BEFORE THE 1 FLORIDA PUBLIC SERVICE COMMISSION 2 DOCKET NO. 090172-EI 3 In the Matter of: PETITION TO DETERMINE NEED FOR FLORIDA ENERGYSECURE PIPELINE 5 BY FLORIDA POWER & LIGHT COMPANY. 6 7 8 9 VOLUME 2 10 Pages 221 through 519 11 ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE 12 A CONVENIENCE COPY ONLY AND ARE NOT THE OFFICIAL TRANSCRIPT OF THE HEARING, 13 THE .PDF VERSION INCLUDES PREFILED TESTIMONY. 14 PROCEEDINGS: HEARING 15 COMMISSIONER 16 PARTICIPATING: CHAIRMAN MATTHEW M. CARTER, II COMMISSIONER LISA POLAK EDGAR 17 COMMISSIONER KATRINA J. McMURRIAN COMMISSIONER NANCY ARGENZIANO 18 COMMISSIONER NATHAN A. SKOP 19 DATE: Monday, July 27, 2009 20 TIME: Commenced at 9:30 a.m. 21 PLACE: Betty Easley Conference Center Room 148 22 4075 Esplanade Way Tallahassee, Florida 23 REPORTED BY: JANE FAUROT, RPR 24 Official FPSC Reporter (850) 413-6732 25 APPEARANCES: (As heretofore noted.) FLORIDA PUBLIC SERVICE COMMISSION

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PROCEEDINGS

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CHAIRMAN CARTER: We are back on the record.

And when we last left, staff was doing cross -- let me correct that, staff was conducting the cross-examination of Doctor Morley, right?

MS. BROWN: Yes, Mr. Chairman.

CHAIRMAN CARTER: You're recognized.

ROSEMARY MORLEY

continues his testimony under oath from Volume 1:

CONTINUED CROSS EXAMINATION

BY MS. BROWN:

Q. Just one follow-up question, Ms. Morley.

There have been several questions asked about the capital costs of the 18-inch, 36-mile oil and gas pipeline that FPL owns. I would like to ask for a late-filed exhibit to answer this question. Does FPL include any capital costs of the 18-inch, 36-mile oil/gas pipeline in its electric rate base; and, if so, what amounts are in rate base or in fuel clauses?

A. I don't know the answer to that question. We are certainly willing to file a late-filed exhibit offering all of that information. What I do know is that there was a question in discovery asking about the capital costs of gas transportation, capital costs, and if they are in FPL's rate base, and if we make a return

1	on that. And in answer to that discovery question the
2	answer was yes, we do have examples of that.
3	But in terms of the specific pipeline you
4	asked about, I don't know that answer, but we are
5	certainly ready to answer it in a late-filed exhibit.
6	MS. BROWN: Well, that would be great and we
7	would like that.
8	CHAIRMAN CARTER: For the record, and for the
9	parties and Commissioners, that will be Exhibit Number
10	96, Exhibit Number 96.
11	(Late-filed Exhibit Number 96 marked for
12	identification.)
13	MS. BROWN: And we could call that Rate Base
14	Recovery of 18-inch Pipeline Capital Costs.
15	CHAIRMAN CARTER: Okay. Ms. Brown.
16	MS. BROWN: I'm sorry. Mr. Chairman, we have
17	no further questions.
18	CHAIRMAN CARTER: Any questions from the
19	bench?
20	Doctor Morley will be with us for rebuttal, as
21	well, is that correct?
22	MR. GOORLAND: That's correct.
23	CHAIRMAN CARTER: Okay. All right, then,
24	let's do redirect, then. You're recognized.
25	MR. GOORLAND: At this point FPL has no

redirect, and we would ask that Doctor Morley's exhibits 1 be moved into the record. 2 CHAIRMAN CARTER: Commissioners, for the 3 record, that would be exhibits beginning at Number 13 4 going through to -- is it 33? 5 MR. GOORLAND: That's correct. 6 CHAIRMAN CARTER: Mr. Self. 7 MR. SELF: No objections. 8 9 CHAIRMAN CARTER: Without objection, show it 10 done. Hang on a second, Doctor Morley, before you 11 12 go. So we're entering in Exhibits 13 through 33, 13 Commissioners. These are the ones with Doctor Morley. MR. SELF: Mr. Chairman? 14 CHAIRMAN CARTER: Yes, sir. 15 MR. SELF: I think, for the record -- are any 16 of those rebuttal exhibits? I don't care whether we 17 18 move them now or later, I just --CHAIRMAN CARTER: I'm thinking they are 19 20 direct. Because the way I have my sheet here is that 21 this is all for direct. 22 MR. GOORLAND: They are. 23 MR. SELF: Thank you. 24 CHAIRMAN CARTER: Okay. Thank you. 25 problem.

Commissioners, before we allow Doctor Morley 1 to step down -- do you have any questions, Commissioner 2 3 Skop? COMMISSIONER SKOP: No. 4 CHAIRMAN CARTER: Okay, thank you. You are on 5 recess, Doctor Morley. Be on your best behavior, okay. 6 MR. MORROW: I'll try. 7 CHAIRMAN CARTER: Call your next witness. 8 9 MR. BUTLER: Thank you, Mr. Chairman. I would call Mr. Collins to the stand. And 10 11 Mr. Collins has not been previously sworn. CHAIRMAN CARTER: He has not been sworn in? 12 13 Okay, no problem. 14 Mr. Collins, when you get there, if you would be so kind to stand and raise your right hand. We'll go 15 16 ahead on and administer the oath to you. 17 (Witness sworn.) CHAIRMAN CARTER: Thank you. Please be 18 19 seated. You may proceed. 20 MR. BUTLER: Thank you. CLINTON M. COLLINS 21 was called as a witness on behalf of Florida Power and 22 23 Light Company, and having been duly sworn, testified as 24 follows: 25 DIRECT EXAMINATION

BY MR. BUTLER:

- Q. Mr. Collins, would you please state your name and business address for the record?
- A. My name is Clinton M. Collins, and my business address is 1000 Louisiana Street, Houston, Texas.
 - Q. By whom are you employed and in what capacity?
- A. I am employed by the U.S. Gas SS Group for FPL.
 - Q. And what is your position?
 - A. I am Director of Gas Infrastructure.
 - Q. Thank you.

Have you prepared and caused to be filed 29 pages of prefiled direct testimony with attached Exhibits CMC-1 through CMC-3 in this proceeding?

- A. That is correct.
- Q. Did you also cause to be filed an errata to your testimony on July 24, 2009?
 - A. That is correct.
- Q. Do you have any further changes or revisions to your prefiled direct testimony?
- A. With respect to the errata on Page 4 of my Direct Testimony, I noticed that in Line 2, the number there should reflect 1.531 billion, and that is to be consistent with the errata that I had submitted.
 - Q. Thank you. With those changes, if I asked you

1	the same questions contained in your direct testimony,
2	would your answers be the same?
3	A. They would be.
4	MR. BUTLER: Mr. Chairman, I would ask that
5	Mr. Collins' prefiled direct testimony be inserted into
6	the record as though read.
7	CHAIRMAN CARTER: The prefiled testimony of
8	the witness will be inserted into the record as though
9	read.
10	MR. BUTLER: Thank you. And I would note
11	that his exhibits are identified in Staff's
12	Comprehensive Exhibit List as Exhibits 10 through 12.
13	CHAIRMAN CARTER: For identification purposes,
14	10, 11, and 12.
15	MR. BUTLER: Thank you.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF CLINTON M. COLLINS
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and business address.
7	A.	My name is Clinton M. Collins. My business address is FPL Group, Inc.,
8		1000 Louisiana Street, Houston, Texas 77002.
9	Q.	By whom are you employed and what is your position?
0	A.	I am employed by FPL Group, Inc. as Director of Gas Infrastructure within
1		the Assets Group.
12	Q.	Please describe your duties and responsibilities in that position.
13	A.	My primary responsibilities for Florida Power & Light Company ("FPL" or
14		the "Company") are to provide technical support and oversight with respect to
15		natural gas-related facilities or opportunities as they are identified and pursued
16		by FPL.
17	Q.	Please describe your educational background and business experience.
18	A.	In 1989, I earned a Bachelor of Science degree in Construction Science from
19		the University of Louisiana-Monroe. In 1998, I earned a Master of Business
20		Administration degree from Our Lady of the Lake University located in San
21		Antonio, Texas. Prior to joining FPL Group, Inc. in June 2008, I was either
22 -		directly or indirectly employed for approximately 23 years by Spectra Energy
23		(Spectra) and its predecessor gas-transmission companies.

DOCUMENT NO. DATE

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FPSC - COMMISSION CLERK

In 1990, I started my professional career working full time for Panhandle
Eastern Pipeline Company in Indianapolis, Indiana, where I supported various
field construction and development activities. In 1991, I advanced into the
Cost Management Group in Houston, gaining experience and expertise in
estimating and forecasting gas infrastructure projects. During this time, I
supervised, scheduled and provided technical support to numerous project
estimators in the preparation of capital expansion and maintenance projects.
In 1995, I transferred into the Environmental and Construction Group where,
as Manager of Construction, I oversaw all construction scheduling and
business management activities for the construction department on the
systems that were owned and managed by Duke Energy Gas Transmission
systems. These systems included: Panhandle Eastern Pipe Line, Trunkline
Gas, Texas Eastern Transmission, East Tennessee Natural Gas and Algonquin
Gas Transmission. In 1999, I was promoted into the Project Management
ranks to manage overall project development activities where I estimated and
developed numerous market expansion projects throughout the U.S. including
the Southeast Supply Header (SESH) project, which was an approximately
270-miles pipeline located in Louisiana, Mississippi and Alabama. During
this assignment, I advanced to the position of Regional Director for Spectra
Energy, where my primary responsibilities were to provide direction and
oversight to a team of project and construction managers responsible for
southern regional capital expansions and larger maintenance projects or
Spectra's Texas Eastern Transmission, East Tennessee Natural Gas and

Gulfstream Natural Gas (Gulfstream) pipeline systems. In this role, my regional team developed and estimated numerous project expansion opportunities ranging up to and in excess of \$3.0 billion.

4 Q. Are you sponsoring any exhibits in this case?

- 5 A. Yes. I will be sponsoring the following exhibits, which are attached to my direct testimony:
- CMC-1 Map of Florida EnergySecure Line and Related
 Facilities
- 9 CMC-2 FPL Right-of-Way Corridor
- CMC-3 Summary of Costs

11 Q. What is the purpose of your testimony?

A.

The purpose of my testimony is to provide an overview of the steps FPL will undertake to construct and operate the Florida EnergySecure Line, including associated facilities (the "Project"). The scope of my testimony will include: (1) a technical description of the Project; (2) a description of the Project engineering and construction as well as FPL's strong qualifications to undertake the Project; (3) a description of the material acquisition process typically encountered in a Project of this scope and magnitude; (4) a description of FPL's commitment to safety and environmental stewardship relating to the various construction techniques that will be employed during the construction phase; (5) a description of the proposed operations and maintenance of the Project; and (7) an estimate of the installed costs of the Project.

Q. Please summarize your testimony.

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This testimony describes in technical detail FPL's proposed \$1.588 billion high-pressure natural gas transmission facility that will provide FPL's customers and the state of Florida with additional pipeline capacity to meet FPL's projected demand for natural gas supplies to fuel electric generation. FPL proposes a 30-inch diameter, approximately 280-mile mainline pipeline originating near Florida Gas Transmission, LLC's (FGT) Station No. 16 (FGT) Station 16) in Starke, Florida (Bradford County) to FPL's Martin Plant in Martin County and approximately 23 miles of laterals ranging in diameter from 20 to 24-inches to serve FPL's modernized Cape Canaveral Next Generation Clean Energy Center (CCEC) and Riviera Beach Next Generation Clean Energy Center (RBEC). FPL also plans to construct two compressor stations, the Bradford Compressor Station and the 45th Street Terminal Compressor Station and appurtenant facilities. FPL has established project management skills, a highly-qualified staff and the necessary ancillary support services and procedures to undertake projects of this scope and magnitude. In acquiring materials and labor, FPL will manage the costs by employing a competitive bidding process. FPL will comply with all regulatory, safety and environmental requirements in choosing construction materials, constructing the pipeline and in operating the pipeline. The overall Project construction should create little to no permanent impact to the route. Also, upon completion of construction activities, all disturbed land areas will be graded, seeded and returned to their original contours and natural states.

TECHNICAL DESCRIPTION OF

FLORIDA ENERGYSECURE LINE

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4 Q. What is the Florida EnergySecure Line?

The Florida EnergySecure Line is a proposed intrastate pipeline that will originate in Starke, Florida (Bradford County) near the existing FGT Station 16 and extend south to FPL's Martin Plant where it physically connects with an existing FPL pipeline, and in the future potentially could connect with existing Gulfstream and FGT pipelines. Also, the Florida EnergySecure Line will include two laterals to serve FPL's modernized CCEC and RBEC (collectively, the Modernization Projects), as well as associated metering stations, two compression stations and appropriate valving. The Project will consist of a 30-inch diameter mainline pipeline with laterals ranging in diameter from 20 inches to 24 inches. This high pressure natural gas transmission facility will provide FPL's customers and the State with access to additional unconventional supplies of natural gas and additional pipeline capacity to meet the growing demand for clean fuels for electrical generation, as described in more detail in the testimonies of FPL witnesses Forrest and Sharra. Can you please describe in more detail the Engineering and Construction scope as it is currently proposed for the Florida EnergySecure Line? As shown on Exhibit CMC-1, the Florida EnergySecure Line includes approximately 280 miles of mainline 30-inch coated-steel pipe, which will be buried at roughly a four foot depth along the final corridor. The designed maximum allowable operating pressure (MAOP) for the mainline will be 1480 pounds per square inch (PSIG), although it will operate at somewhat lower pressures throughout the system depending on flow dynamics. The Mainline will act as the feeder and will initially serve three FPL generation plants: the CCEC, RBEC and the Martin Plant.

The Florida EnergySecure Line will serve the CCEC via a 24-inch coated-steel lateral pipeline. This line will extend from the mainline approximately 17 miles to the northeast and will terminate within the boundaries of the CCEC. FPL's Martin Plant will be served directly by the Florida EnergySecure Line's 30-inch mainline, which will terminate within the boundaries of the Martin Plant. The RBEC will be served by the Project via the utilization of FPL's existing 18-inch oil/natural gas pipeline that currently connects the Martin Plant with FPL's 45th Street Terminal in Palm Beach County, and a new approximately 3-mile section of 20-inch pipe. By employing the existing 18-inch oil/natural gas pipeline, FPL will avoid having to construct approximately 36-miles of new pipeline through environmentally sensitive areas in western Palm Beach County (see Exhibit CMC-1). However, FPL's existing 18-inch oil/natural gas pipeline, which is fully permitted, is not subject to this need proceeding.

1		The RBEC will receive the gas via a new 3-mile lateral segment of 20-inch
2		coated-steel pipeline, which will traverse due east from the 45th Street
3		Terminal to the RBEC along an existing FPL transmission and pipeline
4		corridor. This final stretch of pipeline from the 45th Street Terminal to FPL's
5		RBEC is included in this need determination.
6	Q.	Are there any other pipeline laterals required as a part of the Florida
7		EnergySecure Line?
8	A.	The Project also includes a new approximately 3-mile segment of 20-inch
9		pipeline lateral that will replace an existing FPL 6-inch pipeline, which
10		traverses northwest from FPL's 45th Street Terminal to an existing receipt
l 1		point from FGT. This 3-mile segment will be utilized to provide reliable
12		secondary service to the RBEC in those instances when fuel oil is being
13		transported from the 45th Street Terminal to the Martin Plant via the existing
14		18-inch oil/natural gas pipeline.
15	Q.	What other facilities are required as a part of the Florida EnergySecure
16		Line and where might they be located?
17	A.	The Project also includes two compressor stations. The Bradford Compressor
18		Station will be located near the origination of the Mainline in Bradford
19		County, near the point referred to as FGT Station 16. This compressor station
20		is needed to insure adequate pressure of the gas at the key delivery points
21		along the route.

The second compressor station will be located within the existing boundaries of the 45th Street Terminal. This facility will provide natural gas service to RBEC during those periods when the 18-inch oil/natural gas pipeline is being utilized for oil transportation. In conjunction with this compressor station, an additional segment of 20-inch pipe will be installed to connect this compressor station to an existing FGT location approximately three miles west of the 45th Street Terminal location, as illustrated in Exhibit CMC-1. This compressor station and 3-mile, 20-inch pipe segment will be used solely to boost receiving line pressures from FGT to provide adequate pressures and volumes at the RBEC during those times when there is oil product being moved through the existing 18-inch oil/natural gas pipeline.

The approximate location of the compressor sites, as they are currently envisioned, would have the Bradford Compressor Station positioned to connect with up to two third-party owned pipelines. As previously noted, the other compressor station will be located within the boundaries of the 45th Street Terminal. There are also a number of metering stations, valve stations and PIG launchers and receivers that will be located along the length of the Mainline and laterals to regulate and operate the system in a safe manner.

Q. What are PIG launchers and receivers?

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- 2 A. PIG launchers and receivers are used to ensure the cleanliness of the pipeline,
- 3 over its many years of operation, and to allow for periodic monitoring of the
- 4 integrity of the pipeline. These facilities will be designed to allow for various
- 5 types of PIGs to be placed periodically into the pipeline for cleaning and
- 6 monitoring purposes. PIGs are most often propelled thru the pipeline by the
- 7 pressure of the natural gas without interrupting pipeline service.

8 Q. What is the purpose of the compressor stations?

- 9 A. Compressor stations are an integral part of all pipelines. The gas is
- compressed by these stations to allow the natural gas to flow through the pipe,
- similar to the way a pump is used to push water or other liquids through a
- 12 pipe. These compressors are typically located within enclosed buildings,
- which are designed to protect the equipment from the elements as well as
- minimize any resulting noise from the operation of the units. For the most
- part, these stations are minimally manned by operators and are monitored
- remotely to insure proper operation and control of all significant equipment
- and to secure the area surrounding the compressor stations.

18 Q. Please describe the compressor stations for the Florida EnergySecure

- 19 Line in more detail.
- 20 A. The Bradford Compressor Station is currently planned to consist of
- 21 approximately 20,000 horsepower (HP) utilizing two turbines. Delivery
- pressures from the upstream gas supply line will determine the actual number

1		and size of units that will be required to insure adequate downstream pressures
2		at the designated receiving locations.
3		
4		The 45th Street Terminal compressor station is currently planned to consist of
5		approximately 4,700 HP utilizing two reciprocating units designed to provide
6	•	backup compression only when the existing 18-inch lateral between the
7		Martin Plant and the 45th Street Terminal is needed to transport fuel oil
8		supplies from the Port of Palm Beach/45th Street Terminal to FPL's Martin
9		Plant. The 45th Street Terminal compressor station will be used solely to
10		boost receiving line pressures during these short periods of product
11		movement.
12		
13		ENGINEERING AND CONSTRUCTION
14		
15	Q.	Please discuss the type of pipe that will be utilized to construct the
16		Florida EnergySecure Line.
17	A.	The Florida EnergySecure Line will be constructed of high-strength carbon
18		steel, manufactured in accordance with U.S. Department of Transportation
19		(DOT) pipeline regulations. The entire pipeline will have a corrosion-
20		resistant, non-conductive coating that forms a waterproof skin over the pipe.
21		Prior to backfilling the trench, the coating on the entire pipe will be
22		electronically tested to ensure there are no anomalies in the coating. Where

pipe is located beneath roads, railroads and major water bodies, an abrasion

1		resistance coating will be applied to prevent damage to the pipe when it is
2		pulled beneath these obstacles.
3	Q.	What will be the visual impact of the Florida EnergySecure Line once the
4		pipeline is constructed?
5	A.	There will be minimal visual evidence of the Project. Though not
6		anticipated, should the Florida EnergySecure Line cross a natural physical
7		obstruction that cannot be crossed utilizing a proven underground crossing
8		method, the installation of an over-ground support system along the corridor
9		may be deemed necessary.
10	Q.	What is the projected schedule and commercial operation date for the
11		Florida EnergySecure Line?
12	A.	The current Project schedule has been developed based on the Florida
13		EnergySecure Line being available for commercial operation in January 2014.
14		At a very high level, the anticipated Project schedule would be:
15		
16		 File NGPSA Application - third quarter of 2009;
17		• Receive Site Certification Final Order from Siting Board - second
18		quarter of 2011;
19		 Receive post-certification approvals - third quarter of 2012;
20		 Commence field construction activities - fourth quarter of 2012;
21		 Commence commissioning activities – fourth quarter of 2013;
22		• Place the facilities in commercial service – first quarter of 2014.

1		This schedule allows for the majority of direct field construction of the Florida
2		EnergySecure Line and its related laterals and facilities to be performed
3		during Florida's dry season, which will significantly minimize the temporary
4		environmental impacts associated with the Project and avoid potential
5		schedule delays and cost impacts due to inclement weather, including
6		hurricanes.
7	Q.	What is the expected construction duration necessary to complete the
8		Florida EnergySecure Line?
9	A.	The actual construction period is expected to take approximately one year
0		from the time of initial mobilization through final commissioning and
l 1		cleanup. To timely and effectively execute the construction of the Project, it
12		will be subdivided into smaller segments or "spreads" for which construction
13		would proceed concurrently. By optimizing the number of "spreads," FPL
14		believes all construction can be completed within a 12 month period. FPL
15		would also expect to have the compressor stations and individual plant laterals
16		constructed during the same time period.
17	Q.	What other associated impacts could be expected from construction of the
18		Florida EnergySecure Line?
19	A.	Construction of the Florida EnergySecure Line requires a significant volume
20		of pipe, valves and construction equipment to be temporarily stored prior to
21		installation. FPL will identify temporary storage yards where pipe and
22		equipment can be stored and staged near the right-of-way (ROW) prior to the
23		construction activities commencing. These temporary areas will be sited to

1		minimize traffic, environmental impacts and to facilitate the most efficient
2		means of staging support materials and manpower involved in the
3		construction of the pipeline. Once construction is completed, these areas will
4		be restored to their original condition or to the recommendations of the
5		landowner.
6	Q.	Can you explain some of the typical terrain that the Florida
7		EnergySecure Line will encounter?
8	A.	Yes. There are four primary types of terrain or land use that would typically
9		be encountered during pipeline construction: (1) upland areas, (2) wetland
10		areas, (3) timber or forested areas and (4) residential or congested areas, all of
11		which are described in more detail below.
12		
13		Upland Areas:
14		Upland Areas are most often identified as either actively cultivated or rotated
15		cropland, pasture land for livestock, hayfields, or rural residential areas.
16	-	These areas are normally dry and are typically the easiest areas to construct
17	•	within.
18		
19		Wetland Areas:
20		Wetland Areas are defined by DEP as those areas that are inundated or
21		saturated by surface water or ground water at a frequency and duration
22		sufficient to support a prevalence of vegetation typically adapted to life in
23		saturated soils. Additional construction practices are often required in these

areas to both protect the wetland during and after construction as well as allow for the safe and efficient movement of manpower and equipment during construction.

Timber or Forested Areas:

Timber or Forested Areas are lands with moderate to heavy timber vegetation and can be either public or private, but are often managed by large landowners or land management companies. These lands are typically utilized for harvestable timber and will require small areas of timber to be removed to allow for construction.

Residential or Congested Areas:

Residential or Congested Areas are metropolitan areas and often require significantly more complex construction techniques to address logistical challenges associated with impacts to streets, businesses, residences and municipal services. Often these areas require the employment of a greater degree of horizontal drilling, boring and other unique construction techniques to create a safe work environment and minimize or avoid impacts to existing surface and subsurface conditions.

İ	Q.	With the proposed Project corridor, how will each of these terrains o	ľ
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land uses be addressed?

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The pipeline corridor siting process, which is part of the NGPSA and overseen by the Florida DEP, is designed to affect a reasonable balance between the need for a pipeline and its environmental impacts. To meet this balance and to insure the least amount of overall impact, FPL proposes to co-locate the 1/3 mile-wide mainline corridor within the existing FPL transmission ROW or adjacent to other linear facilities to the maximum extent practical to safely construct the pipeline. By co-locating the pipeline it will insure the least amount of overall impact. FPL focused on ensuring safety and ease of maintenance while also focusing on reducing the overall impacts to wetlands, timber or forested lands, public lands and residential areas. Co-location with FPL's existing transmission ROW will have the added advantage of locating the Mainline in or within 1/3 mile of an existing ROW, where timbering and residential and commercial development has already been restricted. Utilization of existing easements to the maximum extent practicable will greatly reduce the overall impacts to wetlands, timber or forested lands and residential areas.

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In locations where the pipeline can be located within the transmission ROW, the existing easement may not be adequate to support the overall workspace needed for expected pipeline construction activities. In these areas, there will be a need to acquire temporary construction easements along the ROW.

1		Exhibit CMC-2 illustrates a typical temporary construction workspace that
2		may be needed in these areas.
3		
4		FPL is currently seeking public and regulatory input on the proposed corridor,
5		which is subject to change based on public input and the NGPSA application
6		review process.
7	Q.	What will be the short-term and long-term impact of these construction
8		activities on the environment?
9	A	During the development of the Project, environmental consultants will review
10		the entire pipeline corridor to identify environmentally sensitive areas as well
11		as those areas that have historic or cultural significance. As part of the
12		development of the Project through the NGPSA Siting Process, and other
13		applicable permitting processes, FPL will work with federal, state, local and
14		other interested stakeholders in an effort to avoid and/or minimize impacts
15		that would be associated with the Project. FPL will mitigate for any
16		unavoidable impacts and will meet or exceed all applicable environmental
17		regulations during construction.
18		
19		The construction of the Florida EnergySecure Line will involve about 3,500
20		direct workers, nearly 140,000 tons of steel pipe, and various pieces of mobile
21		construction equipment. Every step will be guided by FPL professionals and
22		industry consultants with years of experience in building natural gas pipelines
23		that meet the highest industry and government standards for safety,

environmental protection and operational reliability. Great effort will be taken to minimize disruption to landowners during the construction process. In addition, FPL and its consultants will carefully plan every step of the Project and use multiple construction crews to install the pipeline and restore areas temporarily impacted by construction to their previous use as quickly and efficiently as practical.

A.

The overall Project construction should create little to no permanent impact to the area. Upon completion of construction activities, all disturbed land areas will be graded, seeded (as appropriate) and returned as close as possible to their original contours and natural states. All restoration efforts will be in compliance with applicable federal, state and local requirements. FPL will remain available to respond to agency, stakeholder and landowner questions and concerns throughout restoration and ongoing operations.

15 Q. Why do you believe FPL can undertake such a Project of this magnitude?

Although FPL has never built a natural gas pipeline of this size, FPL has built a number of transmission and piping systems with much more complex operating and engineering conditions than the proposed Project. As previously noted, much of the pipeline that will be employed throughout Palm Beach County is an existing pipeline that FPL built from the Port of Palm Beach to the Martin Plant in 1979. FPL built this pipeline along a 36-mile route within an existing transmission corridor and an existing railroad

1		easement. This terrain is very similar to the terrain that will be encountered
2		during construction of the Florida EnergySecure Line.
3		
4		FPL also has demonstrated its ability to engineer and construct numerous
5		electric transmission corridors and power plants throughout Florida. In many
6		respects, a gas pipeline construction project is very similar to a transmission
7		line construction project. Very similar land and permitting issues are
8		encountered. Large volumes of materials, such as steel, poles, wire and cable,
9		must be stored along the corridor to facilitate construction. Many of the same
0		construction techniques required to support pipeline construction are required
1		to support construction of a transmission corridor. These construction
2		projects are literally moving assembly lines.
3		
4		MATERIAL ACQUISITION AND LABOR
.5		
.6	Q.	Based on the magnitude of the Florida EnergySecure Line, is material
.7		acquisition a concern?
.8	A.	Material acquisition is always a concern and represents one of the largest cost
9		risks associated with a pipeline Project of this magnitude. However, FPL will
20		effectively manage this risk by employing a competitive bidding process,
21		insuring the use of materials which are commonly available for projects of this
22		scope and securing materials well in advance of the expected date the
23		materials will be required to support construction. FPL has been successful at

1		cost-effectively purchasing large quantities of construction materials, as
2		demonstrated by many of the projects it has undertaken.
3		
4		Prevailing market conditions at the time the Project is bid will dictate the most
5		preferred approach. Since steel is a commodity, there are strategies which can
6		be employed to avoid substantial material risks associated with the cyclical
7		market swings that are typical in the steel and pipe conversion business.
8	Q.	Based on the magnitude of the Florida EnergySecure Line, is contracting
9		for construction services, labor and equipment a concern?
10	A.	The most significant cost component of a pipeline project is the construction
11		process and contracting for labor and equipment. To timely and effectively
12		execute, the overall Project will be broken into segments known as "spreads,"
13		each of which is constructed concurrently. A gas pipeline of this scope is
14	,	typically broken into three or four spreads and then each spread is
15		competitively bid to ensure the best pricing. Each spread operates like a
16		moving assembly line, with each component of construction occurring in
17		systematic sequence for maximum efficiency and execution.
18		
19		There are currently a number of companies that own equipment and have the
20		employee relationships necessary to support the construction of this Project.
21		By employing a competitive bidding process, insuring contractor availability
22		and securing these critical resources well in advance of the expected date of
23		construction, FPL will effectively manage this risk. Contractors are typically

1		secured and contracts executed with substantial lead times to support a Project
2		of this magnitude. Prevailing market conditions at the time the Project is bid
3		will dictate the most effective approach to contractor selection and execution.
4		FPL has a very successful and demonstrated ability to cost-effectively secure
5		and manage contractors on the projects it has undertaken.
6	Q.	Has FPL considered contracting with a pipeline construction
7		management company to support the development of this Project?
8	A.	Yes. Engaging a pipeline construction management company to provide turn-
9		key engineering and construction of the Project is an option. However, as I
10		have discussed previously, the skills necessary to oversee and effectively
11		manage the scope of a Project of this magnitude are entirely within the range
12		and technical competence of the current FPL staff and the staff of its sister
13		companies. FPL's commitment to bringing value to its customers and
14		protecting the environment is strong. In addition, FPL is among the industry
15		leaders when it comes to safety during construction and throughout continuing
16		operations.
17		
18		SAFETY, CONSTRUCTION AND OPERATION
19		
20	Q.	What will FPL do to ensure safety during construction and operation of
21		the Florida EnergySecure Line?
22	A.	FPL is very focused on safety in all aspects of our business, whether it is
23		building a new power generating plant, new electrical transmission line, or

1	pipeline, the safety practices, procedures and protocols are very similar.
2	Workers are trained in all aspects of safe working procedures, as they apply to
3	their particular responsibility before ever undertaking a project.
4	
5	The Florida EnergySecure Line will be designed, constructed, tested, operated
6	and maintained in accordance with the requirements of federal pipeline safety
7	regulations, and will meet or exceed stringent industry standards. Examples
8	of these safety measures include the following:
9	
10	• Even before actual construction begins, at steel rolling mills where
11	pipe is fabricated, our representatives will carefully inspect the pipe to
12	ensure that it is of high quality and meets both federal and industry
13	standards.
14	
15	Coating systems and other corrosion control techniques will be used to
16	prevent corrosion of the pipeline.
17	
18	• During construction, our representatives will inspect the fabrication
19	and construction of the pipeline. Welds linking the joints of the
20	pipeline are X-rayed to ensure their integrity.
21 .	

1	 Once in the ground, and before being placed into service, the pipeline
2	will be pressure-tested with water in excess of its maximum operating
3	pressure, exceeding standards set by the DOT.
4	
5	• Pipeline markers will be placed to alert the public of our pipeline's
6	presence, identify pipeline rights of way and provide a telephone
7	number to be used to contact us in an emergency.
8	
9	• To help protect against third-party damage, regular inspections by
10	motor vehicles and patrol aircraft will keep a watchful eye on pipeline
11	routes and adjacent areas.
12	
13	Our maintenance crews will perform facility inspections at regular
14	intervals to identify any construction in the vicinity of the pipeline and
15	to maintain the pipelines and their rights-of-way.
16	
17	Pipelines undergo periodic maintenance inspections, including leak
18	surveys, valve and safety device inspections and electronic inspections
19	using in-line inspection devices known as smart PIGs to confirm the
20	continuing integrity of the line.
21	

1		• Our representatives will meet with local emergency response officials
2		on pipeline operations and coordinate emergency response procedures
3		in the unlikely event of an emergency
4		
5		• The presence of the pipeline will clearly marked with signs in order to
6		reduce the possibility of damage or interference form outside parties.
7		To further reduce this possibility, the pipeline will participate in the
8		"One Call" system, which offers a toll-free number that should be
9		called before digging.
10		• FPL will also be continuously monitoring pressures and operating
11		conditions along the pipeline to identify potential deviations from
12		normal conditions and to allow for timely adjustment and response.
13	Q.	Are you familiar with Chapter 368, Florida Statutes, Chapter 25-12,
14		Florida Administrative Code, the Federal rules and regulations in 40
15		C.F.R. Parts 190 through 199, and codes and standards incorporated
16		therein?
17	A.	Yes. These regulations cover the design, fabrication, installation, inspection,
18		testing and safety standards for installation, operation and maintenance of gas
19		transmission and distribution systems, including gas pipelines, gas compressor
20		stations, gas metering and regulating stations.

1	Q.	Will the engineering, construction, and operation of the Project comply
2		with these requirements?
3	A.	Yes. I will briefly describe some of the key requirements and how FPL will
4		comply them.
5		
6		First, FPL will comply with the inspection and testing of all welded members
7		in accordance with and required by the Florida Administrative Code and the
8		Federal requirements of 49 CFR Part 192. Where appropriate, welds will be
9		inspected using approved non-destructive radiographic and ultrasonic means
0		and all welders qualified in accordance with applicable state and federal
1		requirements. Appropriate records will be maintained to insure compliance
2		with these requirements.
3		
4		Second, as noted above, all piping will undergo appropriate pressure testing as
5		required by the service conditions surrounding the area, and in accordance
16		with 49 CFR Part 192 to validate the integrity of the facilities prior to being
7		placed into gas service.
8		
19		Third, as noted above, once the pipeline is placed into service, operational
20		procedures will be implemented to allow for periodic and timely inspection o
21		the pipeline to monitor its condition using a smart PIG, a device that can
22		travel within the pipe and monitor wall thickness and various other parameter
23		to insure the overall integrity of the pipeline over its lifetime.

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Fourth, all valves will be inspected in accordance with the class of service and the operating plan, which will be developed in accordance with 49 CFR Part 192 and the Florida Statues.

A.

Finally, a cathodic protection system will be designed, installed and operated in accordance with the appropriate Federal requirements of 49 CFR Part 192. Cathodic protection is a system designed to mitigate the potential for corrosion of the pipeline in all environments. The system will be designed, installed, monitored and inspected in accordance with applicable design standards included in 49 CFR Part 192.

12 Q. In general, what has been the history of reliability and safety for natural 13 gas pipelines?

Natural gas pipelines have been safely and reliably supplying the energy needs of the U.S. for the past seventy years. Currently there are hundreds of thousands of miles of active natural gas transmission pipelines in the country, providing a critical link from the production basins to industrial, commercial and residential markets. These natural gas pipeline systems have an extremely good record of safety and reliability and today represent one of the safest modes of moving products throughout the U.S. Given the critical role that natural gas plays to Florida and the country, it is essential that these systems be safe and reliable. According to the DOT, pipelines are the safest method of transporting natural gas.

OPERATIONS AND MAINTENANCE

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Α.

Q. Once construction is completed, please describe the initial operations of the Florida EnergySecure Line.

At a high level, pipeline operations of the Florida EnergySecure Line will consist of monitoring and maintaining the compression and pipeline facilities at a safe and reliable level to insure adequate pressure and volume is maintained along the pipeline and at the various receiving points. The operations of the Project will be consistent with the current operations of the existing 36-mile oil/natural gas pipeline from the 45th Street Terminal located in Palm Beach County to the Martin Plant located in Martin County. This facility is operated around the clock, on a 24 hours a day, seven days a week basis. However, FPL is currently evaluating options for operating the Florida EnergySecure Line, which include the possibility of expanding existing operations to include the Florida EnergySecure Line, engaging a third-party pipeline operator, or implementing an integrated approach.

To provide for timely and responsive maintenance of the Florida EnergySecure Line, additional field maintenance locations and/or contractual arrangements with local contractors will be established prior to the pipeline being placed into service.

1	Q.	What procedures does FPL plan to employ to maintain the Florida
2		EnergySecure Line?
3	A.	FPL currently maintains an Integrity Management Program which insures its
4		existing pipeline laterals and other facilities are maintained in accordance with
5		Chapter 25-12 of the Florida Administrative Code and 49 CFR Part 192
6		Subpart O, "Pipeline Safety: Pipeline Integrity Management in High
7		Consequence Areas (Gas Transmission Pipelines)." Under these requirements
8		FPL conducts routine maintenance and monitoring of all existing oil and gas
9.		pipelines within its system. These existing practices and procedures will be
.0		amended to include the scope of the Florida EnergySecure Line and would be
.1		applied either internally or to any third-party operator.
2		
13		INSTALLED COSTS OF THE
4		FLORIDA ENERGYSECURE LINE
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16	Q.	What is the cost estimate for the Florida EnergySecure Line?
۱7	A.	The current expected installed cost for the Florida EnergySecure Line is
8		\$1.588 billion. As shown in Exhibit CMC-3, this figure includes all costs for
19		land acquisition, pipe materials, valving, metering stations, current
20		compressor stations, development, construction labor and equipment, project
21		management, start-up and AFUDC for the Project. The costs include \$1.05
22		billion in direct material and installation costs, \$325 million in indirect costs

associated with development and start-up of the Project, \$100 million in

estimated land costs, and \$113 million for AFUDC. Land costs are estimated based on the assumption that 90 percent of the pipeline corridor will be co-located with existing FPL utility transmission easements. As discussed previously, it is FPL's intent to co-locate as much of the mainline and laterals along existing electrical transmission corridors whenever practicable to minimize land costs and environmental impacts associated with a new, undeveloped corridor. However, the proposed pipeline corridor is subject to change through the regulatory siting process.

9 Q. How did FPL develop these estimates?

A.

A.

FPL contracted a major pipeline engineering consultant to prepare a preliminary scope and project estimate. FPL reviewed these preliminary project estimates and modified them to reflect the final project scope, FPL's own construction experience, along with current and future market conditions anticipated in Florida. While the estimates were prepared during a period of highly volatile commodity fluctuations, steel pricing was benchmarked to reflect pricing consistent with other project opportunities that were evaluated.

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

Yes. As described in more detail by FPL witness Sharra, a 30-inch pipeline has the ultimate capacity to transport approximately 1.25 Bcf/d at the maximum allowed design pressure. While the initial capacity will be 600 MMcf/d, the pipeline can be expanded at a later time. For the purposes of FPL's evaluation, 200 MMcf/d increments were evaluated to correlate with the expected load growth currently anticipated. Each incremental expansion

- would require only the compression necessary to flow an additional 200
- 2 MMcf/d, plus interconnection costs at a new location.
- 3 Q. What are the estimated costs associated with expansion of the Florida
- 4 EnergySecure Line?
- 5 A. The costs of expansion are contingent on the specifics of the additional
- 6 compression, including year of installation and related costs, the final location
- of the laterals and intersection with the mainline, the length of the laterals, and
- 8 the final pressure needed at the receiving location. At this time, we estimate
- 9 expansion costs varying between \$125 million to approximately \$200 million
- for each incremental upgrade. Thus, a 200 MMcf/d expansion would
- represent a 33 percent increase in capacity (600 MMcf/d to 800 MMcf/d) for
- an increase in capital of only about eight percent
- 13 Q. Does this conclude your testimony?
- 14 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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

ERRATA SHEET

DIRECT TESTIMONY OF CLINTON M. COLLINS

PAGE #	LINE#	CORRECTION
27	18	Replace "\$1.588" with "\$1.531"
27	21	Replace "\$1.05" with "\$1.0"
28	1	Replace "\$113" with "\$106"
EXHIBIT # CMC-3	<u>PAGE #</u> 1	CORRECTION Second Column (costs) numbers are corrected

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 MR. BUTLER:

- Q. And I would ask Mr. Collins at this point to summarize his testimony.
- A. Good afternoon, Commissioners. The scope of my testimony today will discuss the Florida EnergySecure Line as it is currently envisioned and will focus on four primary areas.

First, the technical description of the proposed project and unique advantages that the facilities offer to FPL customers in the state of Florida. Second, a description of FPL's strong qualifications and expertise to undertake a project of this scope. Third, I will discuss the expandability of the pipeline to allow for future growth. And, fourth, the subsequent operations of the Florida EnergySecure Line and how proposed facilities are an extension of FPL's existing safe and reliable operations.

As with any project of this scope and magnitude, considerable engineering design and decision-making precedes the project final design. Like building new generation capabilities or new electric transmission lines, the preliminary engineering for the pipeline included an evaluation to optimize the size of the pipeline to allow the project to meet FPL's immediate needs and still allow for reasonable growth.

В

I will discuss the engineering practices that have been and will be employed as a route and geology of the 30-mile corridor are better defined. I will also describe the practices that will be used to ensure the facilities are built and operated in a cost-efficient, safe, and environmentally conscientious manner.

FPL is proposing to construct the 30-inch diameter mainline pipeline which will originate in Bradford County near the existing Florida Transmission Station 16, and will traverse approximately 280 miles to FPL's existing Martin Power Plant. Having the EnergySecure Line connect these two major points is very strategic as it essentially creates an in-state header with a northern and southern hub which enhances natural gas reliability and supply diversity for the state of Florida and allows access to broader more abundant reserves of natural gas.

The utilization of the proposed 30-inch main line along with FPL's existing owned, operated, and maintained infrastructure, which includes the existing 36 miles of 18-inch lateral, will be an integral part of serving FPL's new modernization projects at Cape Canaveral and Riveria Beach. While the initial phase of the project will allow for FPL to provide the most cost-effective solution for providing natural gas to

these modernizations, it will also provide the flexibility to meet future capacity needs as they arise.

EPL and its affiliates have considerable experience in managing very complex and schedule sensitive projects in the energy industry. In many respects these projects all require very similar skills and management capabilities; real estate acquisition, environmental due diligence and permitting, engineering, procurement, logistical support, and construction management, many of which must be executed within very defined and constrained work areas or along linear corridors.

The ability to manage a project of this size and scope is easily reflected in the skill sets that FPL displays in support of all of its projects. The proposed EnergySecure Line will be simply another addition to the existing 70 miles of pipeline, four fuel terminals, and various pumping stations that FPL currently owns and operates to support its current generation needs. FPL has operated these systems safely and reliably for many years.

Without doubt, the EnergySecure Line as proposed will provide FPL customers and the state of Florida with critical infrastructure that will provide a reliable and cost-effective solution to meeting FPL's

1 current and future natural gas demand for electric 2 generation. 3 I thank you for your time and welcome your 4 comments. 5 Thank you, Mr. Collins. MR. BUTLER: I tender the witness for cross-examination. 6 7 CHAIRMAN CARTER: Thank you. 8 Mr. Self. 9 MR. SELF: Thank you, Mr. Chairman. 10 CROSS EXAMINATION 11 BY MR. SELF: 12 Good afternoon, Mr. Collins. I'm Floyd Self Q. 13 representing FGT. 14 A. Good afternoon. 15 This morning we have had some questions and 16 discussions regarding some of the existing pipeline 17 segments that FPL currently owns and operates. Were you 18 present for any of that discussion? 19 Α. Yes, sir, I was. 20 Okay. Would it be correct to classify those Q. 21 pipeline segments as laterals? 22 A. They are pipelines that were built to support 23 the infrastructure of their plants. As far as what you 24 want to call them, they are pipelines to actually move 25 product from the 45th Street terminal to Martin, as well

1 as other pipelines that were built to support other 2 infrastructures that they have on their system. 3 Q. Okay. Well, looking at Page 4 of your testimony, if I may. Do you have that? 4 5 Α. Yes. sir. On Line 6 you talk about how the proposed 6 7 pipeline is a 30-inch diameter, approximately 280-mile 8 mainline pipeline, do you see that? 9 A. Yes, sir. 10 And then down a couple more lines on Line 9, 11 you talk about approximately 23 miles of laterals 12 ranging in diameter from 20 to 24 inches. Do you see 13 that? 14 Α. That is correct. 15 How would you define a lateral? Q. 16 It is any segment of the pipeline that is not, A. 17 in my mind, considered part of the mainline, the actual 18 physical assets connecting the two hubs. So anything 19 that is stretching off of that mainline I would refer to 20 as a lateral. 21 Q. Would it be fair to say that a lateral only 22 serves one receipt point? 2.3 No, that's not a good assumption. Laterals 24 can be run for multiple miles with various different

deliveries or receipts onto those laterals. It's just

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an extension of the mainline or the mainline facilities.

- Well, then how would you define the mainline pipeline, what's a mainline pipeline?
- A. Essentially, the mainline is referred to in the industry as the trunk line, the actual main capacity that the pipeline flows through. There can be various capacities that come onto a system or off a system off of various laterals that come off of that main trunk line.
- Okay. Now, with respect to mainline pipelines, it's true, I believe, that FPL has never constructed a 280-mile mainline pipeline before, have thev?
- Not that I'm aware of. However, they have constructed various different infrastructure within the state. Roughly, now, I think they have 70 miles of pipeline that they currently operate to support their facilities, ranging in 30-inch diameter down to smaller laterals, as far as I'm aware of, a six-inch. So they have constructed many different pipelines within the state to support their needs.
- All right. And those smaller pipelines, Q. generally they serve one plant, correct?
- The six-inch that I just referred to primarily is used to connect FGT's existing system to the 45th

Street Terminal, and it's primarily used for launching of pigs when they are moving product up to the 45th Street Terminal. But it's an integral part of FPL's overall operations and how they move product through their system.

- Q. On Page 20 of your Direct, if you want to turn there, the question and answer that runs from Line 6 to 16, you indicate that FPL is considering contracting with a pipeline construction management company. If FPL does, in fact -- well, first off, has FPL contracted with such a management company at this point?
- A. No, we have not. We would not move forward with actually even considering something like that until the project was moving forward from an execution standpoint. Right now the way we have looked at the project is to execute it ourselves with our internal resources. However, we would not be opposed to considering that, and I think that was the intent of the question and the answer here is that that is an option that would still be on the table for consideration if we felt like it was in the best interest of executing on the project.
- Q. And if, in fact, FPL contracted with a construction management company, the cost of that would also be ultimately, if FPL's proposal is accepted,

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rolled into the rate base, as well, correct?

- That is correct. However, the costs associated with executing on the project are currently in the capital costs that we have developed for the project, so if we opted to go in this fashion, it would only be to the benefit of the customers.
- If you could look at Page 17 of your testimony, please. Starting with Line 16, you mention this Port of Palm Beach to Martin Plant pipeline that was built in 1979. Do you see that there on Lines 20 and 21?
 - Α. Yes, sir.
- Do you know if and when FPL has built any Q. other pipelines subsequent to this 1979 pipeline?
- To my knowledge, the Martin north lateral, the 20-inch, 17-mile Martin north lateral was built in 1993. And I believe those facilities just here recently have been turned over to FGT under Phase 8 negotiations for their operations. So those facilities, in fact, to my knowledge, were built in 1993, but I can't confirm that date.
- MR. SELF: Mr. Chairman, we have no further questions.
- CHAIRMAN CARTER: Thank you. Commissioners, I'm going to go to staff and then I'll come back to the

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MS. BROWN: Staff has no questions.

CHAIRMAN CARTER: Okay. Give us a second

Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chair.

Good afternoon, Mr. Collins.

THE WITNESS: Good afternoon.

Page 8 of your prefiled testimony, please. And beginning with Line 2 through Line 11, they talk about the second compressor station at the 45th Street Terminal, and basically that facility will provide natural gas service to the Riveria Beach Energy Center during those periods when the 18-inch oil and natural gas pipeline is being utilized for oil transportation, and they also mention further down about replacing the six-inch with a 20-inch pipe to connect to the FGT.

Can you further elaborate on that situation to the extent that if you look at the large charts behind you, you have what is described as the mainline terminating down at the Martin Plant, and then the remainder of that pipeline capacity to move it down to Riveria Beach is the existing 36-mile, 18-inch pipe.

So it's almost as if -- I'm trying to get a

little clarification there, because it seems to me that when that pipeline is being utilized for oil transportation, they have to bypass the proposed pipeline and then draw from FGT to service the Riveria Beach plant. So if you could clarify that for me, I would appreciate it.

THE WITNESS: Yes, sir. The normal flow now before the EnergySecure Line will be built is for product to move from -- as it comes into the tankers at the Port of Palm Beach, it flows through a 30-inch line to the 45th Street Terminal, and then from the 45th Street Terminal, it is then put in the 18-inch line which then transports and pumped through the 18-inch line to service Martin Plant, and that's the primary use for it now.

Once the line has product in it, and they are ready to move the rest of that product up, they actually put a pig, or, if you will, a cork in the pipeline.

They utilize an existing six-inch interconnect that they have with FGT at the Turnpike. They move gas through that six-inch for three miles back to the 45th Street Terminal, and then they use the pressure of that gas to push the pig and the reminder of that product up to the Martin Terminal. So that is the normal process in the utilization of that six-inch line.

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Once the actual product all is received at the Martin Terminal and the line is actually free of liquids, then they open up an existing side gate valve which allows that existing Martin South Interconnect to feed gas into that 18-inch so it can actually feed the Martin Plant from gas as well from the south. So it's referred to as the Martin South Interconnect.

When the EnergySecure Line is put in place, the majority of gas flow will be coming from the north into Martin. The 18-inch primary use then will be to flow gas from north to south to the 45th Street

Terminal. A new three miles of pipeline will be built from the 45th Street Terminal to the Riviera plant to provide the normal day-to-day service through the EnergySecure facilities.

In those events when we want to move product from the terminal at 45th Street, because we still have the ability to take product into the 45th Street from the Port of Palm Beach because the 30-inch pipeline is dedicated for that service, in those events when we want to move product from the 45th Street Terminal to Martin for reliability purposes, we have proposed to take up that existing six-inch line which currently is only used to launch the pigs to take the remainder of the product out of the pipeline, and we will relay that with 20-inch

1 diameter pipeline, therefore allowing us to have a full 2 interconnect with FGT at the Turnpike through the 45th 3 Street Terminal with that take up and relay of three miles of 20-inch, and then the three miles that 5 exist with the EnergySecure Line from the 45th Street 6 Terminal to the Riviera plant. 7 Now, because we are unable to quarantee 8 pressures from FGT to support the event when that does 9 happen, we propose to install two small boost 10 compressions at the 45th Street Terminal to allow us to

COMMISSIONER SKOP: Thank you.

guarantee that we have adequate pressures and throughput

from our existing interconnect with FGT at the Martin

CHAIRMAN CARTER: Thank you, Commissioners.

Anything further from the bench?

Okay. Mr. Butler.

MR. BUTLER: I have very brief redirect. It's going to come down considerably from that elevated level just described.

REDIRECT EXAMINATION

BY MR. BUTLER:

south lateral.

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- Q. Would you please define pig and product.
- A. Product is generically referred to of any oil-based type product that is moved through the line.

It could be a one percent, or a .9 percent fuel, diesel, kerosene, any type of product. We generically in the industry refer to that as just a product, because typically a product pipeline can be used for various different types of liquids to flow through them. So I hope — does that answer your question?

- Q. That does. Now we will move on to the pig.
- A. Pig, I think I actually covered in one of my interrogatories. But pig is not really an acronym. It generically refers to any obstacle that we put in the pipeline to propel down the pipeline for various different reasons. For either cleaning purposes, for internal inspections, for sizing to make sure that the quality of the pipeline is maintained.

And we refer to one type of pig as a smart pig, or an intelligent pig, which is actually a computer that we will run through the pipeline periodically to validate the integrity of the facilities and make sure that there are no anomalies or coatings anywhere in the system. It would be part of our normal operations to make sure that we validate the integrity of those facilities so that we never have any issues with them.

MR. BUTLER: Thank you, Mr. Collins.

That's all that I have.

CHAIRMAN CARTER: Okay. Exhibits.

1	MR. BUTLER: I would move the admission of
2	Exhibits 10, 11, and 12.
3	CHAIRMAN CARTER: Mr. Self?
4	MR. SELF: No objection.
5	CHAIRMAN CARTER: Without objection, show it
6	done.
7	(Exhibit Numbers 10, 11, and 12 admitted into
8	the record.)
9	MR. BUTLER: Mr. Collins does not have
10	rebuttal testimony, so I believe it would be appropriate
11	to excuse him at this point.
12	CHAIRMAN CARTER: Mr. Collins, this is your
13	lucky day.
14	Commissioner Skop.
15	COMMISSIONER SKOP: Thank you, Mr. Chairman.
16	Mr. Collins, I know that on Page 3 of your
17	prefiled testimony, CMC-3 provided a summary of the
18	costs. In terms of asking specific costs as to rate
19	impact when the proposed pipeline would go into service,
20	who would be the best witness, would it be you, or
21	witness I'm trying to pronounce his name.
22	MR. BUTLER: Enjamio.
23	COMMISSIONER SKOP: Yes.
24	THE WITNESS: Witness Enjamio.
25	CHAIRMAN CARTER: All right. Thank you.

1	Anything further from the bench?
2	Thank you, sir, and you are excused.
3	MR. BUTLER: Thank you, Mr. Chairman.
4	CHAIRMAN CARTER: Call your next witness.
5	MR. PERKO: Thank you, Mr. Chairman.
6	FPL calls Heather Stubblefield.
7	(Pause.)
8	MR. PERKO: Good afternoon, Ms. Stubblefield.
9	Have you been sworn?
10	THE WITNESS: I have not.
11	CHAIRMAN CARTER: Okay. Would you please
12	stand and raise your right hand.
13	(Witness sworn.)
14	CHAIRMAN CARTER: Thank you. Please be
15	seated.
16	HEATHER C. STUBBLEFIELD
17	was called as a witness on behalf of Florida Power and
18	Light, and having been duly sworn, testified as follows:
19	DIRECT EXAMINATION
20	BY MR. PERKO:
21	Q. And could you please state your full name and
22	business address for the record.
23	A. Yes. My name is Heather Stubblefield. My
24	business address is 700 Universe Boulevard, Juno Beach,
25	Florida 33408.

	Q. By whom are you emproyed and in what capacity:
2	A. I am employed by Florida Power and Light
3	Company as Manager of Project Development.
4	Q. Ms. Stubblefield, did you prepare and have
5	occasion to file 18 pages of Direct Testimony in this
6	proceeding?
7	A. Yes, I did.
8	Q. And did you attach to that testimony three
9	exhibits labeled HCS-1, HCS-2, and HCS-3?
10	A. Yes.
11	Q. Did you prepare an errata for your testimony?
12	A. Yes, I did.
13	Q. And that was filed on July 24th?
14	A. Yes.
15	Q. Other than the changes indicated in your
L6	errata, do you have any additional changes to your
۱7	testimony or exhibits?
L8	A. No, I do not.
L9	Q. If I were to ask you the questions in your
20	testimony today, would your answers be the same?
21	A. Yes, they would.
22	MR. PERKO: At this time, Mr. Chairman, I
:3	would request that Ms. Stubblefield's Direct Testimony
: 4	be inserted into the record as though read.
25	CHAIRMAN CARTER: The prefiled testimony of

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF HEATHER C. STUBBLEFIELD
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and address.
7	A.	My name is Heather C. Stubblefield. My business address is Florida Power and
8		Light 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 "Company")
11		as Manager of Project Development in the Energy Marketing and Trading
12		(EMT) Business Unit.
13	Q.	Please summarize your educational background and professional
14		experience.
15	A.	I graduated from Auburn University with a Bachelor of Arts degree in Business
16		Administration in 1986. I joined El Paso Corporation (formerly Sonat
17		Corporation) in 1988, where I held various positions in Human Resources,
18		Internal Auditing and the Sonat Marketing Company. In 2003, I joined FPL
19		Group Resources as the Director of Marketing for liquefied natural gas (LNG)
20		initiatives. In 2005, I transferred to the EMT Business Unit of FPL to support
21		project development activities.
22	Q.	Please describe your duties and responsibilities as they relate to this docket.
23	A.	In my current position, I am responsible for evaluating gas transportation
24		alternatives for FPL's generation expansions. This includes evaluating proposals

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FPSC - COMMISSION CLERK

1		from pipeline companies, negotiating terms and conditions, and executing
2		transportation agreements that are in the best interest of FPL's customers.
3	Q.	Are you sponsoring any exhibits in this case?
4	A.	Yes. I am sponsoring the following exhibits which are attached to my direct
5		testimony:
6		HCS-1 FPL's Solicitation Letter
7		HCS-2 Summary of Company B, Company E and FPL Florida
8		EnergySecure Line Transportation Rates (Confidential)
9		HCS-3 Letter of Intent with Company E (Confidential)
0	Q.	What is the purpose of your testimony?
1	A.	The purpose of my testimony is to present and explain the natural gas
12		transportation solicitation process that FPL used to solicit proposals for gas
13		transportation to meet, at a minimum, its gas requirements for the Cape
14		Canaveral Next Generation Clean Energy Center (CCEC) and the Riviera Beach
15		Next Generation Clean Energy Center (RBEC) modernization projects and to
16		describe the results of that solicitation process.
17		
18		Please note that for purposes of my testimony one (1) million cubic feet per day
19		(MMcf/d) equals 1,000 million British thermal units (Btu) per day (MMBtu/d),
20		assuming a heat content of 1,000 Btu per cubic foot of natural gas. In my
21		testimony, I refer to quantities of gas transportation in MMcf/d and refer to gas
22		transportation costs in dollars per MMBtu/d which is the industry standard unit
23		for expressing gas transportation costs.

Q. Please summarize your testimony.

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FPL initiated a solicitation process to determine the best transportation alternative to meet the needs of FPL's CCEC and RBEC modernization projects. The process consisted of issuing a Solicitation Letter to seven pipeline companies capable of providing the transportation services that FPL required. FPL initially requested that the respondents consider three potential pipeline alternatives for quantities of 400 MMcf/d, 800 MMcf/d and 1.0 billion cubic feet per day (Bcf/d). FPL followed up the initial solicitation with an additional request that the respondents submit proposals for a quantity of 600 MMcf/d. The first pipeline alternative (Interstate Pipeline) was based on the respondent developing a new pipeline or upgrading an existing pipeline from Transcontinental Pipe Line Company's (Transco) compressor station No. 85 in Choctaw County, Alabama (Transco Station 85) to FPL's CCEC and RBEC The second alternative (Upstream Pipeline Segment) allowed the parties to submit a proposal based on providing only the segment of the pipeline needed to deliver gas from Transco Station 85 to Florida Gas Transmission, LLC's (FGT) compressor station No. 16 in Bradford County, Florida (FGT Station 16). The third alternative (Florida Pipeline Segment) identified in the solicitation was based on the respondent providing only the segment of the pipeline needed to deliver gas from FGT Station 16 to FPL's CCEC and RBEC facilities. The Solicitation Letter also informed respondents of FPL's intentions to develop an intrastate pipeline as an alternative to the third party proposals. The segments proposed under this alternative could be combined with proposals

1	received from respondents on the Upstream Pipeline Segment to develop a total
2	pipeline project for comparison purposes.
3	
4	The Solicitation Letter resulted in a significant number of proposals. Due to

The Solicitation Letter resulted in a significant number of proposals. Due to various factors, FPL elected to focus on the proposals for 400 MMcf/d and 600 MMcf/d. FPL ranked the various proposals and then conducted a life-cycle economic analysis of the two lowest cost proposals to determine which solution offered the lowest cost to customers. The results of FPL's analysis, as confirmed by the independent analysis of FPL witness Sexton, indicated that the pipeline alternative that provided the lowest life-cycle cost to the customer and the greatest supply diversity was a combined project which included an Upstream Pipeline Segment proposed by a third party natural gas transmission company, referred to as Company E for confidentiality purposes (Upstream Pipeline Project), and a Florida Pipeline Segment proposed by FPL (Florida EnergySecure Line).

- Q. Please explain the process FPL used to solicit proposals for natural gas transportation alternatives for the CCEC and RBEC modernization projects.
- A. FPL prepared a Solicitation Letter that was distributed to a number of pipeline providers in the Southeast requesting gas transportation proposals to supply FPL's CCEC and RBEC facilities. The Solicitation Letter outlined several requirements but gave respondents the discretion to propose multiple and alternative solutions to meet FPL's objectives. FPL's intent was to meet the gas

supply needs of CCEC and RBEC, including the baseload hourly delivery requirements, to provide for increased reliability and supply diversity and to allow for future generation growth in FPL's gas transportation portfolio. The Solicitation Letter was issued on July 17, 2008 and requested that firm proposals be submitted by September 2, 2008. The letter explained that the proposals would be evaluated on overall economics including the value of the supply diversity and delivery flexibility of each project. All prospective respondents were encouraged to contact FPL with any questions regarding the Solicitation Letter and there was significant interaction between FPL and the respondents throughout the solicitation process. The process was sufficiently structured to allow the respondents to understand FPL's needs and receive all the information necessary to prepare their responses, which resulted in a significant number of proposals.

A.

Q. Please describe the different scenarios requested by FPL in the Solicitation Letter.

To support FPL's desire to access unconventional onshore natural gas supplies, the Company requested that all parties propose a pipeline project that would provide access to natural gas supplies at Transco Station 85. As discussed by FPL witness Sharra, FPL identified Transco Station 85 as the best location to provide access to new natural gas supplies. The Solicitation Letter also informed the respondents that FPL was considering development of an intrastate pipeline (which was later designated the Florida EnergySecure Line) capable of receiving gas at or near FGT Station 16. FPL asked the parties to consider responding to

1	at least one of three pipeline alternatives, but also indicated it was open to
2	evaluating other viable alternatives which might be suggested by the
3	respondents.
4	
5	Interstate Pipeline: The first pipeline alternative was based on the respondent
6	developing a new pipeline or upgrading an existing pipeline from Transco
7	Station 85 to FPL's CCEC and RBEC facilities. Under this scenario, the
8	respondent could propose a new pipeline originating at Transco Station 85 with
9	delivery capabilities to both CCEC and RBEC. A respondent could also propose
10	an expansion of an existing pipeline system that would allow FPL to access
11	Transco Station 85 with delivery capabilities to CCEC and RBEC.
12	
13	<u>Upstream Pipeline Segment:</u> The second alternative allowed the parties to
14	submit a proposal based on providing only the segment of the pipeline needed to
15	deliver gas from Transco Station 85 to FGT Station 16. This segment could be
16	combined with other proposals to create a total pipeline project capable of
17	delivering gas from Transco Station 85 to CCEC and RBEC. The proposal
18	could be based on construction of a new pipeline system or an expansion of an
19	existing pipeline system.
20	
21	Florida Pipeline Segment: The third alternative identified in the solicitation
22	was based on the construction of a new pipeline or the upgrade of an existing
23	pipeline from FGT Station 16 to FPL's CCEC and RBEC facilities. This

segment could be combined with proposals received from respondents on the Upstream Pipeline Segment to develop a total pipeline project for comparison purposes.

A.

In addition, FPL requested respondents consider three different quantity scenarios. FPL requested proposals for 1.0 Bcf/d, 800 MMcf/d and 400 MMcf/d. FPL subsequently went back to all of the parties soon after the proposals were received and requested additional proposals based upon a 600 MMcf/d scenario, which were provided to FPL by the parties. All proposals were based on the parties having the facilities in service by 2012 or 2013.

Q. Why did FPL go back to the respondents and request additional proposals based on a 600 MMcf/d scenario?

There were two reasons FPL requested 600 MMcf/d proposals. First, as discussed by FPL witness Morley, FPL was revising the load forecast downward. This resulted in FPL shifting the focus of the solicitation analysis away from the higher quantity scenarios (1.0 Bcf/d and 800 MMcf/d) to the 600 MMcf/d and 400 MMcf/d scenarios. Second, FPL received proposals from only a few parties for the initial 400 MMcf/d scenario requested in the Solicitation Letter. Our goal was to increase the pool of responses and to determine the minimum quantity that would be required by the respondents to propose a new pipeline into Florida which could enhance the state's gas transportation infrastructure and increase reliability.

1	Q.	What did FPL determine to be the minimum quantity required to support
2		proposals for new pipeline infrastructure into Florida?
3	A.	It was clear from our discussions with the respondents that a minimum quantity
4		of 600 MMcf/d would be necessary for a pipeline company to commit to build
5		new pipeline infrastructure into Florida. We made every attempt to work with
6		the parties to determine if a smaller quantity would be feasible, but all the
7		smaller scale projects resulted in significantly higher transportation costs. In
8		addition, as discussed by FPL witness Sharra, FPL determined that a 30-inch
9		diameter pipeline with an initial capacity of 600 MMcf/d was the optimum size
10		to meet current transportation capacity requirements while providing the
11		capability to economically increase capacity through the addition of
12		compression.
13	Q.	Did all parties who received a Solicitation Letter submit proposals?
14	A.	Yes. All seven parties who received a Solicitation Letter submitted proposals.
15		FPL received numerous proposals for all the volume scenarios as well as
16		multiple proposals on the Interstate Pipeline, the Upstream Pipeline Segment and
17		the Florida Pipeline Segment.
18	Q.	Please summarize the bids received.
19	A.	Interstate Pipeline: FPL received proposals from two companies that were
20		proposing a new interstate pipeline or an expansion of an existing pipeline
21		capable of receiving gas at Transco Station 85 and delivering gas to CCEC and

RBEC. The proposals ranged from 400 MMcf/d to 1.0 Bcf/d. In addition, two

companies submitted proposals that did not conform to the Solicitation Letter

because they did not provide reasonably direct access to Transco Station 85.

<u>Upstream Pipeline Segment:</u> FPL received proposals from three companies for the Upstream Pipeline Segment for volumes ranging from 400 MMcf/d to 1.5 Bcf/d. In addition, two companies submitted proposals that did not conform to the Solicitation Letter because they did not provide reasonably direct access to Transco Station 85.

Florida Pipeline Segment: In addition to the FPL proposal, FPL received proposals from two companies for the Florida Pipeline Segment. One of these proposals was not considered in the final analysis because FPL was not satisfied that the respondent's cost estimates were consistent with current market conditions. As a result, since the respondent's proposal was based upon these underlying cost estimates, FPL was not convinced that the transportation rate included in the proposal provided a reasonable comparison versus the transportation rates received from other respondents. In addition, this proposal did not include, and the respondent was not willing to provide, a firm transportation rate as requested in the Solicitation Letter and follow-up discussions. Rather, the ultimate transportation rate payable by FPL under this proposal would only be finalized after construction based upon actual costs of project installation. As such, FPL was unwilling to consider this proposal in the final analysis.

1 Additional Proposals: FPL also received a number of alternative proposals for consideration.

Q. How did FPL address the issue of non-conforming proposals?

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FPL received proposals from two companies that did not conform to FPL's request in the Solicitation Letter that the primary receipt point for an Interstate Pipeline proposal or an Upstream Pipeline Segment proposal be located at or near Transco Station 85. This supply point was specifically chosen by FPL to ensure access to onshore natural gas supply. FPL requested the applicable respondents consider revising their proposals to include the incremental cost of extending their proposed pipeline to Transco Station 85, but the respondents declined to resubmit proposals to include this cost. In order to include these proposals in the evaluation, FPL adjusted these proposals to include the estimated incremental cost of accessing Transco Station 85. This cost estimate was based on analysis performed by FPL witness Sexton and confirmed through discussions with a pipeline company with existing infrastructure in the area. As presented in FPL witness Sexton's testimony, the cost assessed to the nonconforming proposals consisted of an incremental \$0.20 per MMBtu/d, which was added as a demand charge, and incremental fuel retention of 0.3% to reflect fuel usage on these facilities.

Q. How did FPL begin the evaluation process?

FPL reviewed the proposals individually and then met with each of the respondents to discuss the proposals submitted in order to clarify any outstanding questions. During these discussions, FPL's main goal was to

1		determine the firmness of the proposal, specifically the willingness of the
2		respondent to quote a fixed demand charge not subject to future adjustments.
3		These discussions were an important part of the process and allowed the parties
4		to provide follow-up information to be sure that FPL clearly understood the
5		proposals and could accurately evaluate them.
6	Q.	Did all parties submit a firm gas transportation price as requested by the
7		Solicitation Letter?
8	A.	No. In fact, all parties submitted proposals subject to various types of
9		adjustment or true-up factors. The respondents were unwilling to quote a firm
10		demand charge well in advance of ordering materials and hiring contractors.
11		FPL was, however, able to convince several of the respondents to commit to a
12		fixed demand charge subject only to a steel price tracker. This limited FPL's
13		exposure to a commodity risk (steel cost) that could be easily monitored and
14		locked-in once the order for pipe had been placed. The steel price tracker
15		mechanism significantly limited the risk compared to the potential price
16		adjustments originally proposed by many of the parties.
17	Q.	What analysis did FPL perform to determine the best gas transportation
18		alternative?
19	A.	FPL took the individual proposals submitted by the respondents and sorted them
20		into categories based on quantity and pipeline alternative (Interstate Pipeline,
21		Upstream Pipeline Segment, Florida Pipeline Segment) proposed. Proposals that

did not conform to the Solicitation Letter were put into a separate category to be

analyzed. FPL then analyzed the various components of each proposal to

determine an overall cost per MMBtu/d. All parties proposed transportation rates based on a demand charge (subject to some type of adjustment or true-up factor) and a variable charge comprised of a fuel charge and, if applicable, a usage or transportation charge. For the initial analysis, these costs were uniformly evaluated assuming a 100% load factor and an estimated natural gas cost of \$8.50 per MMBtu/d which was used to calculate the fuel charge. Once FPL determined a total cost per MMBtu/d for each proposal, the proposals within each category were compared to determine the lowest cost alternative for each quantity and pipeline alternative (Interstate Pipeline, Upstream Pipeline Segment and Florida Pipeline Segment) proposed.

A.

Q. How did FPL evaluate the Florida EnergySecure Line proposal for the Florida Pipeline Segment?

FPL calculated the annual revenue requirements for the Florida Pipeline Segment based on FPL's estimate of the cost of the Florida EnergySecure Line proposal. The annual revenue requirements were then converted to a fixed cost per MMBtu/d by dividing the annual revenue requirements by the annual quantity of natural gas for each year (600 MMcf/d multiplied by 365 days for year one). The variable cost per MMBtu/d was calculated based on the fuel rate of the Florida EnergySecure Line, which was evaluated using the same methodology utilized to calculate the variable costs for all of the other proposals. Once the cost of the Florida EnergySecure Line was converted to a total cost per MMBtu/d, the Florida EnergySecure Line could then be compared with the other proposals.

Q. What were the initial results of the solicitation analysis?

The analysis focused on only those proposals for quantities of 600 MMcf/d and 400 MMcf/d, based on FPL's reduced gas transportation needs under the load growth forecast presented by FPL witness Morley. For the Interstate Pipeline alternative, a proposal by one of the respondents, referred to as Company B for confidentiality purposes, for 400 MMcf/d or 600 MMcf/d provided the lowest transportation costs to serve CCEC and RBEC. For the Upstream Pipeline Segment from Transco Station 85 to FGT Station 16, Company E's proposed Upstream Pipeline Project provided the lowest transportation cost for 600 MMcf/d. For the Florida Pipeline Segment from FGT Station 16 to CCEC and RBEC, the FPL proposal, the Florida EnergySecure Line, provided the lowest transportation cost for 600 MMcf/d. None of the proposals for 400 MMcf/d was designed to bring new pipeline infrastructure into the state and allow access to supplies at Transco Station 85. A summary of the Company B, Company E and the FPL Florida EnergySecure Line gas transportation costs is provided as Confidential Exhibit HCS-2.

Α.

Once it was determined that Company B provided the lowest overall cost alternative for the required 400 MMcf/d, FPL focused on comparing the Company B proposal to the combined Upstream Pipeline Project (Upstream Pipeline Segment) and the Florida EnergySecure Line (Florida Pipeline Segment) proposal to determine which pipeline solution offered the lowest cost to customers when evaluated over the life-cycle of the project.

1	Q.	How did FPL determine which of the two proposals offered the lowest cost
2		to customers?

For each of the two proposals FPL calculated the annual gas transportation costs necessary to meet all the gas requirements for FPL's long-term resource plan, as well as two alternate resource plans. The development of FPL's long-term resource plans is described in the testimony of FPL witness Enjamio. The first proposal, which includes the Upstream Pipeline Project and the Florida EnergySecure Line, consists of two cost components: (1) revenue requirements associated with FPL's Florida EnergySecure Line (including applicable fuel retention) and (2) gas transportation costs and applicable fuel retention (Upstream Pipeline Segment and future pipeline expansions required to supply gas to the resource plan through the life of the study). The annual revenue requirements include the cost of the Florida EnergySecure Line as initially configured as well as the cost of additional compression required to boost the capacity of the Florida EnergySecure Line to a maximum capacity of 1.25 Bcf/day. The gas transportation costs for the Company B proposal include Company B's annual gas transportation charges (including applicable fuel retention) that will be required to supply gas required by the resource plan through the life of the study.

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FPL witness Enjamio describes how the gas transportation costs for both transportation alternatives, for each of the three resource plans, are incorporated into an overall economic evaluation of both alternatives, resulting in the

1 Cumulative Present Value of Revenue Requirements (CPVRR) and the 2 estimated impact on the average customer bill.

Q. Did FPL evaluate future benefits of the proposals other than cost?

A.

A.

Yes. One of the important aspects of the solicitation was to determine if there was an alternative that would allow FPL to access future gas transportation capacity at rates that would be beneficial to our customers. For example, if FPL could support a new pipeline project into Florida, could there be future benefits through reduced pricing for expansions. The existing pipelines in Florida have reached the point that future expansions require extensive facility upgrades that result in increasingly higher transportation costs. As discussed in the testimony of FPL witness Sharra, a new pipeline can be designed in a way that would allow for a certain amount of future expansion at relatively inexpensive pricing.

Q. What recommendation resulted from the solicitation?

The Upstream Pipeline Project and the Florida EnergySecure Line combined proposal was the recommended natural gas transportation alternative to serve CCEC and RBEC. This recommendation was based on the following factors. First, the Upstream Pipeline Project and the Florida EnergySecure Line combined proposal provide the lowest cost to customers when evaluated over the life of the project. As presented in the testimony of FPL witness Enjamio and independently corroborated by FPL witness Sexton, the total savings to customers over the 40 year life of the project is estimated to be \$204 to \$513 million (CPVRR).

In addition, the combined project provides for new pipeline infrastructure in
Florida, which will increase the reliability of FPL's gas deliveries. The new
pipeline also provides added diversity of supply, in the form of direct access to
onshore natural gas supply sources via Transco Station 85. Even though the
Company B proposal had the lowest overall initial transportation costs and
would meet the immediate needs of CCEC and RBEC, the proposal Company B
submitted did not allow for direct access to onshore natural gas supplies via
Transco Station 85 (without the addition of additional facilities by either
Company B or another pipeline) and would not be able to meet FPL's future
growth needs without further expansions. FPL has seen pipeline expansion costs
increase significantly over the past few years (e.g., the lowest cost proposal
submitted in the solicitation in response to the Interstate Pipeline alternative
reflects approximately a 50% increase in demand charge when compared to the
demand charge FPL was able to secure under our last transportation agreement
executed in early 2008). Given FPL's analysis of these rising expansion
transportation costs and the need to continue to increase the reliability of FPL's
gas transportation portfolio, the Upstream Pipeline Project and the Florida
EnergySecure Line combined project was determined to be the best solution to
meet FPL's current and future gas transportation needs. The combined project
will also provide additional competition for natural gas transportation within the
state that should provide for lower future pricing for all Florida natural gas
transporters.

V. Did r r L also have a third darty evaluate the drobosa	0.	Did FPL also have a third party evaluate the propo	sals
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A.

A. Yes. FPL engaged Mr. Tim Sexton of Gas Supply Consulting, Inc. to review the results of the analysis. Mr. Sexton is providing testimony analyzing and confirming the results of FPL's conclusion that the combined Upstream Pipeline Project/Florida EnergySecure Line proposal is the best alternative available to meet FPL's future gas needs.

Q. Please describe FPL's planned transportation agreement with Company E to serve the Florida EnergySecure Line.

FPL has executed a Letter of Intent (LOI) with Company E to negotiate a Precedent Agreement based upon the proposal submitted by Company E in response to the Solicitation Letter. The LOI is attached as Confidential Exhibit HGS-3. It expresses FPL's and Company E's intent to negotiate a Precedent Agreement on or before October 1, 2009 that would provide for 600 MMcf/d of gas transportation from Transco Station 85 to be delivered to the Florida EnergySecure Line at FGT Station 16, beginning on January 1, 2014. The agreement will provide for the necessary access to natural gas supply and delivery rights required to deliver natural gas into the Florida EnergySecure Line. The agreement will be similar to FPL's current firm transportation agreements with FGT and Gulfstream, and FPL would request recovery of all costs associated with the firm transportation on the Upstream Pipeline Project through the Fuel Cost Recovery Clause.

1	Q.	Did FPL receive any additional proposals which it was unable to include in
2		the final analysis?

A. Yes. FPL received an additional proposal from one of the respondents while FPL was in the process of finalizing the economic analysis and testimony preparation. This proposal was an unsolicited update from the company that had submitted the next-best alternative (Company B), which would result in a lower proposed gas transportation charge. Based on prior commercial dealings, FPL is skeptical that Company B could or would actually deliver gas at the newly reduced charge. However, even if Company B were willing and able to do so, FPL estimates that the Florida EnergySecure Line/Upstream Pipeline Project proposal would remain the most beneficial alternative for FPL's customers.

Q. Does this conclude your testimony?

13 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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

ERRATA SHEET

DIRECT TESTIMONY OF HEATHER C. STUBBLEFIELD

PAGE #	LINE #	CORRECTION
9	3	Replace "three" with "four"

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

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BY MR. PERKO:

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Ms. Stubblefield, could you please provide Q. your summary.

Yes. Good afternoon, Chairman Carter and Commissioners. The purpose of my testimony is to explain the process that FPL used to solicit proposals for gas transportation to meet, at a minimum, the gas requirements of the Cape Canaveral next generation clean energy center and the Riveria Beach next generation clean energy center modernization projects, and to describe the results of that solicitation process.

The solicitation process consisted of issuing a solicitation letter to seven pipeline companies capable of providing the transportation services that FPL required. FPL requested that the respondents consider three potential pipeline alternatives and a number of volume scenarios.

The first pipeline alternative designated the interstate pipeline alternative was based on the respondent developing a new pipeline or upgrading an existing pipeline from Transcontinental Pipeline Company's, or Transco's, Compressor Station Number 85 in Chocktaw County, Alabama, to FPL's modernization projects.

The second alternative designated the upstream

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proposal based on providing only the segment of the pipeline needed to deliver gas from Transco Station 85 to Florida Gas Transportation, or FGT's Compressor Station Number 16 in Bradford County, Florida.

pipeline segment allowed the parties to submit a

The third alternative, designated the Florida pipeline segment, was based on the respondent providing only the segment of the pipeline needed to deliver gas from FGT's Station 16 to FPL's modernization projects.

The solicitation letter also informed respondents of FPL's intentions to develop an intrastate pipeline as an alternative to the third-party proposals. The solicitation letter resulted in a significant number of proposals.

Due to various factors, FPL elected to focus on the proposals for 400 and 600 million cubic feet per day. FPL evaluated the various proposals to determine the lowest cost proposed for each of the three pipeline scenarios. FPL then conducted a life cycle economic analysis to determine which proposal, either the interstate pipeline proposal, or a combined upstream pipeline segment, Florida pipeline segment proposal resulted in the lowest cost to customers.

The results of FPL's analysis as confirmed by the independent analysis of FPL Witness Sexton indicated

that the proposal that provided the lowest life cycle 1 2 cost to the customer and the greatest supply diversity 3 was a combined project which included an upstream pipeline segment proposed by a third-party natural gas 4 transmission company referred to as Company E for 5 confidentiality purposes and the Florida EnergySecure 6 7 Line proposed by FPL. MR. BUTLER: We tender the witness for 8 9 cross-examination. 10 CHAIRMAN CARTER: Thank you. 11 Mr. Self. 12 MR. SELF: Thank you, Mr. Chairman. 13 CROSS EXAMINATION 14 BY MR. SELF: 15 16 17 questions about your testimony.

Good afternoon, Ms. Stubblefield. I'm Floyd Self representing FGT, and I've got a couple of

As I understand the process, the solicitation process really began in early 2008, is that correct?

That is correct. Α.

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And at that time FPL was looking forward to obtaining transportation both for the Cape Canaveral and Riveria Beach modernization projects, as well as for two new greenfield power plants that were anticipated in the 2015 to 2017 time frame, is that correct?

1	A. Correct. The solicitation letter provided a
2	number of volume scenarios including 400, 800, and a
3	Bcf.
4	Q. And that was because you were contemplating
5	potentially four plants being served?
6	A. Correct.
7	Q. And, in fact, in FPL's 2008 Ten-Year Site
8	Plan, it does, in fact, list these two new greenfield
9	plants for the 2015 to 2017 time period, correct?
10	A. Correct.
11	Q. And at the time that the formal letters
12	inviting responses to FPL's solicitation were sent out
13	in July of 2008, at that time FPL was still
14	contemplating transportation for, again, the Cape and
15	Riviera Plant projects as well as the two new greenfield
16	plants, correct?
17	A. Correct.
18	Q. Now, subsequent to the issuance of those
19	July 2008 solicitation letters, you became aware that
20	the load forecasts were being reduced, is that true?
21	A. That is correct.
22	Q. And, in fact, in the subsequent 2009 Ten-Year
23	Site Plan, those two new greenfield power plants that
24	had been in the 2008 site plan are not in the 2009 site

plan, correct?

A. Correct.

- Q. Now, I believe as a consequence of those lower load forecasts you made a follow-up request to the solicitation respondents that you discuss at Page 3 of your direct testimony, is that correct?
 - A. That is correct.
- Q. Now, by eliminating the two new power plants, in terms of the solicitation process, the unmet transportation need that you had at that point was just for the Cape and Riveria plants, correct?
- A. That's correct, for 400 million cubic feet per day.
- Q. All right. And notwithstanding the fact that you only needed 400 million cubic feet a day for the Cape and Riveria plants, nevertheless in the follow-up solicitation that you did you were still asking for 600 million cubic feet, correct?
- A. Right. As I stated in my testimony, one of the purposes for going back and requesting the 600 a day alternative was to see potentially what parties may be willing to propose for new infrastructure. When we received the original proposals from the respondents, there was no party who was willing to propose new infrastructure into the state for a quantity of only 400 a day. So it was important to us to see potentially,

since we had asked for 800 in a Bcf to see if, perhaps, a 600 scenario would allow for new infrastructure to be brought in the state. The feedback we got from the respondents was if we could increase it to that level that we would get more interest in bringing the new infrastructure in, so we pursued the 600 alternative.

- **Q.** And by the new infrastructure, you are talking about a pipeline that would not be provided by one of the incumbent pipeline companies that currently serve FPL?
- A. No, it could be provided by one of the incumbent pipelines. We just wanted a new distinct pipeline system or route. So one of the existing pipeline companies could have proposed a project that brought new infrastructure in in addition to their existing infrastructure. But, again, we were trying to see what we could do to bring new infrastructure into the state of Florida.
- Q. Now, as I understand from some of the other witnesses, the fact that you only needed 400 million cubic feet a day for the Cape and Riveria Plants leaves you with this 200 million in excess capacity, correct?
- A. I would like to clarify that point slightly.

 We talk about the excess 200. In reality there is

 benefit to the customers of that 200. What the dispatch

model will show and Witness Enjamio can describe more 1 fully is that on a daily basis that incremental 200 has 2 a lower variable cost than our existing capacity on FGT. 3 So in reality that 200 does have benefit to 4 the customer because it will be dispatched. So we will 5 be using the full 600 and we will have excess 200 left 6 7 on FGT at a higher variable cost. But that's in Mr. Enjamio's testimony, 8 0. 9 correct? 10 Well, he can further explain what that cost Α. 11 is, but that is how the model showed how the dispatch would work with the various pipelines. 12 1.3 Q. That's not your model, correct? 14 No, Mr. Enjamio does the modeling for FPL. Α. 15 MR. SELF: Okay. Mr. Chairman, I have no further questions. Thank you. 16 17 CHAIRMAN CARTER: Thank you, Mr. Self. Staff. 18 MS. BROWN: We have no questions. 19 CHAIRMAN CARTER: Commissioner Skop, you're 20 recognized. 21 COMMISSIONER SKOP: Thank you. 22 Good afternoon, Ms. Stubblefield. 23 THE WITNESS: Good afternoon. 24 COMMISSIONER SKOP: I just wanted to draw your 25 attention to Page 3 of your prefiled testimony where it

discusses the various options that were contained in the solicitation letter that was issued on July 17, 2008.

And I guess the third alternative on Lines 18 through 20 provides for a solicitation providing a segment from FGT Station 16 to the respective modernization plants, is that correct?

THE WITNESS: Correct.

commissioner skop: Okay. Now, also beginning on Lines 21 through 22 it also stated in the solicitation letter that respondents were informed of FPL's intention to develop an interstate pipeline as an alternative third-party proposal. Is that also correct?

THE WITNESS: That is correct.

COMMISSIONER SKOP: Okay. I guess the question I have is in the need determination for the modernization plants, and I guess your prefiled testimony was filed on April 30th, 2008, at that time was FPL contemplating an intrastate pipeline?

THE WITNESS: No, we were not contemplating it at that time, as far as I can recall. Although I believe it was in my testimony that we were trying to introduce new infrastructure into the state.

COMMISSIONER SKOP: Right. And you mentioned on Page 3 of that testimony alternatives could include the addition of a new interstate pipeline.

THE WITNESS: Right. 1 COMMISSIONER SKOP: But, again, what somewhat 2 caught me by surprise was trying to ascertain where the 3 intrastate pipeline idea originated from in the temporal 4 time frame under which the prior need determination and 5 the current proceeding before us. So, again, I just 6 wanted to clarify that point that apparently this 7 happened after your testimony was filed and concurrent 8 with the Commission's determination of need for those 9 two modernization projects, is that your understanding? 10 11 THE WITNESS: That's correct. COMMISSIONER SKOP: All right. Thank you. 12 13 CHAIRMAN CARTER: Thank you, Commissioner 14 Skop. 15 Commissioners, anything further from the 16 bench? 17 Redirect. 18 MR. PERKO: No redirect. 19 CHAIRMAN CARTER: Okay. Exhibits. 20 MR. PERKO: Excuse me, Commissioner. 21 CHAIRMAN CARTER: It would be 34 through 36. 22 MR. PERKO: That is correct. 23 CHAIRMAN CARTER: Okay. And you are moving 24 them into evidence. Any objections? 25 MR. SELF: No objections.

1	CHAIRMAN CARTER: Without objection, show it
2	done.
3	(Exhibit Number 34, 35, and 36 admitted into
4	the record.)
5	CHAIRMAN CARTER: Commissioners, we have
6	entered in Exhibits 34, 35, and 36. Thank you.
7	Now, do we have a recess or is she coming
8	back? For the witness, do I put her on recess?
9	THE WITNESS: I have no rebuttal testimony.
10	MR. PERKO: She does not have rebuttal.
11	CHAIRMAN CARTER: Well, you got a
12	get-out-of-jail-free card, then.
13	THE WITNESS: I do. Thank you.
14	CHAIRMAN CARTER: Have a great day.
15	THE WITNESS: Thank you.
16	CHAIRMAN CARTER: Call your next witness.
17	MR. PERKO: FPL calls Juan Enjamio.
18	MR. PERKO: Mr. Chairman, I do not believe
19	that Mr. Enjamio was sworn.
20	CHAIRMAN CARTER: Have you been sworn in?
21	THE WITNESS: No, I have not.
22	CHAIRMAN CARTER: Would you please raise your
23	right hand.
24	(Witness sworn.)
25	JUAN ENJAMIO

1	was called as a witness on behalf of Florida Power and
2	Light, and having been duly sworn, testified as follows:
3	DIRECT EXAMINATION
4	BY MR. PERKO:
5	Q. Could you please state your full name and
6	business address for the record?
7	A. Yes. My name is Juan Enjamio. My business
8	address is 9250 West Flagler Street, Miami, Florida
9	33174.
10	Q. Did you prepare and have submitted in this
11	docket direct testimony consisting of 24 pages?
12	A. Yes, I did.
13	Q. Have you filed an errata pertaining to your
14	testimony on July 24th?
15	A. Yes, I did.
16	Q. Other than the changes indicated in your
17	errata, do you have any changes to your testimony?
18	A. No, I do not.
19	Q. And did you also attach exhibits to your
20	testimony?
21	A. Yes, I did.
22	Q. Does your errata include any changes to those
23	exhibits?
24	A. No.
25	CHAIRMAN CARTER: With that, Your Honor or,

Mr. Chairman, I would ask that -- I'm sorry, one more 1 2 question. BY MR. PERKO: 3 Mr. Enjamio, if I were to ask you the same 4 Q. questions in your testimony today, would your answers be 5 6 the same? 7 A. Yes, they would. MR. PERKO: With that, Mr. Chairman, I would 8 request that Mr. Enjamio's testimony be inserted into 9 10 the record as though read. 11 CHAIRMAN CARTER: The prefiled testimony of 12 the witness will be inserted into the record as though 13 read. 14 And just for identification purposes, 15 Commissioners, on the exhibit list for this witness is 16 37 through 45 for identification purposes. Is that 17 correct, staff? 18 MS. BROWN: (Indicating affirmatively.) 19 CHAIRMAN CARTER: Thank you. Commissioner 20 Skop. 21 COMMISSIONER SKOP: Thank you. Just on that 22 errata, I just wanted to ask FPL's counsel perhaps they 23 could ask the witness on Page 23 of the prefiled 24 testimony reference is made to Witness Sexton's proposed 25 cumulative present value revenue requirement and the

savings that would occur by using the pipeline over 1 other alternatives. And I'm contrasting that to 2 different numbers in the rebuttal of Timothy Sexton on 3 Page 7, Lines 6 through 7. It seems to be -- and I 4 don't know if it's an apple-to-apple comparison, but I 5 just wanted to make sure I'm looking at the right 6 7 numbers. If it helps, I think that Mr. Sexton's revised 8 numbers were on the updated gas cost savings analysis, 9 and maybe those were not adopted in the direct testimony 10 here. So I just wanted to kind of clarify which those 11 12 two numbers are right, if they are apple-to-apple 13 numbers. 14 CHAIRMAN CARTER: Mr. Butler. 15 MR. BUTLER: I'm afraid you have stumped me 16 for the moment. I'm going to have to check into it. 17 Can I confirm that for you during the next break? 18 COMMISSIONER SKOP: That's fine. Thank you. 19 MR. BUTLER: Thank you. 20 CHAIRMAN CARTER: Mr. Butler, you are supposed 21 stump the band, not stump the lawyer. 22 MR. BUTLER: Every so afternoon it happens. 23 Sorry. 24 CHAIRMAN CARTER: Okay. Do you want to take a

moment or can we proceed? We will proceed and you can

25

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF JUAN E. ENJAMIO
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name and business address.
7	A.	My name is Juan E. Enjamio. My business address is Florida Power & Light
8		Company, 9250 West Flagler Street, Miami, Florida 33174.
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 Supervisor of Integrated Analysis in the Resource Assessment
12		& Planning Department.
13	Q.	Please describe your educational background and professional
14		experience.
15	A,	I graduated from the University of Florida in 1979 with a Bachelor of Science
16		degree in Electrical Engineering. I joined FPL in 1980 as a Distribution
17		Engineer. Since my initial assignment in FPL, I have held positions as a
18		Transmission System Planner, Power System Control Center Engineer, Bulk
19		Power Markets Engineer, Supervisor of Transmission Planning and
20		Supervisor of Supply and Demand Analysis. In 2004, I became Supervisor of
21		Integrated Analysis - Resource Planning.

1	Q.	Please describe your du	ties and responsibilities in your current position.
2	A.	In my current position as	Supervisor of Integrated Analysis, I am responsible
3		for supervision and coor	dination of economic analyses of alternatives to meet
4		FPL's resource needs and	d maintain system reliability.
5	Q.	Are you sponsoring an	exhibit in this case?
6	A.	Yes. I am sponsoring th	e following exhibits which are attached to my direct
7		testimony:	
8		• JEE-1 Pr	ojection of FPL's 2009-2030 Resource Needs
9		• JEE-2 Re	esource Plans Utilized in the Analyses
10		• JEE-3 Re	enewable Resource Assumptions
11		• JEE-4 R	PS Scenario Renewable Resources Added
12		• JEE-5 Pr	rojected FPL Energy Mix by Fuel Type
13		• JEE-6 Pr	rojection of FPL System Incremental Gas Use
14		• JEE-7 E	conomic Evaluation Results for Different Gas
15		Ti	ransportation Alternatives
16		• JEE-8 Pr	rojection of Approximate Bill Impacts for
17		D	ifferent Gas Transportation Alternatives
18		• JEE-9 C	ost of Capital
19	Q.	What is the purpose of	your testimony in this proceeding?
20	A.	The purpose of my test	timony is to present the results of economic analyses
21		that support FPL's petit	ion for an affirmative determination of need for FPL to
22		construct the Florida E	nergySecure Line. My testimony addresses six main
23		points. First, I will dis	cuss FPL's projection of additional resource needs in

the future and how those resource needs relate to increased firm natural gas transportation. Second, I present and discuss the long-term resource plan that meets FPL's future resource needs and two alternate resource plans that are used to quantify FPL's natural gas transportation requirements. Third, I present FPL's projected gas requirements. Fourth, I present an overview of the economic analysis process. Fifth, I describe the results of the economic analyses that examined FPL's gas transportation alternatives and the resulting projections of approximate bill impacts for each of the alternatives. Sixth, I summarize the results of the economic analyses and present my conclusion that the Florida EnergySecure Line / Company E Upstream Pipeline Project is the most economic of the gas transportation alternatives considered and, when other beneficial non-economic attributes are taken into account, the best alternative for FPL's customers.

14 Q. Please summarize your testimony.

A.

Based on FPL's current load forecast and consistent with its long-term resource plan, which includes future generation resources previously approved by the Commission (i.e. the West County Energy Center Units 1, 2 and 3, the modernizations of the Cape Canaveral and Riviera steam units, the uprates of FPL's existing nuclear units, Turkey Point Units 6 and 7, and the solar photovoltaic and thermal projects at FPL's DeSoto, Space Center, and Martin sites), FPL projects that it will need as much as 19,661 MW of new capacity between 2013 and 2040. Of this total capacity, 17,357 MW is expected to be incremental gas-fired capacity. This need already accounts for the addition of

1	1,121 MW of new demand side management (DSM) programs projected to be
2	added between 2009 and 2018.
3	
4	In addition to FPL's long-term resource plan (Base Case), two alternate
5	scenarios were developed to analyze firm gas transportation alternatives.
6	These alternate scenarios are the Renewable Portfolio Standard (RPS)
7	Scenario resource plan (RPS Scenario) and the Nuclear Delay Scenario
8	resource plan (Nuclear Delay Scenario). The RPS Scenario assumes that the
9	state of Florida will adopt an RPS rule with a target of 20% renewable energy
10	by 2020, constrained by a 2% cap on increased retail revenues. The Nuclear
11	Delay Scenario differs in that it postulates a four-year delay in the
12	construction of Turkey Point Units 6 and 7.
13	
14	In 2008, approximately 53% of all energy produced by FPL came from gas-
15	fired generating units. This percentage is projected to increase to 68% by
16	2030 and 84% by 2040. Between 2013 and 2040, FPL will need to add about
17	2,700 million cubic feet of gas transportation capacity per day (MMcf/d). As
18	described in the testimony of FPL witness Forrest, the existing gas
19	infrastructure in Florida is inadequate to meet the need for firm gas
20	transportation needs of FPL through 2040.
21	
22	As a result, FPL conducted a solicitation process for gas transportation
23	capacity for FPL's initial gas requirements as well as developed its own self-

build project: the Florida EnergySecure Line / Company E Upstream Pipeline Project. From the solicitation process, the best non-FPL alternative was selected (identified as the "Company B Proposal"). The solicitation process is described in the testimony of FPL witness Stubblefield.

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The focus of my testimony is the economic analysis performed to compare both alternatives, the Company B Proposal and the Florida EnergySecure Line / Company E Upstream Pipeline Project, under the Base Case and two alternate scenarios. The economic analysis consists of a life-cycle cost analysis that determines the difference in cumulative present value of revenue requirements (CPVRR) between the two firm gas transportation alternatives under each of three resource plans. The analysis results show that selecting the Florida EnergySecure Line / Company E Upstream Pipeline Project results in an economic advantage ranging between \$204 million and \$513 million CPVRR when compared to the Company B Proposal. This economic advantage does not include any benefit to FPL's customers from short-term off-system sales of gas transportation capacity. FPL witness Sexton explains how the sales made possible by the Florida EnergySecure Line / Company E Upstream Pipeline Project could provide additional benefits to our customers, ranging from approximately \$200 million to as high as approximately \$700 million.

1		I conclude that based on the projected gas transportation needs and favorable
2		economics, the Florida EnergySecure Line / Company E Upstream Pipeline
3		Project is the best alternative for our customers.
4		
5		I. FPL'S PROJECTION OF RESOURCE NEEDS
6		
7	Q.	How were the projections of resource needs determined?
8	A.	The timing and magnitude of FPL's future resource needs are based on
9		generation reliability analyses using established planning criteria. While FPL
10		uses both loss of load probability (LOLP) and reserve margin criteria in its
11		system, under current assumptions the latter establishes the need for future
12		resources. The reserve margin planning criterion establishes a minimum
13		reserve margin of 20%. FPL updated its reserve margin calculations using
14		current assumptions. The most significant of these assumptions are listed
15		below:
16		
17		Load forecast: By 2030, FPL's summer peak load is expected to grow
18		12,871 MW over the 2008 actual peak load. The load forecast and the
19		load forecasting process are described in FPL witness Morley's
20		testimony.
21		
22		Demand side management (DSM): The DSM assumption used in this
23		analysis is based on meeting FPL's currently-approved DSM Goals
24		through 2014, plus implementing additional cost-effective DSM

through 2014 that was identified after the current DSM Goals were 1 established, and a projection of continued DSM additions in 2015 2 through 2018. This projection above the DSM already implemented 3 by FPL through the end of 2008 results in the addition of 1,121 MW of 5 load control and conservation measures by 2018. This projection of 6 1,121 MW of additional DSM starting in 2009 is not reflected in 7 FPL's load forecast, but is instead included as an additional resource in 8 the resource plan. 9 10 FPL is scheduled to present new projections of cost-effective DSM to 11 the Commission in June 2009. These new projections will be used to 12 determine the Company's new DSM Goals for the years 2010 through 13 2019. The analyses to develop these new projections of cost-effective 14 DSM for the new DSM Goals are a work-in-progress at the time the 15 need determination petition for the Florida EnergySecure Line is being 16 filed. 17 18 Renewable resources: The Base Case resource plan includes 110 MW 19 of solar generation from FPL's new solar projects at the DeSoto, Space 20 Center and Martin sites. These projects have already been approved 21 by the Commission.

1	Generation resources previously approved by the Commission: The
2	following generating units are included in the resource plan:
3	
4	1. West County Energy Center Units 1, 2, and 3 (all in service by
5	the summer of 2011). Total capacity = 3,657 MW.
6	
7	2. Nuclear uprates at existing nuclear units (all in service by end
8	of 2012). Total capacity = approximately 400 MW.
9	
10	3. New nuclear units - Turkey Point Units 6 and 7 will be in
11	service in 2018 and 2020, respectively. Total capacity = 2,200
12	MW.
13	
14	4. Modernizations - The modernization projects at the Cape
15	Canaveral and Riviera Plants, which will become the Cape
16	Canaveral Next Generation Clean Energy Center (CCEC) and
17	Riviera Beach Next Generation Clean Energy Center (RBEC),
18	will be in service in 2013 and 2014, respectively. Incremental
19	capacity = 1,069 MW.
20	
21	Power purchases: Expiration of power purchase contracts totaling
22	1,610 MW.

The analysis of the generation reliability needs, based on the assumptions described above, indicates the need for 14,931 MW of additional resources between 2021 and 2040, after incremental DSM. This need is based on meeting the 20% summer reserve margin criteria. This is further illustrated in Exhibit JEE-1.

II. THE RESOURCE PLANS

Α.

Q. What resource plans did you use in your study?

A. As I previously discussed, FPL used its long-term resource plan (Base Case)
and two alternate scenario resource plans (RPS Scenario and Nuclear Delay
Scenario) to analyze the economics of the Florida EnergySecure Line /
Company E Upstream Pipeline Project.

14 Q. What is included in the Base Case?

The Base Case reflects the major assumptions listed in Section I, including the generation capacity additions through 2020 already approved by the Commission. The need for additional resources required to maintain generation reliability after 2020 in excess of the capacity provided by the resources described in Section I is met with natural gas-fired combined cycle units. For this plan, the combined cycle units were sized at 550 MW with performance equivalent to that of "G" class advanced combustion turbine technology.

1		In the final analysis, this resource plan results in the need to add 17,357 MW
2		of natural gas-fired resources between 2013 and 2040. This total includes the
3		CCEC and RBEC facilities. The results of the Base Case are described in
4		Exhibit JEE-2.
5	Q.	Why did you assume that FPL will fill the incremental generation
6		resource needs beyond the proposed nuclear Turkey Point Units 6 and 7
7		with gas-fired combined cycle units?
8	A.	The options available to FPL to meet the needs for additional generation
9		resources are limited to renewable energy resources, gas-fired combined cycle
10		units, gas-fired combustion turbine units and additional nuclear generating
11		units. I should note that, for resource planning purposes, modernizing existing
12		facilities and building new combined cycle units would impose very similar
13		gas requirements on FPL's system.
14		
15		Under current assumptions, renewable energy resources whether solar, wind,
16		or biomass are not cost effective when compared to FPL's other potential
17		generation resources (gas-fired units and nuclear units). Therefore, it is
18		appropriate that FPL not include new renewable resources in its Base Case.
19		However, FPL did include an RPS plan as an alternate scenario in this study.
20		
21		FPL considered whether gas-fired combustion turbines would be more cost
22		effective than combined cycle units. It was determined that for FPL's system,

under current assumptions, combined cycle units will be the more costeffective natural gas-fired option.

A.

The last option considered was the addition of new nuclear units. As demonstrated in the Nuclear Power Plant Cost Recovery Docket, FPL believes that new nuclear units are cost effective generation alternatives that result in significant fuel cost savings and emission reductions. However, FPL is uncertain as to the timing of additional nuclear units following the construction of Turkey Point Units 6 and 7 and determined that including additional nuclear units into the resource plans utilized in the economic analysis of gas transportation alternatives was not appropriate.

12 Q. Why did FPL develop an RPS Scenario?

The Florida Legislature is considering the adoption of RPS legislation. As requested by the Legislature, the Commission developed a draft rule that it recently submitted to the Legislature for its consideration. FPL believes some form of RPS legislation or other similar renewable energy legislation will be implemented at either the state or federal level in the near future. As a result, FPL decided to include an RPS scenario in the economic analysis of the Florida EnergySecure Line / Company E Upstream Pipeline Project and competing gas transportation proposal.

21 Q. How did FPL develop the RPS Scenario resource plan?

22 A. The RPS Scenario was developed using the major assumptions listed in 23 Section I of my testimony. However, additional renewable resources were

I		added in a manner consistent with the Commission's RPS draft rule. Ally
2		resource need not met with new renewable resources was met with the
3		550 MW natural gas-fired combined cycle units as previously described.
4		
5		In the final analysis, the RPS Scenario results in the need to add 16,804 MW
6		of natural gas-fired resources between 2013 and 2040 in the form of combined
7		cycle units. The results of the RPS Scenario resource plan are shown in
8		Exhibit JEE-2.
9	Q.	Can you describe how you determined the additional renewable
10		resources added under the Commission RPS draft rule?
11	A.	It was assumed that the RPS would require that 20% of energy sales would
12		be met from renewable resources by the year 2020. However, FPL assumed
13		a cap on the cost of these renewable resources. This cap consists of 1.5% of
14		previous year's retail revenues for Class I renewable resources (solar and
15		wind) and an additional 0.5% cap for Class II renewables (all others).
16		
17		To meet the 20% renewable energy standard, the analysis assumed that FPL
18		would add both solar photovoltaic and biomass renewable energy resources.
19		The costs and performance of the solar photovoltaic resources are based on
20		FPL's DeSoto Next Generation Solar Energy Center Project. At 25 MW, this
21		plant will be the largest solar photovoltaic facility in the nation when
22		completed at the end of 2009. The costs of biomass resources are based on
23		Navigant's "Florida Renewable Energy Potential Assessment" report,

prepared for the Commission and others in late 2008. The assumptions used 1 for solar and biomass renewable resources are listed in Exhibit JEE-3. 2 3 Under the RPS Scenario, between 2010 and 2020 FPL will add an average of 4 42 MW of solar photovoltaic resources and 28 MW of biomass resources 5 every year. It was then assumed that after 2020 FPL would continue to build 6 renewable resources following the 2010-2020 trend. This results in the 7 addition, by 2040, of 3,290 MW of renewable resources to FPL's generation 8 9 resource portfolio. 10 In determining the amount of renewable resources to be added under the 2% 11 cap, FPL assumed one of several interpretations of how the cap would be 12 applied. In FPL's analysis, the amount of renewable resources to be added 13 was constrained by the cost cap, thus preventing the 20% RPS target from 14 being met. The renewable resources added in the RPS scenario are shown in 15 16 Exhibit JEE-4. Why did FPL develop a Nuclear Delay Scenario? 17 Q. FPL presently expects to place the new Turkey Point Units 6 and 7 into 18 A. service in 2018 and 2020, respectively. Nevertheless, as FPL explained in the 19 need determination proceeding for those units, there is substantial uncertainty 20 regarding the timetable for licensing and construction of new nuclear units 21 because of circumstances not within FPL's control. For example, licensing 22 could be delayed for years by unexpected intervention and litigation. There is 23

also active competition among new nuclear projects for the fabrication and timely delivery of key components by the few suppliers that are capable of providing them. Moreover, FPL has consistently advised the Commission that it can justify proceeding with new nuclear units only if there is strong political and regulatory support. Recent changes in Congress, a new administration in the White House and the likely appointment of new Commissioners to the Nuclear Regulatory Commission all create uncertainty as to whether the support new nuclear projects have received for the past several years will continue. To illustrate FPL's concern, the "Clean Energy" bill currently being discussed in Congress contains no support for new nuclear projects, in spite of the bill's emphasis on reducing greenhouse gas emissions and the important role that nuclear power can and should play in achieving those reductions.

Because of these uncertainties, FPL elected to develop a planning scenario that assumed a four-year delay of both new nuclear units so that they would be brought into service in 2022 and 2024. The Florida EnergySecure Line would provide valuable insurance against such a delay by ensuring that there would be sufficient gas supply available to the gas-fired units needed to accommodate this delay.

20 Q. How did you develop the Nuclear Delay Scenario?

A. The Nuclear Delay Scenario resource plan was also developed using the major assumptions listed in Section I of my testimony. However, in this scenario, the in-service dates of Turkey Point Units 6 and 7 were deferred to 2022 and

1		2024 to reflect a four-year delay as a result of factors outside of FPL's control.
2		Under this scenario, two combined cycle units, with a capacity of 1,219 MW
3		each with the same technology as the CBEC and RBCC units, were added in
4		2018 and 2020 to meet generation reliability.
5		
6		Ultimately, the Nuclear Delay Scenario results in the need to add 17,030 MW
7		of natural gas-fired resources between 2013 and 2040 in the form of combined
8		cycle units. The results of the Nuclear Delay Scenario are shown in Exhibit
9		JEE-2.
10		
11		III. GAS REQUIREMENTS
12		
13	Q.	What is FPL's projected fuel mix?
14	A.	In 2008, based on historical data, 53% of FPL's net energy for load was
15		generated with natural gas. With the Base Case, the percentage of total
16		energy generated from gas is projected to grow to approximately 68% by 2030
17		and 84% by 2040. Even under the RPS Scenario, the percentage of total
18		energy generated from gas is projected to be 64% by 2030 and 76% by 2040.
19		FPL's projected energy mix by fuel type for each of the three resource plans is
		112 sprojected energy man by their type to a due in the time vesselies plants is

1	Q.	What is the magnitude of incremental gas requirements under the base
2		Case?
3	A.	Under the Base Case, from 2013 FPL's gas need would grow to 1.6 billion
4		cubic feet per day (Bcf/d) by 2030 and 2.8 Bcf/d by 2040. A graph of the
5		incremental gas requirements of the Base Case is shown in Exhibit JEE-6.
6	Q.	What is the magnitude of incremental gas requirements under the RPS
7		Scenario?
8	A.	The gas requirements under the RPS Scenario are lower than the requirements
9		under the Base Case because renewable energy generation displaces gas
10		generation. Under the RPS Scenario, from 2013 FPL's gas need would grow
11		to over 1.6 Bcf/d by 2030 and to 2.7 Bcf/d by 2040. The incremental gas
12		requirements of the RPS Scenario are shown in Exhibit JEE-6.
13	Q.	What is the magnitude of incremental gas requirements under the
14		Nuclear Delay Scenario?
15	A.	The gas requirements under the Nuclear Delay Scenario are approximately the
16		same as those for the Base Case after 2024. There is a significant difference,
17		however, in the gas need in the earlier years because an additional 400
18		MMcf/d is needed between 2018 and 2020 due to the delays associated with
19		Turkey Point Units 6 and 7. Under this scenario, FPL's gas need will grow to
20		800 MMcf/d in the 2013-2020 period to 1.7 Bcf/d by 2030 and to 2.7 Bcf/d by
21		2040.

1		IV. OVERVIEW OF ECONOMIC ANALYSIS PROCESS
2		
3	Q.	Which gas transportation alternatives did FPL include in its economic
4		analysis?
5	A.	In this economic analysis, FPL considered two gas transportation alternatives:
6		(1) the self-build Florida EnergySecure Line coupled with the Company E
7		Upstream Pipeline Project, and (2) the most competitive of the proposals
8		obtained under FPL's solicitation process, which was designated the
9		"Company B Proposal."
10		
11		As described in detail in the testimony of FPL witnesses Sharra and Collins
12		the Florida EnergySecure Line consists of the construction of approximately
13		300 miles of new gas pipe by FPL to be placed in service by January 2014
14		This FPL alternative assumes the use of the Company E Upstream Pipeline
15		which will be its primary supply source. This option also includes the
16		economic benefits of future expansions of the Florida EnergySecure Line, as
17		described by FPL witness Sharra.
18		
19		The Company B Proposal, and the process whereby this alternative was
20		selected as the most competitive gas transportation alternative from all the
21		proposals received under FPL's solicitation process, is described in the
22		testimony of FPL witness Stubblefield.

1	Q.	How were the economic analyses performed?
2	A.	The economic analysis of the Florida EnergySecure Line / Company E
3		Upstream Pipeline Project and the most competitive alternative (the Company
4		B Proposal) consisted of the following steps:
5		
6		Step 1 - FPL defined the Base Case and the alternative scenarios as well as the
7		determination of gas requirements for each resource plan, as described earlier
8		in my testimony.
9		
.0		Step 2 - FPL developed the gas transportation costs. This step was carried out
1		for each resource plan for both the Florida EnergySecure Line / Company E
2		Upstream Pipeline Project and the Company B Proposal. These costs were
13		developed through the life of the study. The 40-year timeframe of the study is
14		based on the expected useful life of the Florida EnergySecure Line /
15		Company E Upstream Pipeline Project because the analysis is intended to be a
16		life-cycle cost study.
17		
18		For the Florida EnergySecure Line / Company E Upstream Pipeline Project,
19		the gas transportation costs reflect the initial capital costs, the operating and
20		maintenance (O&M) costs of the line and the capital costs of increasing
21		compression to boost its capacity. Also included are the Company E
22		transportation charges and additional transportation charges incurred to obtain
23		additional firm gas transportation in the future to meet FPL's projected

growing gas needs after 2026 through the end of the study period. For the Company B Proposal, the gas transportation costs include all Company B gas transportation charges as well as additional transportation charges that will be incurred to obtain additional firm gas transportation in the future to meet FPL's projected growing gas needs through the end of the study period. The development of the gas transportation costs is discussed in more detail in the testimony of FPL witness Stubblefield.

Step 3 - FPL quantified the fuel and other variable cost savings. The two gas transportation alternatives have slightly different natural gas costs. The P-MAREA production-costing model from P-Plus Corporation was used to determine the resulting difference in FPL's total system fuel cost. This model has been used by FPL in fuel cost recovery proceedings as well as need proceedings brought before the Commission. The P-MAREA model simulates the operation of FPL's system on an hourly basis. The model captures variable costs (such as fuel, variable O&M and environmental compliance costs) in its production costing calculations, projects the annual emission levels associated with the resource plans, incorporates the effects of system transmission transfer limits on the dispatch of the generating units and recognizes the pipelines that serve FPL's system, incorporating lateral constraints to the various plants in FPL's system.

1		Step 4 - FPL aggregated all components of system cost and determined the
2		cumulative present value of revenue requirements (CPVRR) of each
3		alternative under each of the three resource plans.
4	Q.	Did you perform sensitivity analyses regarding fuel price forecasts and
5		emission price forecasts?
6	A.	No. The fuel consumption and fuel prices under the Florida EnergySecure
7		Line / Company E Upstream Pipeline Project and the Company B Proposal
8		are very similar. As a result, we determined that fuel price sensitivities would
9		not make a significant difference. Similarly, emissions were close to the same
10		under the Florida EnergySecure Line / Company E Upstream Pipeline Project
11		and the Company B Proposal in each resource plan. Therefore, sensitivities to
12		emission price forecasts would not have affected the economic comparison
13		between the gas transportation alternatives and were deemed unnecessary.
14	Q.	In your economic analysis, did you assume gas transportation sales from
15		the Florida EnergySecure Line / Company E Upstream Pipeline Project
16		to non-FPL customers?
17	A.	The economic analysis results discussed in my testimony do not reflect any
18		short-term gas transportation sales to non-FPL customers. However, FPL
19		witness Sexton explains in his testimony that such sales are likely to happen
20		and discusses his projections of the resulting benefits. These anticipated
21		benefits from sales to non-FPL customers, although significant in magnitude,
22		are not included in my economic analysis.

Q. What financial assumptions did you use for this economic analysis?

Exhibit JEE-9 shows the long-term financial assumptions used in this economic analysis. These financial assumptions are consistent with the assumptions used during the need determination proceedings of the modernization of the Riviera and Cape Canaveral Plants as well as FPL's solicitation for gas transportation proposals. This solicitation process is described in the testimony of FPL witness Stubblefield. Although FPL's projected cost of capital has been adjusted recently, in this economic analysis FPL used the cost of capital assumptions in effect at the time of the solicitation because the factors that affect FPL's cost of capital assumptions also affect the parties that responded to FPL's solicitation and would affect their bids. Using the cost of capital assumptions in effect at the time of the solicitations ensures that the alternatives are comparable.

A.

V. RESULTS OF THE ECONOMIC ANALYSES

17 Q. What are the results of the economic analysis?

A. Exhibit JEE-7 shows the economic results of the Florida EnergySecure Line /
Company E Upstream Pipeline Project under the three resource plans.

Under the Base Case resource plan, the economic analysis shows that the Florida EnergySecure Line / Company E Upstream Pipeline Project is the most economically beneficial with an advantage of \$208 million CPVRR.

1		About \$89 million of the total economic advantage is based on the comparison
2		of gas transportation costs, with fuel and other variable cost savings
3		contributing another \$119 million.
4		
5		Under the RPS Scenario, the economic analysis shows that the Florida
6		EnergySecure Line / Company E Upstream Pipeline Project is the most
7		economically beneficial with an economic advantage of \$204 million CPVRR.
8		About \$89 million of the total advantage is based on the comparison of gas
9		transportation costs, with fuel and other variable cost savings contributing
10		another \$115 million.
11		\cdot
12		Under the Nuclear Delay Scenario resource plan, the economic analysis shows
13		that the Florida EnergySecure Line / Company E Upstream Pipeline Project is
14		the most economically beneficial with an economic advantage of \$513 million
15		CPVRR. About \$403 million of the total economic advantage is based on the
16		comparison of gas transportation costs, with fuel and other variable cost
17		savings contributing another \$110 million.
18	Q.	Did you develop projections of the estimated bill impact to FPL
19		customers?
20	A.	Yes. FPL developed projections of the approximate bill impact of the two gas
21		transportation options under the three resource planning scenarios. Exhibit
22		JEE-8 shows the projections of this bill impact for an average customer using
23		1,000 kWh per month.

1		VI. CONCLUSIONS
2		
3	Q.	Is the Florida EnergySecure Line / Company E Upstream Pipeline
4		Project the best gas transportation option available to FPL and FPL's
5		customers?
6	A.	Yes. Natural gas is and will continue to be FPL's major fuel source for the
7		foreseeable future, and gas-fired generation capacity will continue to be a
8		major part of FPL's future resource plan. The existing gas infrastructure in
9		Florida will be inadequate to meet the long-term needs for gas transportation
0		capacity to support the anticipated increase in gas generation, to as much as
1		17,357 MW of new gas-fired generation by 2040, as described by FPI
2		witnesses Forrest and Sexton. FPL's proposed Florida EnergySecure Line
3		Company E Upstream Pipeline Project results in CPVRR savings between
4		\$204 million and \$513 million compared to the best non-FPL proposa
5		obtained in FPL's solicitation process.
6		
7		Based on the economic advantages of the Florida EnergySecure Line
8		Company E Upstream Pipeline Project as described in my testimony, the
9		additional economic benefits presented in the testimony of FPL witnes
20		Sexton and the significant non-economic benefits described in the testimony
21		of FPL witness Forrest, I conclude that the Florida EnergySecure Line
22		Company E Upstream Pipeline Project is the best alternative to meet FPL'

future gas requirements.

- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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

ERRATA SHEET

DIRECT TESTIMONY OF JUAN E. ENJAMIO

PAGE #	LINE #	CORRECTION
4	1	Replace "1,121" with "1,211"
7	4	Replace "1,121" with "1,211"
7	6	Replace "1,121" with "1,211"

Respectfully submitted this 24th day of July, 2009.

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BY MR. PERKO:

- Q. Mr. Enjamio, could you please provide your summary of your testimony.
- A. Yes, I will. Good afternoon, Chairman Carter and Commissioners. Based on FPL's current load forecasts and consistent with its long-term resource plan, which includes future generation resources previously approved by the Commission, FPL projects that it will need as much as 19,661 megawatts of new capacity between 2013 and 2040. Of this total capacity, 17,357 megawatts is expected to be incremental gas-fired capacity. This need already accounts for the addition of 1,211 megawatts of new demand-side management programs projected between 2009 and 2018 and FPL's proposed nuclear units at Turkey Point.

In 2008, approximately 53 percent of all energy produced by FPL came from gas-fired generating units. This percentage will increase to 68 percent by 2030 and 84 percent by 2040. Between 2013 and 2040, FPL will need to add about 2.7 billion cubic feet per day of gas transportation capacity.

As described in the testimony of FPL Witness Forest, the existing gas infrastructure in Florida is inadequate to meet FPL's firm gas transportation needs. As a result, FPL conducted a solicitation process for

gas transportation capacity for FPL's initial gas
requirements as well as to develop its own self-built
project, the Florida EnergySecure Line Company E
Upstream Pipeline Project, which I will refer to as the

EnergySecure Line.

From the solicitation process, the best FPL alternative was selected, which was the FGT proposal.

The solicitation process is described in the testimony of FPL Witness Stubblefield.

The focus of my testimony is the economic analysis performed to compare both alternatives, the FGT and the Florida EnergySecure Line under the base case and two alternate scenarios. The economic analysis consists of a lifecycle cost analysis that determines for the difference in cumulative present value of revenue requirements between the two firm gas transportation alternatives for each (phonetic) of three resource plans.

The proposal with lowest cumulative present value of revenue requirements over the life of the project will result in the lowest total cost impact to FPL's customers. The analysis shows that selecting the Florida EnergySecure Line results in an economic advantage ranging between 204 million and \$513 million cumulative in present value of revenue requirements when

compared to the FGT proposal. This economic advantage 1 2 does not include any additional benefit to FPL's 3 customers from short-term off-system sales of gas 4 transportation capacity. FPL Witness Sexton explains how the sales made possible by the Florida EnergySecure 5 Line could provide additional benefits to our customers 6 7 ranging from approximately 200 million to as high as 8 approximately 700 million.

I conclude that based on the projected gas transportation needs and favorable economics, that the Florida EnergySecure Line project is the best alternative for FPL's customers.

MR. PERKO: We tender the witness for cross-examination.

CHAIRMAN CARTER: Thank you. Mr. Self.

MR. SELF: Thank you, Mr. Chairman.

CROSS EXAMINATION

BY MR. SELF:

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- Q. Mr. Enjamio, I'm Floyd Self representing FGT.

 It's nice to see you in person this time.
 - A. Same here.
- Q. In your summary you reference the 19,661 megawatts of new generating capacity that you are anticipating between 2013 and 2040, correct?
 - A. Yes.

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- Q. And I believe I heard you say and your testimony reflects that of that 19,661 megawatts, 17,357 megawatts will be gas-fired. Is that correct?
 - A. That's correct.
- Q. Would it be reasonable for FPL to construct this 19,661 megawatts of new generating capacity today so that it will be available for the next 30 years when you need it?
- A. No, sir. When we add a new generating resource or any kind of a large capital expenditure, we basically do a cumulative present value revenue requirement analysis of that particular project over its projected life. It turns out to be often that you build a project for an amount larger than is actually required to serve the capacity at the immediate time knowing that at some point in time you will grow into the size of the project. But clearly FPL is not coming in front of you to ask for a need to petition for 17,357 megawatts of generation today, no.
- Q. And, in fact, the next gas-fired generating plant, according to your forecast, would come in service in -- I believe it's 2021, correct?
- A. That is partly correct, Commissioners. Under what I call my base resource plan, the first unit, gas-fired unit to come into service after the

reorganizations of Cape Canaveral and Riviera happens in 2021. I do have another scenario which I have called 3 the four-year nuclear delay scenario which assumes that in case we have licensing difficulties or other things 5 that could delay the in-service date of the units we would be requiring, in essence, two large combined cycles units in 2018 and 2020.

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- At this time, do you believe that any of the Q. circumstances that might lead to your nuclear delay scenario will, in fact, occur?
- No, I cannot say it will, in fact, occur. But there is a significant risk of delays. The nuclear licensing process is early in its development. There are a lot of issues that come up. FPL is still trying to do its best to bring those units in 2018 and 2020, but FPL also recognizes a significant risk to that schedule. So we think it's prudent to at least consider an alternative in case those nuclear units are delayed, and the fact that we build the Florida EnergySecure Line with 600 million cubic feet of capacity with very easy ability to expand would allow us to, in essence, if we find out two or three years down the road that the nuclear units are delayed, would allow us to, in essence, to bring gas -- have the gas capacity available to meet the generation units of those needs of those

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units coming in in 2018 and 2020.

- But under either of those scenarios, whichever proves true, the gas generating electric plant that you are talking about under either scenario, neither of those gas plants are currently authorized, correct?
- No. We have not asked the Commission for permission to build any of those units, no.
- Okay. Now, in general, your load forecasts Q. are based upon the population and other forecasts that are prepared by Doctor Morley, correct?
 - Α. That is correct.
- Q. And so if Doctor Morley's forecasts are overstated, then your generation forecasts may be overstated depending upon the magnitude of the overstatement of Doctor Morley's analysis, is that correct?
- That is correct, Mr. Self. It would be -- if Α. the load forecast is overstated, the generation plan might be somewhat overstated. Similarly, if the load forecast is understated, which based on the history of long-term load forecasting is a more likely possibility as Doctor Morley said, then our gas needs would be understated and our generation requirements would be understated.
 - Q. Okay. I would now like to discuss with you

your Exhibit JEE-7, which I believe has been identified at this point as Hearing Exhibit 43. I just want to ask you some questions about that document and your analysis.

Now, as I understand the way that you conducted your analysis for what is presented in this exhibit, you depreciated the FPL pipeline over 40 years, is that correct?

- A. That is correct. We depreciated the FPL EnergySecure Line over 40 years, which is the expected useful life of the project.
- Q. And for purposes of your analysis which is reflected on JEE-8, which has been identified as Hearing Exhibit 44, you assumed instantaneous adjustments to electric rates each year, is that correct?
- A. I assumed that the EnergySecure Line would be placed in rate base in 2014.
- Q. And for purposes of the analysis in JEE-8, you assumed instantaneous adjustments to electric rates, correct?
- A. No, I would not say that, Commissioners. The rate impact calculation shown in Exhibit JEE-8 are, in essence, done for purposes of comparing the relative impact of the two alternatives. So, in a sense, we do assume that we do instantaneous ratemaking, but it's

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just a convenience of comparing the impact of both alternatives.

- Q. And, in fact, that is what Footnote 1 says about the instantaneous rate adjustments, correct?
 - A. That's right.
- Q. Now, in actuality, the only way that you could flow through such rate reductions each year would be if you had a rate case, assuming this asset was in the rate base?
- A. I think the proper way to look at this is that we are including -- we are requesting to include the revenue requirements of this project once it's placed into service to electric rate base, and we will have whatever the standard treatment for electric rate base is; at that time rates will be set, okay. For purposes of this comparison we have assumed that the rates, the reality impact on the customer changes from year to year, but we are not assuming that we are going to have a rate case. But this is a standard process and analysis that we always use in these type of projects. We look at the annual revenue requirement and, therefore, presume that rate impact on the customers.
- Q. But, in fact, you could not reflect these lower costs to customers each year unless you had a rate case, correct?

1	A. That I don't know, Mr. Self. I'm not a rate
2	expert, so I do not know how that would work.
3	Q. Okay. Now, in your analysis of the FGT
4	proposal that you are comparing here in your JEE-7 and
5	JEE-8, you used the rate proposal provided by FGT to FPL
6	in January of 2009, is that correct?
7	A. For purposes of the direct testimony, I
8	used I believe that's the correct date. I cannot say
9	with certainty. Ms. Stubblefield could tell us what the
10	actual date was.
11	$oldsymbol{Q}_{oldsymbol{\cdot}}$ Well, but in terms of the information that you
12	used, you used the FGT January 2009 rate proposal,
13	correct?
14	A. I am assuming that is the correct date,
15	subject to check.
16	Q. Now, in performing your analysis of the FGT
17	rate to compare against the FPL rate, you assumed a flat
18	fixed rate for FGT over 40 years, correct?
19	A. That is correct.
20	Q. Okay. And if we can look at your Exhibit
21	JEE-8, Page 1 of 3. This is your base case analysis, is
22	that correct?
23	A. Yes.
24	Q. All right. And it begins in year 2014, is
25	that correct?

A. Yes, it is.

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Q. And in columns that are labeled as 1 and 2, beginning in 2014 in the first row there, the FGT, which is actually Company B, for 2014 the FGT is cheaper than the FPL, is that correct?

A. That is correct. If we do not assume all the additional benefits of third-party sales and other benefits that other FPL witnesses have discussed, the FPL customer will see an increase in rates from 2014 to basically 2021. Starting in 2022, the FPL customer will see a benefit in rates with the FPL project. Over the life of the project and use in the standard analysis that we have used in this case, which is the same type of economic analysis we use in all of our generation resource needs proceedings that would come in front of the Commission, the cumulative present value of revenue requirement analysis, we show that over the life of the project the FPL EnergySecure Line will result in lower costs to FPL's customers.

- Q. All right. But that lower rate that you mentioned that would kick in in I believe it's 2022, again, that would occur only if you actually had a rate case in order to flow that rate through?
- A. No, sir. I have explained that I'm not a rate expert, but this shows a relative impact of the rates,

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both rates. But I do not know how these rates would be adjusted, and if it would require a rate case.

- Q. All right. But the cumulative impact of the FPL rates versus the FGT rates through 2022, on a cumulative basis at that point the FGT proposal is still cheaper than the FPL proposal, correct?
- Yes, but that is not a proper economic analysis, or any kind of proper economic comparison of the two proposals. For any type of large capital project, Commissioners, the standard that has been used in front of this Commission for many years is to look at the economics of the project over its useful life. And, in fact, when we comparing different projects with different useful lives, the standard is to use the useful life of the project with the longer life, which is the approach we have shown here. And as we used in many other proceedings and most recently in the nuclear need filing, we used the same proposal. We looked at the cumulative present value of revenue requirements over the life of the project. In the early years -- for the nuclear case, in the early years the FPL customers are worse off, but over time the FPL customers over the long-term become better off.

And, also, if I may remind you, Commissioners, this does not include a lot of the benefits that have

been discussed by FPL customers -- by other FPL's witnesses, excuse me. We do not include the third-party sales which will offset the rate impact in the early years. It does not include, for example, FPL enters into short-term or interruptible transportation purchases to supplement its firm gas transportation costs.

Just between April and today, FPL spent over \$2.8 million in short-term or interruptible gas that would be avoided by having this pipeline which have not been included in the economics. So the economics that I am showing here, which do show that FPL customers would pay more between 2014 and 2020, or 2021, but will be better off over time are conservative in that they do not include all these other benefits that have been discussed by others.

- Q. Are you finished?
- A. Yes, I am.
- Q. Under your base case analysis, in what year does the cumulative analysis indicate that FPL's pipeline becomes more cost-effective over the FGT pipeline?
- A. Under my base case analysis, as we said before, the FPL customer starts seeing a lower rate impact in 2022, what we call the crossover point, which

Q. So for 27 years, 2041?

A. But, once again, that does not include -excuse me, yes, but that does not include all the other
benefits. If I include, for example, just the
third-party sales that FPL Witness Sexton has discussed
in his testimony, this crossover will be much shorter.
But in this particular case the crossover is in 2041.
In the same analysis shown in my direct testimony under
the nuclear delay scenario, the crossover would happen
in 2031.

is the point at which the cumulative present value of

revenue requirements shows that the customer over the

period of the analysis is better off is 2041,

approximately 27 years after the in-service date.

projects of this type, on large capital projects.

Certainly the case in the nuclear units filing.

Which, once again, is a fairly normal occurrence in

- Q. Are third-party sales a formal part of FPL's application in this case?
- A. I'm not sure if you could call them formal or not. FPL recognizes there will be a benefit from third-party sales. I have not included those in my analysis that is shown in my direct testimony, but we do believe those sales will occur. And they are quite sizable, as I discuss in my testimony, somewhere between

200 and \$700 million.

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And if I may, Commissioner Skop, I think I may clarify the discrepancy in the numbers, if I may, for a second. I think it is an issue of present value of revenue requirements. I believe Mr. Sexton's present value are for a different year than I did, but I will confirm that.

MR. SELF: I'm finished. Thank you.

COMMISSIONER EDGAR: Thank you.

Are there questions from staff?

MS. BROWN: Thank you, Commissioner.

CROSS EXAMINATION

BY MS. BROWN:

- Q. Good afternoon, Mr. Enjamio. We are passing out two exhibits that are already in the record. One is Exhibit 1 to your deposition, and the other is the late-filed exhibit to your deposition that we asked for. I think you're familiar with both of those.
 - A. Yes, I am.
- Q. First, though, to Exhibit JEE-7. That summarizes the results of your economic evaluation of the pipeline compared to FGT's first proposal, correct?
 - A. Yes.
- Q. And that summary shows that under the nuclear delay scenario, the EnergySecure Line would realize

savings of approximately \$500 million, correct?

A. Yes.

- Q. And that summary also shows that under the base case scenario, the EnergySecure Line would realize savings of approximately \$200 million, correct?
 - A. Yes.
- Q. So under the nuclear delay scenario, approximately 300 million of additional savings are realized when compared to the base case, correct?
 - A. Yes.
 - Q. Could you explain why this is the case?
- A. Yes, I will. Under the FPL EnergySecure Line proposal as has been discussed before, even though FPL has a firm need for 400 million cubic feet, the pipeline has a capacity of 600 million cubic feet. Under the nuclear delay scenario, when we accelerate the need for new gas capacity to replace the nuclear units, in essence we have 200 million cubic feet that have already been paid made for in the original analysis. So those 200 million cubic feet are largely free of cost for the FPL EnergySecure Line portion of the analysis.

That is not the case for the FGT analysis.

For the FGT proposal then we would have to accelerate or include additional transportation costs in those years.

So I believe that is the main component of the

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differential, the increase between the two scenarios.

- So to be clear, accelerating the need for gas Ο. generation capacity is the primary driver behind the additional 300 million of savings realized under the nuclear delay scenario, correct?
 - I could agree with that, yes. A.
- Now, if you will refer to your Deposition Q. Exhibit 1. Does it accurately reflect the difference between the revenue requirements for the EnergySecure Line and FGT's proposal as given to staff in FPL's response to Staff Interrogatory Number 24?
- Yes, it does. Commissioners, what this Α. exhibit represents is the economics using a load forecast since it was requested by staff, which reduce the load forecast. FPL still believes that the load forecast that is used in my analysis and presented by Doctor Morley is the right forecast to use for this purpose, but we conducted -- at the request of staff, we conducted this analysis which shows that under the base case, FPL's proposal was \$7 million less economic than the FGT proposal, and \$101 million more economic than the FGT proposal under the nuclear delay scenario.

A couple of observations I would like to make. One is that, once again, these numbers do not include the benefits of any third-party sales or any other

1 benefit that was described. Mr. Enjamio, I think you're looking at the 2 Q. 3 wrong exhibit. A. I'm looking at Page 2 of 10. 4 You should be looking at the exhibits that we 5 Q. just passed out to you, and the one I want you to look 6 7 at is present value revenue requirements, Deposition 8 Exhibit 1. Oh, I'm sorry, I'm looking at the wrong one. 9 10 That's all right. We'll get to the other one. Q. My question was does it appear to accurately represent 11 12 the difference between the revenue requirements for the 13 EnergySecure Line and FGT's proposal as given to staff 14 in FPL's response to Staff Interrogatory Number 24? 15 A. Yes, it does. 16 Q. Okay. And the values in Interrogatory Number 17 24 are the values that were used to populate Exhibit 18 JEE-7, is that correct? 19 Α. That's correct. 20 Okay. If you would focus on the line titled Q. 21 nuclear delay. It's the line with the triangle. 22 what year does the EnergySecure Line become 23 cost-effective on a cumulative basis?

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Α.

Q.

FLORIDA PUBLIC SERVICE COMMISSION

Now, please focus on the line titled base

In approximately 2030.

1	case. I think you mentioned this before, but just to
2	clarify, in what year does the EnergySecure Line become
3	cost effective on a cumulative basis?
4	A. First, Ms. Brown, may correct my previous
5	answer? In crosses in 2031 for the nuclear delay
6	scenario. For the second line, the base case, it
7	crosses over in 2041.
8	Q. And is the 11-year difference also
9	attributable to the timing of the need for additional
10	gas generation capacity?
11	A. Yes. And the fact, as I mentioned before,
12	that, in essence, we have a period where we can
13	accelerate the amount of gas delivered on the
14	EnergySecure Line with very little cost while under the
15	FGT proposal it would require additional transportation
16	charges.
17	Q. All right. Now, if you would turn to
18	Late-filed Exhibit Number 1, Page 2 of 10.
19	CHAIRMAN CARTER: Ms. Brown, could you hold on
20	for a second?
21	MS. BROWN: Sure.
22	CHAIRMAN CARTER: Commissioner Skop.
23	COMMISSIONER SKOP: Thank you, Mr. Chair.
24	Just a quick point of information from staff,
25	because I'm a little confused. I see the Late-filed

1 Exhibit 1, Page 2 of 10, which I believe you are 2 questioning the witness on. 3 MS. BROWN: I'm just about to. 4 COMMISSIONER SKOP: Okay. What is the second 5 sheet? 6 MS. BROWN: The second sheet is Deposition 7 Exhibit 1 that we just finished questioning on. When we 8 took Mr. Enjamio's deposition we sent this exhibit to 9 him and asked questions related to it. 10 COMMISSIONER SKOP: All right. Thank you. 11 CHAIRMAN CARTER: You may proceed. 12 BY MS. BROWN: 13 All right. Late-filed Exhibit 1, Page 2 of Q. 10 is a summary of FPL's economic evaluation of the 14 15 EnergySecure Line assuming a load forecast based on the 16 University of Florida population forecast, is this 17 correct? 18 A. Yes, it is. And that summary shows that under the base 19 20 case scenario, the EnergySecure Line would actually cost 2.1 the ratepayer \$7 million, correct? 22 Yes, that is correct, although as I was 23 mentioning in my premature answer before, this number does not include the additional benefits that we 24 25 discussed about like benefits of sales to third party

and avoidance of interruptible charges for gas transportation charges.

- Q. All right. Can you explain why the University of Florida's population projection causes a more than \$200 million reduction in savings?
- A. It's, in essence, similar or a reverse of what happens when you accelerated the units. It takes longer, there is a longer time, in essence, where the FPL EnergySecure Line is not fully utilized.
- Q. So would it be accurate to say that the cost-effectiveness of the EnergySecure Line, assuming no revenue from sales, is greatly dependent on the timing of future gas transportation capacity needs?
- A. Yes. The economics of the EnergySecure Line are dependent on the timing, but if I may point out, Commissioners, we are looking here at what I will call a load forecast sensitivity, a low load forecast sensitivity. The reverse happens if we were to do a high band forecast sensitivity. The economics of the line would be greatly enhanced if we had a higher load forecast, and the evidence shows that Doctor Morley presented that the chances of overforecasting are lower than the chances of underforecasting.

An example, I think, was mentioned before I believe on Doctor Morley's testimony earlier today. We

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experienced a peak load earlier this summer of 22,200 megawatts approximately. Under this load forecast we would not see that level of load under 2014.

Now, granted that's part of the reason for the very high load forecast. The high actual load this year was extreme weather, but nevertheless, Mr. Forest's organization has to actually operate the system. He has to, in essence, have sufficient gas supplies to operate the system under the higher load forecast.

The point I'm trying to make is there a much greater risk to FPL's customers of underforecasting than overforecasting. And I'll just add one last point. Even under this scenario, which is a negative \$7 million in the base case, 101 million positive in the nuclear delay scenario for the FPL pipeline, on the average \$22 million to a positive of the FPL EnergySecure Line. But, even if we take -- let's say we would take the base case results with a negative 7 million, which I would assume you would agree with me that is close to break-even, in essence, the FPL customer is getting a third pipeline into a state at no cost. So it's getting all the benefits of third-party lines, competition, supply diversity, all of that with basically no cost to And, of course, we expect, once again, these numbers, the actual impact on the customer would be

better than this when we include all those other 1 2 benefits. 3 MS. BROWN: Mr. Chairman, I apologize, could 4 we have five minutes? 5 CHAIRMAN CARTER: Yes, you may. 6 MS. BROWN: Thank you. 7 CHAIRMAN CARTER: Commissioners, this is a good time for a stretch. Let's come back at twenty-four 8 9 after. 10 (Recess.) 11 CHAIRMAN CARTER: We are back on the record. 12 And when we last left, Staff, you had the ball. 13 MS. BROWN: Yes. Thank you, Mr. Chairman. 14 Just a few more questions, Mr. Enjamio. 15 BY MS. BROWN: You talked earlier several times about the 16 17 benefits of third-party sales of capacity off the 18 EnergySecure Line. Would you explain for us what you mean by third-party sales? 19 20 Α. Yes. 21 Commissioners, what I mean by third-party 22 sales is what has been referred to by others as capacity 23 release on either FGT or Gulfstream pipelines. As has 24 been discussed before, when the FPL pipeline goes into 25 service, it will have a capacity of 600 million cubic

4 5

feet, while FPL has a firm demand of 400 million cubic feet only.

Now, FPL will fully utilize the 600 million cubic feet capacity in the FPL EnergySecure Line because it, is essence, a more cost-effective way of moving gas. But that may free up at times that ability to free up capacity from our existing contracts with Gulfstream and with FGT, so that's, in essence, my definition of third-party sales.

- Q. If FPL uses all 600 MCF on the EnergySecure pipeline and releases its excess capacity held on FGT or Gulfstream, will FPL recoup 100 percent of the cost it paid for the capacity on FGT or Gulfstream?
- A. No, it's my understanding that FPL would not necessarily recover the full cost.
- Q. All right. Thank you. The next questions have to do with the handout. We handed out to you Interrogatory Number 132 and 134. Do you see that there? I think 133 is in the middle of it, but we're not concerned with that one, and they have to do with demand-side management savings. Would you agree that your response to FPL's Response to Interrogatory 132 shows FPL's DSM savings assumed in this docket?
 - A. Yes.
 - Q. And would you agree that FPL's Response to

Interrogatory 134 illustrates FPL's achievable DSM 1 2 savings in Docket Number 080407, the current DSM goals 3 setting docket? 4 Α. Yes, it does. Would you also agree that in every year FPL's 5 6 projected summer peak reduction and annual energy 7 reduction in this docket are greater than the achievable 8 assumed in the current DSM goals setting document? Yes, I would. And the reason for that, 9 A. Commissioners, is that when I started this analysis 10 earlier this year, FPL had not conducted or started 11 12 its -- well, I think it had already started, but it was definitely not anywhere close to completing its economic 13 14 analysis of DSM. So the numbers that are used in my 15 analysis do not reflect the current assumptions for the 16 economic cost-effectiveness of DSM, which those current 17 assumptions are the ones that are included in the 18 response to 134. 19 MS. BROWN: All right. Thank you, Mr. 20 Enjamio. 21 We have no further questions. 22 CHAIRMAN CARTER: Thank you, staff. 23 Commissioner Skop, you're recognized. 24 COMMISSIONER SKOP: Thank you, Mr. Chair. 25 Just a few quick questions. If I could draw

your attention to Exhibit JEE-8, please.

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THE WITNESS: Yes, sir.

COMMISSIONER SKOP: With respect to years 2014

and beyond, does the total, or annual total revenue

requirement in years 2014 and beyond include the revenue

requirement for both the Riviera conversion project as

well as the Canaveral conversion project?

THE WITNESS: If you're asking, Commissioner

Skop, does that include the revenue requirements of the

actual, the two projects, the generation projects, no,

it does not. And the reason we did not include it is

that the number would, in essence, be the same for both

alternatives. So in terms of the comparative analysis,

it would not add any value.

COMMISSIONER SKOP: Okay. I guess what I was

trying to ascertain was -- I'm looking at the far right

column, which is the differential in customer bill for a

comparative 1000 kilowatt hours, and I understand that

this is a differential analysis between the FPL option

and the Company B's requirement in showing the

difference in terms of bill impact. And at least for

the average consumer in 2014, the average consumer would

see a potential bill impact, if I understand this chart

correctly, of probably about \$2, or 2.50, \$3 per month

on a stand-alone basis and then declining further on.

But what I was trying to do is find an all-in 1 rate impact. Again, we are in the pendency of a current 2 3 rate case, but in 2013/2014 you've got about \$4.1 billion of capital projects coming into the rate 4 base, potentially, and I'm trying to understand ahead of 5 6 the curve what the potential bill impact might to be the 7 average consumer. 8 THE WITNESS: I understand what you are looking for, Commissioner Skop, but unfortunately that 9 is not included. I don't think you can derive that from 10 11 my testimony. COMMISSIONER SKOP: Okay. Is there a way to 12 perhaps get that as a late-filed exhibit? 13 14 MS. BROWN: Yes, Commissioner. We could make 15 it Late-filed Exhibit 96, is it? 97. And perhaps you 16 could describe it. 17 COMMISSIONER SKOP: I knew they were going to do that to me. Annual total revenue requirement -- or 18 19 actually, excuse me, I'll just -- let me take another 20 stab at this. Economic analysis results projection of 21 appropriate bill impacts, including the modernization 22 projects. Is that short enough? MS. BROWN: That's fine. 23 (Late-filed Exhibit 97 marked for 24

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identification.)

CHAIRMAN CARTER: That was the short version? 1 2 COMMISSIONER SKOP: Yes. 3 And just one point of clarification. And I think I heard it correctly, but the base case does not 4 5 include any revenue associated with off-system sales of 6 excess capacity, is that correct? 7 THE WITNESS: That is correct, Commissioner 8 Skop. It does not include third-party sales, revenues, 9 or any other benefit. 10 COMMISSIONER SKOP: Okay. All right. Thank 11 you. CHAIRMAN CARTER: Anything further from the 12 13 bench? Redirect? 14 15 MR. PERKO: Yes. Thank you, Chairman. 16 REDIRECT EXAMINATION 17 BY MR. PERKO: 18 Mr. Enjamio, I've got a couple of questions in 19 response to Mr. Self's questions. I believe at one 20 point you testified that for the FGT rate proposal your 21 analysis assumed a fixed rate for the length of the 22 analysis. Is that correct? 23 Yes, it is correct. We did use a flat rate for the FGT proposal through the length of the study. 24

We assumed the same thing for the company proposal, so

both proposals were treated in the same way.

Q. Are you aware of any benefit that FPL customers have received as a result of depreciation of FGT assets?

A. I haven't performed any actual analysis. But, Commissioners, I think the implication is that if FPL would have imputed a reduced rate due to depreciation at the end of the 25-year contract, that would improve the economics of the FGT proposal, and that is not necessarily the case. If I may explain. The Company proposal is a 20-year proposal, and it's also a proposal for 600 million cubic feet. So if we were to apply depreciation or some reduced rate derived in some way, I would have to do the same thing for both the FGT proposal and also for the company proposal in FPL's option.

And given the fact that the FGT proposal -excuse me, the Company proposal is actually for a
shorter term and is a larger amount, it is very likely
that the comparative economics would actually improve if
the depreciation or some kind of depreciation was
imputed so that after the end of a 25-year contract the
rates for both company -- I'm sorry, the FGT contract,
the rate for FGT would reduce, and at the end of the
20-year contract for the company its rate would also be

reduced.

Q. Mr. Enjamio, Ms. Brown asked you some questions regarding release of capacity off the Florida EnergySecure Line -- or, I'm sorry, release of capacity off of FGT and Gulfstream as a result of the Florida EnergySecure Line, and whether all of those costs could be fully recouped. Do you recall that testimony?

- A. Yes.
- Q. Was that taken into account in your analysis?
- A. Yes, it was. In fact, my analysis includes the full amount of FGT costs, or the full amount of the FGT transportation costs for the existing contracts.
- Q. And to the extent that cost of released capacity is recovered, will that improve the economics of the Florida EnergySecure proposal?
- A. It would improve the economics of the EnergySecure proposal and reduce the cost impact in the early years to FPL's customers.
- Q. Now, Ms. Brown showed you an exhibit which is a series of interrogatory responses, I believe it's 132, 33, and perhaps 34. Yes, 34. I just wanted to make it clear. Is my understanding correct that in this docket you assumed more DSM savings than any other docket?
- A. Yes. In this docket I'm assuming a greater amount of DSM programs. FPL has determined it's a

Cost-effective amount if it's the DSM goals docket.

What I'd like to point out, that in terms of this docket that, in essence, reduces the gas requirements to FPL, and if we were to reduce the amount of DSM in my analysis to what is shown in the DSM cost-effectiveness goals result, it would only benefit the FPL EnergySecure Line.

Q. Finally, Mr. Enjamio, I want to pass around Page 3 of the late-filed exhibit that Ms. Brown had passed around, and if you would take a look at that when you get it.

Have you had a chance to look at it?

- A. Yes, I have.
- Q. Could you explain what this exhibit does?
- A. Yes. This exhibit is, in essence, a compilation of the results of all the analysis that FPL has done in this docket, all the economic analysis, either at FPL's own initiative or at the initiative of the staff. And basically shows a total of 36 different economic analysis with a range of different assumptions, including higher fuel forecasts, lower fuel forecasts, revised FGT proposals, and the three different resource centers that we discussed. And basically what it says is of the 36 cases, 34 of those show a positive result to FPL with a net savings in cumulative present value of

revenue requirements of 352 million. The two cases that are negative to FPL's proposal were the ones that were discussed -- I answered some questions of Ms. Brown, which basically were used in the low load forecast sensitivity, and those show that the base case will be minus \$7 million.

I pointed out before that that case basically does not include any of the other benefits of third-party sales and other cost benefits. So, in essence, in the very worst-case of all the analysis, what this shows is that FPL customers receive all the benefits of third-party pipeline at essence at no cost. But the main purpose of the analysis is to show the robustness of the analysis that was done. So of 34 cases, 36 were shown to be positive to FPL's customers.

- Q. And, Mr. Enjamio, I believe you stated that in your analysis you did not account for the revenues associated with off-system sales, but if you were to do that, what impact would that have on those cases that were negative?
- A. Well, in Mr. Sexton's low -- what I will call low case for third-party benefits, it is approximately \$200 million present value, so they would definitely turn those cases to a strong positive for FPL's customers.

MR. PERKO: Nothing further, Mr. Chairman.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you.

Just one further question. I guess on the late-filed exhibit that was just passed out for the Line Item 31, which is the base case Interrogatory 183, JEE-7, with Henry Hub prices minus 10 percent. I guess staff in the previous exhibit did a sensitivity analysis based on a load forecast which I think resulted in the base case of the negative cost differential.

I was wondering with respect to the fuel prices, and I don't know if you're the best witness to ask, perhaps it might be better reserved for Mr.

Sexton's rebuttal, but has anyone checked the near-term fuel sensitivities in terms of what impact those might have? I don't think really it is that critical to the majority of the analysis, but, again, Mr. Sexton's numbers get a little bit lower than most of the numbers presented here. But it seems to me that the fuel forecast was based on November 2008, which was -- I guess Henry Hub prices back then were about 6.70 per MMBtu, and since then they have fallen to about \$3.5, 3.6. So I was wondering in terms of term -- I know there was a near-term, a mid-term, and then a long-term that used an escalator factor based on the analysis, but

I was wondering if anyone has done any sensitivities as 1 to that near-term selection of natural gas prices and 2 how that would affect the cumulative present value 3 revenue requirement. 4 The answer is no, we have not done any such 5 sensitivity. It is my assumption that if we did such a 6 7 sensitivity as long as it only effects in the short-term, and we assume that the long-term trend is 8 the same, then the answer would not change. But that I 9 think is a question that is best answered by either Mr. 10 Sexton or actually I would refer to Mr. Sharra to answer 11 12 that question. COMMISSIONER SKOP: Okay. Thank you. 13 14 CHAIRMAN CARTER: Thank you. Exhibits. 15 MR. PERKO: FPL would move Exhibits 37 through 16 45 into the record. CHAIRMAN CARTER: Mr. Self. 17 MR. SELF: No objection. 18 19 CHAIRMAN CARTER: Without objection, show it 20 done. 21 (Exhibit Numbers 37 through 45 admitted into 22 the record.) 23 CHAIRMAN CARTER: Commissioners, Exhibits 37 24 through 45. Okay. And I assume that we will see Mr. 25 Enjamio -- did I get it right?

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1.	THE WITNESS: That's right.
2	CHAIRMAN CARTER: I can go home now.
3	We'll probably see him again in rebuttal.
4	THE WITNESS: Yes.
5	CHAIRMAN CARTER: So you get a recess, sir.
6	Thank you. Call your next witness.
7	MR. BUTLER: Thank you. Mr. Chairman, I would
8	call Mr. Guest to the stand. And Mr. Guest has not been
9	previously sworn.
10	CHAIRMAN CARTER: Okay. I'll let him get his
11	water first.
12	Mr. Guest, will you please raise your right
13	hand.
14	(Witness sworn.)
15	CHAIRMAN CARTER: Please be seated.
16	James K. Guest
17	was called as a witness on behalf of Florida Power and
18	Light Company, and testified as follows:
19	DIRECT EXAMINATION
20	BY MR. BUTLER:
21	Q. Mr. Guest, would you please state your name
22	and business address for the record?
23	A. James K. Guest. My business address is 1155
24	15th Street Northwest, Washington, D.C. 20005, Suite
25	400.

FLORIDA PUBLIC SERVICE COMMISSION

1	${f Q}.$ By whom are you employed and in what capacity?
2	A. I am an associate in the consulting firm of
3	Brown, Williams, Moorhead, and Quinn.
4	Q. Have you prepared and caused to be filed 14
5	pages of Prefiled Direct Testimony and four attached
6	exhibits, JKG-1 through JKG-4, in this proceeding?
7	A. Yes, I have.
8	Q. Did you also cause to be filed an errata to
9	your testimony on July 24, 2009?
10	A. Yes.
11	Q. Do you have any further changes or revisions
12	to your prefiled direct testimony beyond the errata that
L3	were filed?
14	A. No, I do not.
15	Q. With those changes reflected in the errata, if
L6	I asked you the same questions contained in your direct
17	testimony, would your answers be the same?
18	A. Yes, they would.
L9	MR. BUTLER: Mr. Chairman, I would ask that
20	Mr. Guest's Direct Testimony, Prefiled Direct Testimony
21	be inserted into the record as though read.
22	CHAIRMAN CARTER: The prefiled testimony of
23	the witness will be inserted into the record as though
24	read.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		SUPPLEMENTAL TESTIMONY OF JAMES K. GUEST
4		DOCKET NO. 090172-EI
5		MAY 29, 2009
6		
7	Q.	Please state your name and business address.
8	A.	My name is James K. Guest. My business address is 1155 15th Street, NW,
9		Suite 400, Washington, DC 20005.
10	Q.	On whose behalf are you testifying in this proceeding?
11	A.	I am testifying on behalf of Florida Power & Light Company (FPL).
12	Q.	By whom are you employed and what is your position?
13	A.	I am an Associate with the firm of Brown, Williams, Moorhead & Quinn, Inc.
14	Q.	What services does the firm offer?
15	A.	Brown, Williams, Moorhead & Quinn, Inc. provides technical and policy
16		assistance to various segments of the natural gas, electric and oil industries on
17		business and regulatory matters.
18	Q.	Please describe your educational background and professional
19		experience.
20	A.	I received a Bachelor of Science degree in Accounting from Indiana
21		University of Pennsylvania in 1974. Shortly after graduating, I accepted a
22		position with the Federal Energy Regulatory Commission (FERC) as a field
23		auditor in the FERC's Office of Chief Accountant. I was employed by the

1 FERC for the next 32 years accepting positions of increasing responsibility in 2 the area of financial accounting and reporting requirements for the electric utility, natural gas pipeline and oil pipeline industries. 3 4 5 During this period, I served in a number of different positions including Deputy Director of the Division of Audits in the Office of Chief Accountant; 6 Director, Division of Regulatory Accounting Policy; Deputy Chief 7 8 Accountant; and Chief Accountant before retiring from Federal service in 9 September 2007. In those positions, I was responsible for determining 10 individual companies' compliance with FERC's Uniform Systems of Accounts (USoA) and related reporting requirements, developing and 11 12 directing rulemaking proposals for needed changes in those requirements, providing broad policy guidance to the electric, natural gas and oil pipeline 13 14 industries on emerging financial accounting matters of significant import, 15 acting on industry requests for interpretive ruling on FERC USoA requirements and providing counsel and advice on accounting matters to 16 17 senior FERC staff, the Commissioners and the Chairman. 18 19 I have spoken frequently at meetings of senior industry accounting executives, 20 state public utility commission, and staff and partners from national public accounting firms to explain FERC accounting initiatives and financial 21 22 reporting requirements. I have also provided expert testimony on accounting

and utility cost-of-service matters in a number of administrative proceedings

23

1		before the FERC. Most recently I testified in the United States Tax Court or
2		the background and purpose of FERC's USoA and the accounting
3		classification for street lighting assets under FERC's USoA.
4		
5		I am a Certified Public Accountant and a member of the American Institute of
6		Certified Public Accountants.
7	Q.	Are you sponsoring any exhibits in this case?
8	A.	Yes. I am sponsoring the following exhibits which are attached to my
9		testimony:
10		• JKG-1 Letter from Portland General Electric Company to FERO
11		dated March 12, 1993;
12		• JKG-2 Letter from FERC to Portland General Electric Company
13		dated April 14, 1993 regarding Docket No. AC93-8600;
14		JKG-3 Letter from counsel for Portland General Electric Company
15		to FERC dated December 3, 2003; and
16		JKG-4 Letter from FERC to counsel for Portland General Electric
17		Company dated March 4, 2004 regarding Docket
18		No. AC04-07-000.
19	Q.	What is the purpose of your testimony in this proceeding?
20	A.	I was asked by FPL to comment on the appropriate accounting requirements
21		for costs related to FPL's proposed Florida EnergySecure Line (sometimes
22		referred to as the Line) under FERC's USoA for Public Utilities and
23		Licensees, which is codified at 18 C.F.R. Part 101.

1	Q.	Please summarize your supplemental testimony.
2	A.	My testimony focuses on the proper accounting classification for the costs
3		associated with FPL's proposed Florida EnergySecure Line under FERC's
4		USoA. I conclude that the cost of the proposed Florida EnergySecure Line
5		should be classified as electric utility plant and that such classification is
6		consistent with the appropriate rate treatment that should be afforded these
7		costs.
8	Q.	Does FPL follow the FERC's USoA for financial accounting and
9		reporting purposes?
10	A.	Yes. FPL is a public utility under the Federal Power Act (FPA). Under the
11		provisions of the FPA, FPL must follow the accounting requirements FERC
12		has prescribed in its USoA for all of its business activities, including the costs
13		related to the Florida EnergySecure Line. The Florida Public Service
14		Commission, which also regulates the accounting practices of FPL, has
15		adopted FERC's USoA with certain minor modifications considered necessary
16		to meet its regulatory needs.
17	Q.	Can you please summarize your understanding of the Florida
18		EnergySecure Line?
19	A.	Yes. The Florida EnergySecure Line will consist of approximately 280 miles
20		of mainline pipe, and approximately 23 miles of lateral and branch lines. The
21		mainline will begin at or near Florida Gas Transmission Company, LLC
22		(FGT) Compressor Station 16 (FGT Station 16) located in Bradford County,
23		Florida and terminate at FPL's Martin plant site, where, with FERC approval,

it could interconnect with other pipelines and facilitate delivery of gas for FPL's gas-fired fleet of electric generating units. The Line includes two laterals that will serve FPL's new Cape Canaveral Next Generation Clean Energy Center and Riviera Beach Next Generation Clean Energy Center (collectively, "the Modernization Projects"). The Line also includes upgrades at FPL's 45th Street Terminal near the Riviera Beach Plant in Palm Beach County, including an upgrade of the existing interconnection with FGT, and installation of permanent compression. As initially constructed, the Florida EnergySecure Line will have a capacity of 600 million cubic feet per day (MMcf/d), which can be increased as required up to 1.25 billion cubic feet per day (Bcf/d) with the addition of relatively inexpensive gas compression upgrades.

As explained by FPL witness Sharra, initially the Line will serve primarily the natural gas transportation needs of FPL's Modernization Projects, with these facilities requiring approximately 400 MMcf/d in total, or nearly two-thirds of the pipeline's initial capacity. The remaining 200 MMcf/d will be delivered to FPL's Martin Plant for reliability purposes, but will also be offered to other entities within the state in the interim until the full capacity is needed by FPL. The 200 MMcf/d delivered to FPL's Martin Plant can displace deliveries from FGT or Gulfstream Natural Gas System, LLC (Gulfstream) to that site, which can then be redirected to other FPL facilities or to other entities within the state (Sharra at Page 10).

1	Q.	Under FERC's USoA how should FPL account for the costs related to the
2		proposed Florida EnergySecure Line?
3	A.	Under FERC's USoA, FPL should classify the cost to construct the Line as
4		Electric Utility Plant, accumulating the costs of construction in a construction
5		work order in Account 107, Construction Work in Process - Electric, and
6		ultimately recording the costs in Account 101, Electric Plant in Service, when
7		the Line is placed in commercial operation. The depreciation, operation and
8		maintenance expenses related to the Line after it has been placed in service
9		should be charged to electric utility operating expense accounts.
10	Q.	Is it unusual to classify a gas pipeline as electric utility plant?
11	A.	No. Where a pipeline is owned by an electric utility and used to supply fuel to
12		an electric generating station, it is an asset serving the electric production
13		function and therefore should be classified as electric utility plant.
14	Q.	Does FPL's ability to potentially use the Line to provide gas
15		transportation service to others disqualify it from classification as electric
16		plant under the FERC's USoA?
17	A.	No. Based on my review of the proposed Line, as described in the testimony
18		of FPL's witnesses, the overwhelming primary purpose of the Line is to meet
19		the gas transportation needs of FPL's gas-fueled generating stations. Public
20		utilities often classify assets on the basis of their primary purpose even though
21		the assets may be used at times for other purposes. This is sometimes referred
22		to as the primary function approach to classifying costs.

1	Q.	Can you pleas	e explain	the	primary	function	approach	to	classifying
2		costs?							

Yes. Under the primary function approach, the cost of an asset shared by two 3 A. or more departments or functions is classified according to its primary or 4 major function. The depreciation, operation and maintenance costs of the 5 asset are likewise classified according to the asset's primary or major function 6 and any revenue received from third parties from the asset's secondary use are 7 recognized as revenue or a reduction in the costs of the primary function. 8 This approach is typically used when the revenue from secondary use of the 9 asset is incidental to its primary use and/or the secondary use of the asset is 10 not a separate profit center line of business of the accounting entity. 11 Typically, the primary function approach carries minimal administrative 12 burden to implement.

Are any costs allocated to the secondary function when costs are classified 14 Q. using the primary function approach? 15

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No. Instead of allocating costs, any revenues received from third parties from its secondary use are assigned to the primary function. This recognizes that the revenues, while providing an economic benefit, are really ancillary to the primary use of the asset, which, for the Line, is providing gas to the FPL planned gas-fired units. Similar to off-system sales of power from temporary surplus capacity, the revenues serve to reduce the cost of supplying gas to the gas-fired units.

Q. Does the FERC's USoA contain references to this practice?

Yes. The FERC's USoA contains Electric Plant Instructions that specify how public utilities should initially recognize and account for the cost of electric utility plant, how public utilities should recognize and account for changes in those costs through additions, retirements and transfers, and how public utilities should classify electric plant costs among the various accounts, functions and categories of electric plant. Electric Plant Instruction No. 8 sets forth the costs that should be included in the category, "Structures and Improvements." Paragraph D of Electric Plant Instruction No. 8 refers to certain plant assets that can be used to provide steam for electricity production and also for heating buildings. Paragraph D of Gas Plant Instruction No. 8 requires all of the cost of these type assets to be classified as electric production plant because that is the primary purpose for which the assets are used. Similarly, Paragraph E of Electric Plant Instruction No. 14 of the USoA provides that the cost of land and structures used jointly for transmission and distribution are to be classified as either transmission or distribution according to the major use of the asset.

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Classifying revenue received from third party use of electric property based on the property's primary use is addressed in the USoA instructions for Account 454, Rent from Electric Property, and Account 456, Other Electric Revenues. Both of these accounts are electric operating revenue accounts. The instructions to Account 454 provide that it is to include rent received for

l	the use by others of property devoted to electric operations. One example is
2	the rent paid by communications companies for use of an electric distribution
3	pole to carry their communication cable. Similarly, the instructions to
1	Account 456 provide that it is to include revenue from the sale of steam to
5	third parties.

Q. Are you aware of any instances in which a public utility was authorized to classify a gas transmission line as electric utility plant?

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Yes. Portland General Electric (PGE) constructed a 17-mile gas pipeline (Kelso-Beaver Pipeline) to serve its Beaver Combined Cycle Combustion turbine generation facility. At or near the completion of construction, PGE filed a letter with the FERC requesting "concurrence or clarification" on whether or not PGE was required to file a Form 2 or Form 2-A for its pipeline and whether or not PGE could report its investment in the pipeline to electric utility plant Account 342, a subaccount under Account 101 - Electric Plant in Service. The FERC Form 2 and 2-A are Annual Reports that major and nonmajor interstate gas pipelines must file with the FERC under the Natural Gas Act. The Annual Reports contain a basic set of financial statements (Income Statement, Balance Sheet, Statement of Retained Earnings and Statement of Cash Flows) together with a number of supporting schedules. They are similar to an Annual Report to Stockholders but with a much greater level of detail. FERC had authorized PGE to use the pipeline to transport gas only for its use in Docket No. CP91-1607-000. In its response to PGE, FERC, through its Chief Accountant, waived the requirement to file a Form 2 or 2-A, and

1	authorized the use of plant Account 342 - Fuel Holders, Producers and
2	Accessories. Copies of PGE's letter and FERC's response are attached to my
3	testimony as Exhibits JKG-1 and JKG-2, respectively.
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5	In October 2003, FERC issued PGE a "blanket certificate of public
6	convenience and necessity, and approved pro-forma tariff provisions, and
7	initial rates." FERC also established PGE's share of the pipeline as an open
8	access gas pipeline. In light of that development, PGE filed another letter
9	with FERC dated December 3, 2003 requesting clarification of the proper
10	accounting for the cost related to the Kelso-Beaver Pipeline stating in
11	pertinent part:
12	"Portland believes that it would be most appropriate to grant Portland
13	a waiver of use of the gas accounts of the US of A since its portion of
14	the Kelso-Beaver Pipeline continues to service Portland's Beaver
15	generation plant. At most the pipeline would provide minimal
16	interruptible service if requested by a new shipper."
17	
18	In a letter dated March 4, 2004, FERC responded stating:
19	"Under the circumstances described above, Portland should continue
20	to account for its investment in the Kelso-Beaver Pipeline and its
21	related operations and maintenance in accordance with the Uniform
22	System of Accounts' requirements for public utilities and licenses.
23	This determination, however, is subject to Portland maintaining

1		accounting records related to the pipeline so as to readily permit
2		identification of the depreciation, operations and maintenance expense
3		and all other elements necessary for the development of a cost of
4		service applicable to the pipeline."
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6		Copies of PGE's letter and FERC's response are attached to my testimony as
7		Exhibits JKG-3 and JKG-4, respectively.
8	Q.	You stated earlier that the overwhelming primary purpose of the Line
9		was to meet the gas transportation needs of FPL's gas-fired generating
10		stations. On what did you base that conclusion?
11	A.	I based my conclusion on the direct testimony that the FPL witnesses filed in
12		this proceeding. I believe that testimony strongly supports the conclusion that
13		the proposed Florida EnergySecure Line has been designed to meet the gas
14		transportation needs of FPL's gas-fired electric generation stations and is
15		intended for the benefit of its electric utility operations and the customers that
16		take electric service. For example:
17		• The intent of FPL's solicitation of transportation proposals was to
18		meet the initial needs of its Cape Canaveral and Riviera Beach
19		Modernization Projects, to increase reliability and supply diversity,
20		and to allow for future generation growth (Stubblefield - Page 4,
21		Lines 4 – 23 and Page 5, Line 5).
22		• In 2008 approximately 53% of all energy produced by FPL came
23		from gas-fired generation and that percentage is expected to increase

1		to almost 70% in 2030 and 84% by 2040 (Enjamio - Page 4,
2		Lines 14-16). As a result, under FPL's base case, FPL's incremental
3		gas transportation needs will increase to 1.6 Bcf/d by 2030 and
4		2.8 Bcf/d by 2040 (Enjamio - Page 16, Lines 3-4). Therefore all of
5		the capacity in the Florida EnergySecure Line will eventually be
6		needed to meet FPL's electric utility operations.
7	•	Attempts were made to consider proposals that were more in line
8		with the immediate needs of the Modernization Projects, but those
9		proposals were not cost-effective compared to the Florida
10		EnergySecure Line/Upstream Pipeline proposal, and did not provide
11		the ability to cost-effectively expand capacity to meet the longer-
12		term needs of FPL's generating units (Stubblefield - Page 7, Lines 7-
13		11).
14	•	FPL determined the size of the proposed Line to meet FPL's current
15		transportation capacity requirements for the Modernization Projects,
16		to economically increase capacity over time through addition of
17		compression as additional natural gas-fired generation is needed, and
18		to minimize the cost impact on FPL customers (Sharra - Page 15,
19		Line 18). This also indicates that the Line is intended to meet FPL
20		electric generation needs.
21	•	The remaining 200 MMcf/d above the 400 MMCF/d needed to meet
22		the immediate needs of the Modernization Projects may be delivered

to the Martin Plant for reliability purposes, which would displace

1		deliveries from FGT or Gulfstream (Sharra - Page 10, Lines 12-19).
2		In that situation, the entire capacity of the Florida EnergySecure line
3		would be utilized for the production of electricity.
4		• FPL intends to pass on any proceeds it receives from the sales of
5		excess capacity to its electric customers (Sharra - Page 11, Lines
6		12 - 14). This again demonstrates that the Florida EnergySecure
7		Line is intended to be an integral part of FPL's electric production
8		operation and not a separate business segment selling gas
9		transportation services for investor profit.
10	Q.	Is the accounting classification of the costs of the Florida EnergySecure
11		Line as electric utility plant consistent with how the costs should be
12		recovered in the rates charged to FPL customers?
13	A.	Yes. Typically amounts recorded in the accounts as electric utility plant are
14		included in rate base and the return on, recovery of and the related operation
15		and maintenance expenses of the property to which those costs relate are
16		recovered in rates charged to electric customers. The proposed Florida
17		EnergySecure Line, if approved, will be used to meet the gas transportation
18		needs of its electric generation resources, the output from which will be used
10		to provide electric service to FPL's electric customers. Therefore, it is both

afforded the same rate treatment classified as electric utility plant.

appropriate and reasonable for the cost of the Florida EnergySecure Line to be

- Q. Considering the nature of the Line, do you see any need to identify and assign to other functions or customer classes for ratemaking purposes, costs associated with the 200 MMcf/d of capacity in excess of the immediate needs of the modernization projects that may not be recovered through third-party sales of that capacity?
- 6 A. No I do not. FPL is proposing to undertake the Florida EnergySecure Line to 7 meet the gas transportation needs of its electric generating stations for the 8 benefit of its electric customers. As with many large capital projects and base 9 load generating stations, future growth is almost always anticipated in order to 10 take advantage of economies of scale. But in doing so, there is often excess 11 capacity involved initially. That is the case with the Florida EnergySecure Line as well. However, that does not change the fact that the Line is an 12 integral part of FPL's electric production function and will be utilized, if 13 approved, for the benefit of FPL's electric customers and, by virtue of its 14 15 crediting of any revenues from third party use of the 200 MMcf/d to electric customers, will not be a separate profit center or segment of business for FPL. 16 Under these circumstances, assignment of a portion of the costs of the Florida 17 EnergySecure Line that might be deemed above the related revenue from third 18 party sales of excess capacity to other functions or customer classes is not 19 20 warranted.
- 21 Q. Does this conclude your testimony?
- 22 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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

ERRATA SHEET

SUPPLEMENTAL TESTIMONY OF JAMES K. GUEST

PAGE # CORRECTION

8 11 Replace "Gas" with "Electric"

Respectfully submitted this 24th day of July, 2009.

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DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERY

MR. BUTLER: And I would note that his Exhibits JKG-1 through JKG-4 have been identified in Staff's Comprehensive Exhibit List as Exhibits 46 through 49.

BY MR. BUTLER:

- Q. And with that, Mr. Guest, would you please summarize your testimony.
- A. Good morning -- or, good afternoon, Mr. Chairman and Commissioners. Thank you for this opportunity to appear before you today.

My testimony focuses on the proper accounting for the costs associated with the proposed Florida EnergySecure Line and how that accounting is consistent with the appropriate rate treatment that should be afforded those costs. Unlike most U.S. electric utilities, Florida Power and Light serves a large portion of its electric load through gas fuel generation.

For Florida Power and Light, transporting gas through its electric generating stations is a critical and integral part of its ability to provide reliable electric service. To meet the gas transportation needs of its electric generating stations and for the benefit of its electric customers, Florida Power and Light has carefully and thoroughly gone about assessing those needs and developing a gas transportation proposal that will result in the lowest cost to its electric customers. That proposal is the Florida EnergySecure Line.

Because the Florida EnergySecure Line will be an asset used in Florida Power and Light's electric production function, the related costs of the pipeline should be classified as electric utility plant just as the cost of all other assets owned and used for that purpose are classified. For the same reason, the depreciation, operation, and maintenance expenses related to the line after it has been placed in service should be charged to electric utility operating expenses.

Now, it's true that the addition of the Florida EnergySecure Line may result in Florida Power and Light temporarily holding excess gas transportation capacity. But in large long-lived infrastructure projects such as this, excess capacity almost always exists initially in order to capture economies of scale. That does not mean that costs related to that excess capacity should be reclassified or allocated to different departments or functions. Instead, the cost of the asset and its associated operating and maintenance expenses remain classified according to their primary function and any revenues from third-party sales of excess capacity are credited back to the costs of the primary function.

The practice of classifying an asset's costs

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and related expenses based on its primary function with revenue crediting for its secondary use is accepted and appropriate for public utilities. This is, in fact, what Florida Power and Light has proposed for its Florida EnergySecure Line. This accounting is supported by the Uniform System of Accounts for public utilities and can be put in place very efficiently without the need to resort to complex cost allocations or reporting requirements that would be needed if Florida EnergySecure Line's assets were, for example, held in a separate subsidiary company.

Finally, classifying the costs of the Florida
EnergySecure Line as electric utility plant is entirely
consistent with the appropriate rate treatment that
should be afforded these costs. Electric utility plant
costs and the related expenses typically are assigned
and collected in rates charged to electric customers.
Because the Florida EnergySecure Line project is being
undertaken for the benefit of electric customers,
classifying the costs as electric utility plant results
in assigning the costs to the customers that receive the
benefits, and also comports with Florida Power and
Light's proposal to credit electric customers with the
revenues received from any third-party sales of excess
capacity. Thank you.

1 MR. BUTLER: Thank you, Mr. Guest. 2 I tender the witness for cross. 3 COMMISSIONER EDGAR: Mr. Self. MR. SELF: Thank you. 4 5 CROSS EXAMINATION BY MR. SELF: 6 7 Q. Good afternoon, Mr. Guest. I'm Floyd Self 8 representing FGT, and I've got a few questions for you. 9 Have you ever previously advocated placing a 280-mile 10 long mainline natural gas transmission pipeline in 11 electric utility plant rate base before any regulatory 12 commission? 13 Α. I have not advocated that, no. I do think 14 this is probably a fairly unusual case. 15 Well, pipelines have -- gas transportation Q. 16 pipelines have existed for many years, correct? 17 A. Yes. 18 Can you turn to Page 9 of your testimony, Q. 19 please? 20 Α. I'm there. 21 Now, in support of your analysis, you discuss Q. 22 the Kelso Beaver Pipeline, a 17-mile pipeline that FERC 23 allowed in an electric utility to classify as electric 24 utility plant, is that correct?

FLORIDA PUBLIC SERVICE COMMISSION

That's correct.

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A.

	Q.	Now,	presur	nably	this 1	17-mile	pipel	ine	tied	k
into	some	other	long	dista	nce ma	ainline	trans	port	tatio	n
syste	em tha	at act	ually	broug	ht the	e natur	al gas	to	the	gas
field	ds to	the 1	L7-mile	e line	, is	hat tr	ue?			

- A. I believe so.
- Q. Did the 17-mile long pipeline here serve one electric plant?
- A. I believe the pipeline served a generating station as well as an LDC, I think.
- Q. But it only served one electric plant as far as you knew?
 - A. As far as I'm aware, yes.
- Q. In your mind is this 17-mile pipeline just like some of the short distance pipelines that FPL currently owns and operates?
- A. It may be similar in diameter, but I don't think the particular length of the pipeline necessarily dictates what the proper accounting for the pipeline should be. It's really -- classification for accounting purposes of the pipeline is based upon what it's going to be used for, which in the case of the Florida EnergySecure Line it will be used for the electric production function.
- Q. Well, I understand that. All I'm trying to get to is you would agree with me that FPL today owns

several short distance pipelines, is that true?

- A. I am aware that they own the Martin pipeline.
- Q. Okay. And how long is that pipeline?
- A. My understanding is it is 36 miles long.
- Q. Okay. Do you know whether that pipeline crosses county boundaries?
 - A. No, I do not.
- Q. Can you identify for us any long distance, 200 miles or more in length, high pressure natural gas transportation pipelines that serve multiple customers or multiple power plants and which are included in an electric utility's rate base?
- A. In conducting some research for this case, it was difficult to determine whether, in fact, those types of facilities existed elsewhere in the United States, primarily because to my knowledge there is not necessarily a disclosure requirement for an entity that would own such a facility to disclose that facility in that kind of a description. Given that, I was not able to identify a pipeline that was, as you put it, I believe, over 200 miles in length that was serving multiple generating stations.
- Q. To your knowledge has the Florida Public
 Service Commission ever approved a pipeline project such
 as the one that's here for inclusion in electric rate

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base?

- A. I'm not aware that the Florida Public Service Commission has approved inclusion of a pipeline, if you are equating it to an over 200-mile pipeline, in rate base. I am aware that the Florida Public Service Commission had permitted a return to be earned on a pipeline serving FPL's production function.
 - Q. And what do you mean by that?
- A. It's my understanding that the pipeline that was serving Martin Station, the 36-mile pipeline, was allowed -- that the Florida Public Service Commission had authorized a return to be earned on that pipeline, although it was recovered through the fuel adjustment clause.
- Q. In your experience, would you define that pipeline as a mainline transportation natural gas pipeline?
- A. I would defer that question to Witness

 Collins, I think. I think he earlier had described what
 was mainline and what wasn't mainline.
- Q. Okay. In your experience working before the FERC, have you ever seen the FERC approve a pipeline project such as FPL is proposing here for inclusion in an electric utility's rate base?
 - A. I don't know that the situation would have

been put squarely before the Commission in that fashion.

The Commission regulates wholesale sales for electric

energy, and if there was a pipeline that was included in

the cost of the plant from which a wholesale rate was

determined, I don't know that they would have

specifically focused on whether those costs included a

pipeline.

The one case that I'm aware of where the Commission -- well, the one case I'm aware of where it was considered what the proper accounting should be for a pipeline owned and used by an electric utility and serving a generating station was the Portland General case that I referred to in my testimony, and there they concluded it should be classified as electric plant.

- Q. Let me ask you this question. If FPL, say, had a coal-fired electric plant, and you would agree with me that obviously that plant requires coal in order to generate electricity, correct?
 - A. Yes.

Q. And if based upon where that plant was located, the best way to move coal to that plant was by barge, in your analysis would it be appropriate for the utility to purchase that barge transportation system to use it to transport coal to that power plant and include it in rate base?

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A. If the economics showed that that was the most cost-effective and efficient way of doing it and resulted in the lowest rates for the consumers, yes, it would be — those barges would be being used in the electric production function and should be included in electric plant and service and rate base.

- Q. I'm sorry, I didn't mean to cut you off.
- A. I said and rate base. I believe that was your question.
- Q. Okay. Now, let's say -- just to kind of follow this line -- let's say that the coal that is required to be burned in this power plant is a unique kind of coal that's only found in Tennessee, or Kentucky, it doesn't matter which state.

Would it be appropriate in your analysis for the utility to purchase that coal mine if the coal coming from that coal mine was only going to be transported on that barge and only used by the electric utility?

- A. Your hypothetical was, I think, would it be appropriate for the utility to purchase that coal mine?
 - Q. And include it in the rate base.
- A. And include it in the rate base if it was only going to transport on its own barges?
 - Q. And use it in only its electric generating

1	plant?
2	A. If economically that was the most efficient
3	way of meeting what was needed in its electric utility
4	production function, I don't see any reason why it would
5	not be appropriate to classify it as electric utility
6	plant.
7	MR. SELF: Okay. Thank you. No further
8	questions, Commissioner.
9	COMMISSIONER EDGAR: Thank you. Are there
10	questions from staff for this?
11	MS. BROWN: Yes, Commissioners. Could we have
12	two minutes just to go over our questions because there
13	has been some repetition?
14	COMMISSIONER EDGAR: You may. Should we hold
15	in spot, hold in place?
16	MS. BROWN: Sure.
17	COMMISSIONER EDGAR: We are on an informal
18	break for about two minutes.
19	MS. BROWN: Thank you.
20	(Brief recess.)
21	CROSS EXAMINATION
22	BY MS. BROWN:
23	Q. Good afternoon. Is it Doctor Guest?
24	A. No, it's not.
25	Q. Mr. Guest, if I might direct your attention

back to Portland General for a minute. In your testimony you use it as an example of an electric utility with natural gas transmission pipeline in electric rate base. And you include in your exhibits copies of correspondence between Portland General and FERC in which the utility asks for a waiver of the FERC's Uniform System of Accounts, correct?

- A. Yes.
- Q. Why did Portland General ask for a waiver of the FERC's accounting requirements?
- A. I believe Portland General felt that because it was -- the pipeline in question was an interstate pipeline, it had some doubt as to whether or not it would be required to file a Form 2, or whether the accounting requirements for interstate pipelines would apply to them.
- Q. And was that in part because they were only going to provide minimal interruptible service on the pipeline and the rest was going to serve themselves?
- A. No, I don't think that was -- I don't think that entered into what their thought process was. I just think that that pipeline facility transported gas that crossed state lines, and they had some doubt as to whether they would be required to file a Form 2, which is typically required for interstate gas pipelines, and

whether the gas accounting rules would apply to them. 1 Are you aware that the Public Service 2 Q. Commission has adopted the FERC's Uniform System of 3 Accounts in its accounting rules for electric utilities 4 and gas utilities? 5 That was my understanding, yes. 6 7 Do you agree that Portland General asserted in Q. 8 that series of letters that the waiver should be 9 approved because even if additional assets were built, 10 the vast majority would continue to serve the pipeline 11 owner's facilities? MR. BUTLER: Excuse me. I would ask that Ms. 12 13 Brown point Mr. Guest to where specifically she is 14 referring in the exhibits she's examining him about. 15 MS. BROWN: Well, we are referring to Page 2 16 of 2, Exhibit JKG-4, and if you will give us a minute we 17 will find the other one. BY MS. BROWN: 18 If you will look at Page 2 of 2, JKG-4, the 19 Q. 20 first full paragraph. Do you see that? 21 A. Yes. 22 This is a letter from you to Portland General Ο. 23 allowing for the waiver, correct? Will you read that 24 paragraph. 25 A. Portland seeks a waiver of use of the gas

Beaver Pipeline as it will continue to be used to service Portland Beaver Generation Plant and expected usage by other shippers on the pipeline if requested is expected to be minimal. Now, that is the -- that is a statement of what Portland seeks and what their thought process may have been. The reason that their request was granted, though, was because the pipeline was being used to provide transportation service to Portland General's electric generating station.

- Q. I'm not sure I know the answer to this question, but I am going to ask it anyway. If FPL wants to account for its EnergySecure assets on its electric utility books, would it need to ask for a waiver of the FERC's or the Florida Commission's accounting requirements? And, if so, from whom would it ask for the waiver and when would it need to ask for it? I apologize for the multiple question.
- A. First of all, I think it's a legal question as to whether they do or they don't need to seek a waiver, and it depends on the facts and circumstances. There is a provision in the system of accounts that if an interpretation is doubtful, they can seek an interpretive ruling from the Commission, and I would assume that if the Florida PSC has adopted the FERC's

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Uniform System of Accounts the same would be true and they could make that request to the Florida PSC, or they could make it to the Federal Energy Regulatory

Commission, or they could make it to both. They could do the same for any waiver request, as well. As to timing as to when they would need to request that determination, it certainly wouldn't seem to me to be kind of — you wouldn't want it to be after you're facing how to account for the costs.

Q. So you mean that it would probably be done sooner rather than later? Well, if you're getting ready to build a \$1.5 billion pipeline and you are uncertain about how to account for it and whether or not you need a waiver, wouldn't you want to ask before you built it?

MR. BUTLER: I'm sorry, ask whom?

MS. BROWN: Either the FERC or the Florida Public Service Commission.

MR. BUTLER: Well, to the extent your question refers to FERC, I think I would object to it. It's asking about a jurisdiction that doesn't apply to an intrastate pipeline.

MS. BROWN: Well, I think the question of jurisdiction is still outstanding in this case.

MR. BUTLER: Can you read the question again?

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BY MS. BROWN:

- Q. The question was would FPL need to ask for a waiver of the FERC's or the Florida Commission's accounting requirements; and, if so, from whom and when?
- A. I think the existing system of accounts is sufficiently clear that if a pipeline owns and uses a pipeline for providing transportation service to its generating stations, it's a pipeline that is used in electric operations and should be classified as an electric utility plant.
- Q. Okay. So are you saying a waiver would not be required?
- A. A waiver may not be required in this instance because what triggered the request for a waiver in the Portland General case was provisions of the Natural Gas Act which I don't believe apply to the intrastate pipeline here.

MS. BROWN: All right. Thank you, Mr. Guest. We have no further questions.

CHAIRMAN CARTER: Thank you, staff.

Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chair.

Mr. Guest, just three quick questions. If I think I heard your testimony correctly, I believe you testified that the length of an intrastate pipeline is

1 not determinative of whether rate base recovery should 2 be allowed under the FERC Uniform System of Accounts, is 3 that correct? THE WITNESS: That's correct. 4 5 COMMISSIONER SKOP: Okay. And I think that you also testified, although I don't have an order and I 6 7 will get to that in a second, that the Commission 8 previously allowed FPL to earn a rate of return on the 9 36-mile Martin to 45th Street Terminal pipeline, is that 10 correct, through the fuel clause? 11 THE WITNESS: They permitted FPL to collect a 12 return, yes. 13 COMMISSIONER SKOP: Okay. If either FPL or 14 staff as a late-filed could get a copy of that order to 15 definitize what treatment was given to that specific 16 pipeline, I think it's bearing upon the issue before us. 17 MS. BROWN: Yes, Commissioner. I think that 18 is a Commission order that the Commission can always 19 take official recognition of, and we can include it in 20 the recommendation. 21 COMMISSIONER SKOP: Well, if somebody could 22 research that for me. 23 MR. BUTLER: Also, Commissioner Skop, that is 24 essentially what we will be addressing in Late-filed 25 Exhibit 96, so we will be specifically covering that.

commissioner skop: Thank you. And then just one final question, Mr. Guest. I guess in your professional opinion, Mr. Self has asked a bunch of questions relating to what other states have done, what FERC has done in the past. Florida, I think, inherently is a little bit different from other parts of the states in our nation, so I'm going to just ask a general question. If you can answer it comfortably; if not, fine.

But in your professional opinion, should other factors such as the peninsula nature of Florida, fuel transportation diversification, supply interpretation risk, and FPL's heavy dependence on natural gas be considered within the decision-making calculus that this Commission considers when whether to include the proposed project in the rate base?

THE WITNESS: Yes, I do, and some of those same factors I took into consideration in kind of looking at how the costs should be classified for accounting purposes.

COMMISSIONER SKOP: All right. Thank you.

CHAIRMAN CARTER: Thank you, Commissioner.

Commissioners, anything further from the bench?

Ms. Brown.

MS. BROWN: I have one further follow-up

FLORIDA PUBLIC SERVICE COMMISSION

1	question that I missed before, if I might ask.
2	CHAIRMAN CARTER: Let's see. Go ahead. Let's
3	see what you've got there.
4	MS. BROWN: Well, it relates to your earlier
5	discussion about the Sunshine Pipeline case.
6	FURTHER CROSS EXAMINATION
7	BY MS. BROWN:
8	Q. Are you aware of how other intrastate
9	pipelines are treated in Florida with respect to
10	corporate structure?
11	MR. BUTLER: I assume you're asking about
12	intrastate pipelines generally, not just ones owned by
13	an electric utility?
14	MS. BROWN: Yes, intrastate pipelines
15	generally.
16	THE WITNESS: And I'm not familiar with
17	Sunshine.
18	MS. BROWN: Okay. That's all right. Thanks.
19	CHAIRMAN CARTER: Thank you.
20	Anything further from the bench?
21	Redirect.
22	MR. BUTLER: Briefly, Mr. Chairman.
23	REDIRECT EXAMINATION
24	BY MR. BUTLER:
25	Q. The first, and this is truly a clarification.

You gave an answer to Ms. Brown toward the end of her questioning that began with the phrase, if I understood you correctly, if a pipeline owns and uses a pipeline. Did you mean to say if a utility, an electric utility owns?

- A. I'm sorry, yes.
- Q. I just wanted to clarify the record on that.

Mr. Self had asked you a question about a pipeline that would serve more than one plant. In your opinion, would it make a difference in terms of the proper accounting for a pipeline whether the pipeline served one power plant that a utility owned versus serving two or more power plants owned by the same utility?

- A. No, it would not make a difference. Again, the accounting determination is made based upon the function that the assets will perform.
- Q. Similarly, Mr. Self discussed, or asked you whether you were aware if the 18-inch pipeline from Martin to Riviera crosses a county boundary. Would it make any difference in the proper accounting for a gas pipeline owned by an electric utility whether it crossed a county boundary or not?
 - A. No, it would not.
 - Q. He asked you about the distinction between

1 mainline and lateral pipelines. Would it make a 2 difference, in your mind, in the proper accounting 3 treatment for an electric -- of for a gas pipeline owned by an electric utility whether it was characterized as a 4 5 mainline or a lateral? 6 No, it would not. Again, it is what function 7 is the asset performing, and if it's performing a gas 8 transportation function to the generating station, it 9 would be classified as electric plant. 10 MR. BUTLER: Thank you, Mr. Guest. Those are 11 all the questions I have. 12 CHAIRMAN CARTER: Okay. Exhibits. 13 MR. BUTLER: I would move the admission of 14 Exhibits 46 through 49. 15 CHAIRMAN CARTER: Mr. Self, any objection? 16 MR. SELF: No objection. 17 CHAIRMAN CARTER: Without objection, show it 18 done, Exhibits 46 through 49. Okay. 19 Will we see Mr. Guest again? 20 (Exhibits 46 through 49 admitted into the 21 record.) 22 MR. BUTLER: You will not. This is his only 23 appearance. 24 CHAIRMAN CARTER: Okay. Hasta la bye bye. 25 THE WITNESS: Thank you, Mr. Chairman.

1	CHAIRMAN CARTER: Have a great one. Call your
2	next witness.
3	MR. BUTLER: FPL calls Jonathan D. Ogur. I'm
4	sorry, Mr. Chairman, I don't believe this witness has
5	been sworn.
6	CHAIRMAN CARTER: Okay. Would you please
7	stand and raise your right hand.
8	(Witness sworn.)
9	CHAIRMAN CARTER: Please be seated.
10	JONATHAN D. OGUR
11	was called as a witness on behalf of Florida Power and
12	Light Company, and having been duly sworn, testified as
13	follows:
14	DIRECT EXAMINATION
15	BY MR. PERKO:
16	Q. Could you please state your full name and
17	business address for the record?
18	A. Yes. I'm Jonathan D. Ogur, and my business
	A. Yes. I'm Jonathan D. Ogur, and my business address is 1155 15th Street Northwest, Suite 400,
18 19 20	
19	address is 1155 15th Street Northwest, Suite 400,
19 20	address is 1155 15th Street Northwest, Suite 400, Washington, D.C. 20005.
19 20 21	address is 1155 15th Street Northwest, Suite 400, Washington, D.C. 20005. Q. And by whom are you employed and in what
19 20 21 22	address is 1155 15th Street Northwest, Suite 400, Washington, D.C. 20005. Q. And by whom are you employed and in what position?
19 20 21 22 23	address is 1155 15th Street Northwest, Suite 400, Washington, D.C. 20005. Q. And by whom are you employed and in what position? A. I'm an associate with Brown, Williams,

FLORIDA PUBLIC SERVICE COMMISSION

1	filed Supplemental Testimony consisting of 21 pages in
2	this docket?
3	A. Yes, I did.
4	Q. And along with that testimony, did you submit
5	two exhibits labeled JD-01 and JD-02?
6	A. Yes, that's correct.
7	Q. Have you filed an errata relating to your
8	testimony and exhibits on July 24th?
9	A. I have not.
10	Q. You have not. Do you have any changes or
11	additions to your testimony?
12	A. No, I don't.
13	Q. Do you have any changes or additions to your
14	exhibits?
15	A. No, I don't.
16	Q. If I were to ask you the same questions in
17	your testimony today, would your answers be the same?
18	A. Yes, they would.
19	MR. PERKO: At this time I'd like to move the
20	Prefiled Supplemental Testimony of Jonathan D. Ogur into
21	the record as if read.
22	COMMISSIONER EDGAR: The prefiled testimony of
23	the witness will be entered into the record as though
24	read.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		SUPPLEMENTAL TESTIMONY OF JONATHAN D. OGUR
4		DOCKET NO. 090172-EI
5		MAY 29, 2009
6		
7		INTRODUCTION
8		
9	Q.	Please state your name and business address.
10	A.	My name is Jonathan D. Ogur and my business address is Brown, Williams,
11		Moorhead & Quinn, Inc., Energy Consultants, 1155 15th Street, N.W., Suite 400,
12		Washington, DC 20005.
13	Q.	Please describe your current employment.
14	A.	From 2006 until the present, I have been employed as an Associate by Brown,
15		Williams, Moorhead & Quinn, Inc., Energy Consultants ("BWMQ").
16	Q.	Please describe your educational background.
17	A.	I received an A.B. degree with a pre-med concentration in Mathematics from
18		Columbia College in 1965, a Master of Arts degree in Economics from Cornell
19		University in 1969, and a Ph.D. in Economics from Cornell University in 1970.
20	Q.	Please summarize your previous work experience.
21	A.	From 1970 to 1973, I was an Assistant Professor of Economics at Tulane University,
22		where I taught both graduate and undergraduate courses. From 1973 to 2006, I was
23		an Economist with the federal government. During that time, I worked at the

1		Federal Energy Regulatory Commission ("FERC"), the Federal Trade Commission
2		and the Federal Communications Commission.
3	Q.	What has been the focus of your work?
4	A.	My work has focused on competition, market power, regulation, and economic
5		efficiency in a variety of industries, including natural gas pipelines, electric utilities
6		oil pipelines, electrical equipment, airlines, and cable television.
7	Q.	Have you previously testified before a regulatory commission?
8	A.	Yes. I have presented testimony in numerous proceedings before the FERC and in a
9		proceeding before the Nebraska Public Service Commission. Exhibit JDO-1
10		provides detailed information on my previous testimony, educational background,
11		work experience, and written work.
12	Q.	Are you sponsoring any exhibits in this case?
13	A.	Yes. I am sponsoring Exhibit JDO-1 through Exhibit JDO-2, which are attached to
14		my supplemental testimony.
15		• Exhibit JDO-1 Vita of Jonathan D. Ogur
16		• Exhibit JDO-2 Market Shares and Concentration in Gas Transmission
17		Markets
18	Q.	What is the purpose of your supplemental testimony?
19	A.	The purpose of my supplemental testimony is to address issues related to the impact
20		of the Florida EnergySecure Line ("EnergySecure Line") on economic efficiency
21		and competition in markets for gas transmission and delivered gas in Florida, to the
22		extent such issues are deemed relevant for purposes of assessing FPL's request for a
23		determination of need.

1 Q. What are the main conclusions of your economic analysis?

Based on my economic analysis, I conclude that the EnergySecure Line will promote economic efficiency and competition in highly concentrated gas transmission markets and delivered gas markets in Florida. Before making sales of EnergySecure Line gas transportation service to third-party entities, Florida Power & Light Company ("FPL") would obtain Florida Public Service Commission ("FPSC") approval of tariffs specifying the terms, conditions, and rules under which FPL would provide service. Consistent with prior FPSC practice, any potential adverse effects on local distribution companies ("LDCs") should be addressed in such a tariff proceeding. It is unnecessary and would be premature to address such issues in the context of a need determination proceeding. Concerns about potential adverse impacts should not be a reason to reject a pipeline that is otherwise needed.

Q. Would you briefly summarize the facts underlying this proceeding?

FPL is seeking approval from the FPSC for its proposed EnergySecure Line, a new Florida intrastate natural gas pipeline. The EnergySecure Line will serve the needs of FPL's Cape Canaveral Next Generation Clean Energy Center ("CCEC") and Riviera Beach Next Generation Clean Energy Center ("RBEC"), as well as other current and future gas transportation needs of FPL and the state of Florida (Forrest Testimony at 3:11-17).

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The capacity of the EnergySecure Line is 600 MMcf/d. FPL has determined that 600 MMcf/d was the minimum quantity necessary for suppliers to commit to build a new interstate pipeline into Florida (Sharra Testimony at 16:6-9). The

EnergySecure Line will hold 600 MMcf/d of gas transportation on a new interstate 1 pipeline ("Upstream Pipeline") to be built from a connection with Transcontinental 2 Gas Pipe Line Company (Transco) at Transco Station 85 to a connection with the 3 EnergySecure Line at FGT Station 16 (Forrest Testimony at 10:22-11:12). 4

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On September 12, 2008, the FPSC approved the need for modernizations at CCEC and RBEC. The modernizations will require approximately 400 MMcf/d of natural gas transmission capacity. FPL does not currently have enough firm gas transportation capacity under contract to meet this increased need for natural gas (Forrest Testimony at 6:14-7:2).

11 Q. How much gas transmission capacity does FPL hold?

A. FPL currently holds 1,409 MMcf/d of firm transmission capacity, including 874 12 MMcf/d during the peak summer season on Florida Gas Transmission LLC ("FGT") and 535 MMcf/d on Gulfstream Natural Gas Systems, L.L.C. ("Gulfstream") (Sharra Testimony at 6: 21-7:20). FPL's firm capacity on Gulfstream will rise to 695 MMcf/d beginning June 1, 2009, when Gulfstream's Phase III expansion is completed. FPL's firm capacity on FGT will rise to 1,274 MMcf/d when FGT's Phase VIII expansion project is placed in service in the spring of 2011. As a result of these two expansions, FPL will hold 1,969 MMcf/d of firm transmission capacity in 2011.

21 Q. How much capacity will the EnergySecure Line add to FPL's current capacity?

22 A. The EnergySecure Line will have an initial capacity of 600 MMcf/d, including a 23 delivery capability of 200 MMcf/d to the CCEC and 200 MMcf/d to the RBEC. The

remaining 200 MMcf/d will be delivered to FPL's Martin Plant for reliability 1 2 purposes, but also may be offered to other entities within Florida until FPL needs the full capacity (Forrest Testimony at 9:2-14). As FPL's load growth increases and 3 creates the need for additional generation on its system, the EnergySecure Line can 4 5 be expanded to 1,250 MMcf/d (Forrest Testimony at 11:16-22). 6 To put this in perspective, between 2013 and 2040, FPL projects that it will need to 7 add about 2,700 MMcf/d of gas transmission capacity (Enjamio Testimony at 4:16-8 20). Thus, the 200 MMcf/d that may be offered to other Florida entities for a period 9 of time is less than 10 percent of FPL's projected needs for additional capacity. 10 11 Future expansion of the EnergySecure Line would add 650 MMcf/d of capacity (= 1,250-600), which is less than 25 percent of FPL's projected needs. 12 Q. Would you briefly describe how the 200 MMcf/d delivered to the Martin Plant 13 will be offered to other entities within Florida? 14 A. The 200 MMcf/d delivered to the Martin Plant will displace deliveries from FGT or 15 Gulfstream that can then be redirected to other FPL facilities or to other entities 16 within Florida. FPL also may sell the 200 MMcf/d on the EnergySecure Line 17 Revenues received from any sales would benefit FPL's retail customers 18 via the Fuel Cost Recovery Clause and would offset a portion of the costs associated 19 with the pipeline (Forrest Testimony at 16:8-15). 20

Economic Efficiency, Competition, and Market Power

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3 Q. How would you define economic efficiency?

A. Economic efficiency means producing output at the lowest cost. Applied to this case, it means that FPL chooses the least-cost alternative to supply the additional pipeline capacity to provide gas for its electric generation expansions. Efficiency also means that the gas is obtained from diverse sources to increase the reliability of supply. Source diversity can lower costs by providing alternatives to sources that may be disrupted by weather conditions or may become high cost when their low cost supplies are exhausted.

11 Q. How would you define competition?

12 A. Competition means that market power is absent or, if present, is mitigated or 13 prevented from being exercised.

14 Q. How would you define market power?

Market power is the ability of a seller to profitably maintain prices above the competitive level for a significant period of time. 74 FERC ¶ 61,076, Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines, Docket No. RM95-6-000, Regulation of Negotiated Transportation Services of Natural Gas Pipelines, Docket No. RM96-7-000, (January 31, 1996) at 61,230 ("Gas Policy Statement"). Applied to this case, market power is the ability of a pipeline to charge rates above the competitive level, which yield revenues that are greater than the pipeline's costs plus a reasonable return on investment. By limiting pipeline

1		revenues to recovery of prudently incurred costs plus a reasonable return on the
2		pipeline investment, the FPSC and the FERC prevent the exercise of market power.
3	Q.	Does a competition analysis distinguish between effects on competition and
4		effects on competitors?
5	A.	Yes. The primary focus is on effects on competition in the relevant markets. In my
6		analysis, I will distinguish between gas transmission markets and delivered gas
7		markets, between firm services and interruptible services, and between short-term
8		services and long-term services.
9	·	
10		Effects on individual competitors are only a secondary focus of a competition
11		analysis. Increasing market competition benefits consumers by providing goods and
12		services at a lower cost, using fewer resources. Entry by new suppliers, or
13		expansion of existing low-cost suppliers, provides clear benefits because these
14		suppliers must attract new customers by offering them a better price-quality
15		combination than rival incumbent sellers offer. In general, sellers that are adversely
16		affected tend to be less efficient, high-cost suppliers that may lose sales to more
17		efficient, low-cost suppliers.
18		
19		In previous proceedings, the FPSC has addressed a concern that LDCs may lose
20		large customers to a new pipeline, potentially shifting costs to the LDCs' remaining
21		customers. In re: Petition for approval of natural gas transmission pipeline tariff by
22		Peninsula Pipeline Company, Inc., Docket No. 070570-GP, Order No. PSC-07-
23		1012-TRF-GP (December 21, 2007) ("Peninsula Order"); In re: Petition for

1 approval of natural gas transmission pipeline tariff by Seacoast Gas Transmission, 2 LLC., Docket No. 080561-GP Order No. PSC-08-0747-TRF-GP (November 12, 2008) ("Seacoast Order"). I will address the issue of potential adverse impacts, with 3 4 particular reference to LDCs later in my testimony. 5 **GAS TRANSMISSION MARKETS** 6 7 8 Q. Would you identify the relevant markets where the EnergySecure Line may impact economic efficiency and competition? 9 A. The EnergySecure Line may impact economic efficiency and competition in markets 10 11 for gas transmission services and in markets for delivered gas. Would you identify the possible relevant markets for gas transmission services? 12 Q. I will analyze three sets of relevant markets for gas transmission services. At the 13 A. least aggregated level, there is a market for gas transmission service to each 14 individual delivery point on FPL's system, for example, the CCEC, the RBEC, the 15 Martin Plant, and any other delivery point where potential customers may be 16 located. At a more aggregated level, there is a market for gas transmission service 17 to the FPL system as a whole. Finally, at the most aggregated level, there is a 18 19 market for gas transmission service to the state of Florida as a whole.

1		Economic Efficiency
2		
3	Q.	What is the impact of the EnergySecure Line on economic efficiency in these
4		relevant markets for gas transmission services?
5	A.	The EnergySecure Line will provide increased transmission capacity to supply the
6		growth in demand for natural gas due to current expansions of FPL's electric
7		generating capacity. The increased transmission capacity also will enhance
8		reliability and help meet further projected expansions of gas-fired generation.
9		Economic efficiency is promoted when increased transmission capacity is provided
10		at lowest cost. The EnergySecure Line will promote economic efficiency because it
11		is the least-cost alternative to supply increased transmission capacity over the life of
12		the project (Enjamio Testimony at 5:9-17).
13		
14		As FPL's load grows and creates the need for additional generation on its system,
15		the EnergySecure Line can be expanded to 1.25 billion cubic feet per day ("Bcf/d").
16		This expansion will come at a greatly reduced price to FPL's customers because
17		minimal infrastructure will be required to add capacity. FPL will have access to
18		additional capacity on the Upstream Pipeline to supply the EnergySecure Line's
19		expansion (Forrest Testimony at 11:16-22).
20	Q.	What is the estimated value of the EnergySecure Line's added benefits
21		compared to the next best alternative?
22	A.	Selecting the EnergySecure Line results in added benefits ranging between \$204

million and \$513 million compared to the next best alternative (Enjamio Testimony

at 5:9-17). These added benefits do not include the possible benefits to FPL's customers and Florida gas consumers from short-term off-system sales of gas transportation capacity at favorable prices during the initial period before FPL uses the entire capacity of the EnergySecure Line for its own gas-supply requirements.

Competitive Effects

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8 Q. What is the impact of the EnergySecure Line on competition in the relevant 9 markets for gas transmission services?

The EnergySecure Line may increase the frequency and extent of discounting of gas transmission services below the maximum cost-of-service price. Regulation by the FPSC and the FERC ensures that the price of gas transmission services will be just and reasonable. During off-peak periods, when there is unused capacity, competitive transmission rates may be discounted. In general, discounted rates will be below the maximum cost-of-service price and above variable cost.

16 Q. Can discounted rates be higher than the competitive level?

Yes. If the market for gas transmission services is sufficiently concentrated, discounted rates may exceed the competitive level. In such a concentrated market, the entry of an additional supplier of transmission services, the EnergySecure Line, may increase competition and promote more frequent and deeper discounting than occurred before entry.

- 1 Q. How would you define market concentration?
- 2 A. A market is concentrated when a few large sellers supply most of the products or
- services that are traded. Applied to this case, the market for primary firm gas
- 4 transmission capacity is concentrated when a few large pipelines supply most of the
- 5 transmission capacity traded.
- 6 Q. How do you measure market concentration?
- 7 A. A widely-used measure of market concentration is the Herfindahl-Hirshman Index
- 8 ("HHI"). It is calculated by summing the squared market shares of sellers in the
- 9 relevant market under analysis. For example, suppose a gas transmission market is
- supplied by two equal-sized pipelines, each with a market share of 50 percent. The
- HHI would be 5000 = (50x50) + (50x50). If one of the pipelines has a market
- share of 75 percent, and the other has a market share of 25 percent, the HHI would
- be 6250 = (75x75) + (25x25), which is higher. Thus, the HHI reflects both
- fewness of sellers and differences in the size of their market shares.
- 15 Q. Would you consider the hypothetical transmission market described above to
- be concentrated?
- 17 A. Yes. The FERC generally considers pipeline transportation markets to be
- 18 concentrated if the HHI exceeds 1800. Gas Policy Statement at 61,235. An HHI of
- 19 1800 would characterize a market with five-to-six equal-size pipelines. For
- example, if five pipelines have a market share of 20 percent each, the HHI would
- equal 2000 [= (20x20) + (20x20) + (20x20) + (20x20) + (20x20) = 2000], thus
- 22 exceeding the 1800 threshold. Market concentration above this level raises
- competitive concerns that sellers may be able to exercise market power.

Q. Is the gas transmission market into the state of Florida a concentrated market?

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Yes. As shown on Exhibit JDO-2, the HHI is about 4421. Gas transmission into the state of Florida is provided by four interstate pipeline systems: FGT, Gulfstream, Southern Natural Gas Company's Cypress Pipeline system ("Cypress") (which connects with FGT) and Gulf South Pipeline Company, L.P. ("Gulf South") (Sexton Testimony at 6:16-7:2). FGT and Gulfstream provide approximately 90% of the capacity (Sexton Testimony at 6:16-7:2). FGT's capacity is approximately 2.21 Bcf/day, and Gulfstream, with the recent installation of its Phases III and IV projects, has a capacity of about 1.25 Bcf/day (Sexton at 7:5-15). The remaining two pipelines, Cypress and Gulf South have capacities of about 190 MMcf/d each. Based on these approximations, the total capacity in the market is 3.84 Bcf/d [= (2.21+1.25)/.9)]. Gulf South has a capacity of about 190 MMcf/d. This implies that Cypress also has a capacity of 190 MMcf/d (= 3.84-2.21-1.25-0.19). As a result, FGT's market share is about 58 percent (2.21/3.84), Gulfstream's market share is about 33 percent (1.25/3.84), and Cypress and Gulf South each have market shares of about five percent. Squaring and summing these market shares yields an HHI of about 4421.

18 Q. Is the gas transmission market to the FPL system a concentrated market?

Yes, it is even more concentrated than the gas transmission market to the state of Florida as a whole, as shown on Exhibit JDO-2. FGT and Gulfstream are the only pipelines that currently serve the FPL system (Sexton Testimony at 10:4-610:4-6). With the estimated 2011 completion of FGT's Phase VIII project, FPL will have 1.274 Bcf/d of firm gas transportation on that pipeline, which represents

1 approximately	y 66% of	FPL's 1	peak gas	supply.	Similarly,	by	the	end	of 2	2009,
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- 2 Gulfstream will supply 695 MMcf/d of FPL's gas load, representing 33% of FPL's
- peak gas supply. Together, this is about 1.969 Bcf/d, (Forrest Testimony at 18:4-12).
- Thus, the HHI would be about 5,432. (See Exhibit JDO-2)
- 5 Q. Are the gas transmission markets to the CCEC, RBEC, and Martin Plant
- 6 delivery points on the FPL system concentrated markets?
- 7 A. Yes, they are even more concentrated than the transmission market to the FPL
- system as a whole. FGT is the only pipeline that provides transmission service to
- 9 the CCEC and RBEC delivery points, and Gulfstream is the only pipeline that
- currently provides transmission service to the Martin Plant delivery point (Forrest
- 11 Testimony Exhibit, Map of Florida EnergySecure Line Proposed Corridor and
- Florida's Current and Proposed Natural Gas Infrastructure). Thus, the HHI in these
- markets would be $10,000 (= 100 \times 100)$.
- 14 Q. Do you expect high concentration to persist in the future?
- 15 A. Yes. It is my understanding that FGT will connect to the Martin Plant following
- FGT's Phase VIII expansion in 2011. As a result, when the EnergySecure Line goes
- into service, Gulfstream, FGT, and the EnergySecure Line will serve the Martin
- Plant. Thus, under the best of circumstances, with all three pipelines of equal size,
- the HHI will equal 3333, which exceeds the 1800 HHI threshold indicating a market
- 20 power concern.

1	Q.	Would you identify a factor other than concentration that affects the frequency
2		and extent of discounting?
3	A.	The extent of excess capacity is another factor that affects discounting frequency
4		and extent. At low levels of excess capacity, as indicated by small amounts of
5		unsubscribed capacity, the frequency and extent of discounting is reduced.
6	Q.	Is excess capacity low in the relevant gas transmission markets in this case?
7	A.	Yes. Despite the recent expansion projects on Gulfstream and Cypress, interstate
8		transportation capacity in Florida is still effectively sold out and therefore
9		constrained on a firm contractual basis (Sexton Testimony at 10:8-13). In addition,
10		FGT has executed precedent agreements with shippers accounting for 731,000
1		MMBtu/day of the 820,000 MMBtu/day of its Phase VIII expansion capacity. Thus,
12		only 89,000 MMBtu/day (approximately 89 MMcf/day or 11 percent) of this Phase
3		VIII expansion capacity is unsubscribed and available (Sexton Testimony at 12:10-
4		15).
.5	Q.	Do high concentration levels and low levels of excess capacity suggest that
6		existing transmission suppliers, such as FGT and Gulfstream, possess market

- 1 17 power?
- A. Yes, even after recent expansions are taken into account. In large part, FERC and 18 19 FPSC regulation are intended to prevent such market power from being exercised.
- Q. Do the market shares of FGT and Gulfstream also raise market power 20 concerns? 21

1	A.	Yes. FGT's and Gulfstream's market shares, which exceed 50 percent and range up
2		to 100 percent in some of the relevant markets, also raise concerns that these
3		pipelines possesses market power.
4	Q.	Do sellers with large market shares in concentrated markets sometimes charge
5		different prices to different buyers?
6	A.	Yes, such price differentiation is sometimes referred to as "price discrimination."
7	Q.	Is price discrimination always an anticompetitive practice?
8	A.	No, price discrimination can promote competition by enabling sellers to retain
9		existing customers and compete for new customers.
10	Q.	How does the FERC prevent undue price discrimination by pipelines offering
11		discounted rates for interstate transmission services?
12	A.	To prevent undue price discrimination, the FERC requires pipelines to treat similarly
13		situated shippers similarly. Gas Policy Statement at 61,242. However, this
14		requirement does not prevent pipelines from discounting rates to retain existing
15		customers and to compete for new customers. Gas Policy Statement at 61,225-26.
16		FERC also ensures that rates do not fall below a pipeline's variable cost and thus
17		make a contribution to covering the pipeline's fixed costs. 18 CFR 284.10.
18	Q.	Does the FPSC apply a regulatory standard to prevent undue price
19		discrimination that is similar to the FERC standard?
20	A.	Yes. Gas transmission rates under FPSC regulation must meet the following
21		standard: "It shall be the duty of the commission to ensure that all rates and services
22		made, demanded, or received by any natural gas transmission company are just and
23		reasonable and are not unreasonably preferential, prejudicial, or unduly

discriminatory. Rates must be sufficient, equitable, and consistent in application to each class of customers." Natural Gas Transmission Pipeline Intrastate Regulatory Act at 368.105(2).

Extra Transportation Capacity on the EnergySecure Line

A.

- Q. What is your understanding regarding FPL's plans to make extra transportation capacity on the EnergySecure Line available to third parties?
- It is my understanding that FPL will initially have 200 MMcf/d of extra capacity on the EnergySecure Line, which will enhance reliability. FPL may use that capacity itself and release its capacity on FGT or Gulfstream for resale to others; or sell directly to third parties. Capacity on the EnergySecure Line would be sold through an open and non-discriminatory process. All revenues would be credited back to FPL electric customers through the Fuel Cost Recovery Clause.
- Q. Based on that understanding, would FPL be providing transmission access, subject to available capacity, on a basis that is not unreasonably preferential, prejudicial, or unduly discriminatory?
 - Yes. FPL would follow FERC requirements for any capacity releases to ensure that the process is open and non-discriminatory as discussed in the supplemental testimony of FPL witness Forrest. In the case of any sales, FPL would post the capacity in an open and transparent manner and seek bids in order to ensure non-discriminatory access to the capacity. FPL also would file tariffs governing these sales with the FPSC.

1	Q.	Would releases and sales of the extra capacity promote increased efficiency and
2		competition?
3	A.	Yes. The FERC and FPSC requirements that FPL will follow will ensure that any
4		releases and sales will promote increased efficiency and competition.
5		
6		DELIVERED GAS MARKETS
7		
8	Q.	Would you identify the markets for delivered gas that the EnergySecure Line
9		may impact?
10	A.	There are three possible sets of relevant markets for delivered gas. At the least
11		aggregated level there is a market for delivered gas to each individual delivery point
12		on FPL's system, for example, the CCEC, the RBEC, the Martin Plant, and any
13		other delivery point where potential customers may be located. At a more
14		aggregated level, there is a market for delivered gas to the FPL system as a whole
15		Finally, at the most aggregated level, there is a market for delivered gas to the state
16		of Florida as a whole.
17		
18		Economic Efficiency
19		
20	Q.	What is the impact of the EnergySecure Line on economic efficiency in these
21		relevant markets for delivered gas?
22	A.	In addition to the increased efficiency in the transmission markets, the EnergySecure
23		Line will also promote economic efficiency in delivered gas markets by increasing

fuel reliability and operational flexibility through diversification of gas supply sources. The proposed pipeline into Florida would be largely supplied from shale gas production in Texas, Arkansas, Oklahoma and Louisiana. The Upstream Pipeline and the EnergySecure Line give FPL and other gas users in Florida increased access to shale gas in the Mid-Continent to Gulf Coast supply, and to newly developing and existing liquefied natural gas (LNG) regasification facilities. Having access to several supply sources will protect against declining production in a given supply basin (Forrest Testimony at 20:4-15).

A.

- 9 Q. Will the increased access to new gas supply sources reduce FPL's risk of gas
 10 supply interruption?
 - Yes. Gulfstream and FGT are designed to source gas supplies primarily from traditional onshore Gulf Coast and offshore Gulf of Mexico supply sources. By contrast, the EnergySecure Line will provide supplies from unconventional shale gas locations in North Louisiana, Arkansas and East and Central Texas. The increased diversity of supply will decrease the portion of FPL's fuel requirements that are dependent on traditional Gulf Coast and Gulf of Mexico sources. As a result, a smaller percentage of FPL's overall supply portfolio (and generation capacity) will be impacted by isolated weather events such as hurricanes in the Gulf of Mexico (Sexton at 43:3-12).

1		Competitive Effects
2		
3	Q.	What is the impact of the EnergySecure Line on competition in these relevan
4		markets for delivered gas?
5	A.	By providing increased access to suppliers of shale gas from the Mid-Continent, the
6		EnergySecure Line will increase competition in delivered gas markets in Florida
7		Increased competition will tend to decrease the price of delivered gas in Florida
8		markets.
9		
10		FPL has identified 11 gas suppliers that have subscribed for transportation capacity
11		on one of the major pipeline expansions to Transco Station 85, where the Upstream
12		Pipeline will connect to Transco (See FPL's response to FGT's First Set of
13		Interrogatories, No. 24). These suppliers are: Devon Energy, Chesapeake Energy
14		Marketing, Connective Energy Supply, EOG Resources, Iberdrola Renewables, JW
15		Gathering, OGE Resources, Oneok Energy Resources, Quicksilver Resources, Uni
16		Petroleum, and XTO Petroleum. Discussions with individual suppliers have
17		indicated a willingness to sell gas to FPL on both a long-term basis and a short-term
18		basis at a price based on a market index.

21 A. No.

Customers?

Q.

19

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Are any of these suppliers listed on FGT's or Gulfstream's Index of

Q. Is there evidence supporting the proposition that the EnergySecure Line will cause a decrease in the price of delivered gas in Florida?

Α.

A. Yes. Projects similar to the EnergySecure Line have resulted in gas price decreases for FGT and Gulfstream customers (Sharra Testimony at 8:19-9:8). As an example, FPL entered into a transportation agreement with the Southeast Supply Header ("SESH") pipeline project, which began delivering natural gas (sourced from onshore production fields in Texas and Louisiana) into FGT and Gulfstream beginning in September 2008. After these deliveries began, FGT and Gulfstream customers who purchased gas in the Mobile Bay area experienced over a 50 percent drop in the overall basis premium (current premium for Mobile Bay supplies above NYMEX Henry Hub). FPL projects that this differential could result in customer savings in excess of \$50 million in 2009 alone.

13 Q. Do you have concerns about potential adverse impacts on LDCs?

14 A. In prior tariff approval proceedings, the FPSC has addressed a concern that LDCs

15 may lose large customers to a new pipeline, potentially shifting costs to the LDCs'

16 remaining customers. Peninsula Order at 4; Seacoast Order at 3.

Q. Is it appropriate to address concerns regarding the potential adverse impacts on LDCs in this proceeding?

No. As discussed in the supplemental testimony of Sam Forrest, it is unnecessary and premature to address such issues in the context of a need determination proceeding. FPL would obtain FPSC approval before making sales of EnergySecure Line gas transportation service to third-party entities. Consistent with prior FPSC practice, any concerns about potential adverse impacts on LDCs should be addressed when the FPSC reviews FPL's tariff filing, which will specify the terms, conditions, and rules under which FPL would

provide service to third parties. Concerns about potential adverse impacts should not be a reason to reject a pipeline that is otherwise needed.

CONCLUSIONS

A.

6 Q. What are the conclusions of your economic analysis?

Based on my economic analysis, I conclude that the EnergySecure Line will promote economic efficiency and competition in highly concentrated gas transmission markets and delivered gas markets in Florida. The increased efficiency and competition will provide significant benefits to Florida consumers. Regulation by the FPSC and FERC will ensure that the price of gas transmission services will be just and reasonable. FPL would obtain FPSC approval before making sales of EnergySecure Line gas transportation service to third-party entities. Consistent with prior FPSC practice, any potential adverse effects on LDCs should be addressed in such a tariff proceeding. It is unnecessary and would be premature to address such issues in the context of a need determination proceeding. Concerns about potential adverse impacts should not be a reason to reject a pipeline that is otherwise needed.

Q. Does this conclude your supplemental testimony?

19 A. Yes.

1 BY MR. PERKO:

2.3

- Q. Mr. Ogur, have you prepared a summary of your testimony?
 - A. Yes, I have.
 - Q. Would you please provide that at this time.
 - A. Good afternoon, Mr. Chairman, Commissioners.

In my supplemental testimony, I analyze the impact of FPL's Florida EnergySecure Line on economic efficiency and competition. My analysis examines Florida markets for gas transmission and delivered gas. I conclude that the Florida EnergySecure Line will promote economic efficiency and competition in these markets.

Let's first consider transmission markets. In these markets, the Florida EnergySecure Line will promote economic efficiency because it is the least-cost alternative to supply increased capacity over the life of the project. It will promote competition because it is a new entrant in markets whose structure is conducive to the exercise of market power.

Gas transmission markets in Florida are characterized by high concentration. There are only four pipelines serving Florida, and most markets are served by only one or two pipelines. These markets are also characterized by low levels of excess capacity.

The incumbent pipelines, FGT and Gulfstream, are fully subscribed. Entry by the Florida EnergySecure Line will promote competition and put downward pressure on prices.

Next, let's consider gas markets in Florida.

In these markets, the Florida EnergySecure Line will promote economic efficiency by increasing the diversity and reliability of gas supply sources. It will increase the proportion from unconventional shale gas supplies, and it will decrease the proportion from conventional Gulf of Mexico and Gulf Coast gas supplies.

The EnergySecure Line will promote competition in delivered gas markets by permitting the entry of new gas suppliers in Florida, and this entry will put downward pressure on the delivered gas prices in Florida.

Mr. Chairman, Commissioners, in considering the issues in this proceeding, I believe it's important to remember that the Florida EnergySecure Line will increase economic efficiency and competition resulting in substantial benefits to Florida consumers.

That completes my summary. Thank you for your attention.

MR. PERKO: We tender the witness for cross-examination.

COMMISSIONER EDGAR: Mr. Self, questions on

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1 cross?

MR. SELF: No questions.

COMMISSIONER EDGAR: No questions. Okay. Are there questions from staff for this witness?

MS. BROWN: Yes, we have just a few.

CROSS EXAMINATION

BY MS. BROWN:

Q. Hi, Mr. Ogur. On Page 5 of your supplemental testimony you state that FPL may sell 200 MMcfs per day off the EnergySecure Line directly, and then further on Page 16 you use the term directly to third parties.

Can.

You explain what you mean by the term directly?

- A. Yes. There are two options really for the 200 MMcf per day of capacity on the Florida EnergySecure Line that will not be used initially to supply the FPL power plants. One is to release capacity on Gulfstream and FGT. The other is to make sales of capacity on the EnergySecure Line itself. And so directly simply refers to those sales of capacity on the EnergySecure Line that are made to third parties.
- Q. All right, thank you. If FPL were to need all capacity on the EnergySecure Line, as well as its contracted capacity on FGT and Gulfstream, would this

encourage the discounting of pipeline capacity rates on any of the pipelines?

- A. Yes, I believe it would.
- Q. How would that happen?
- A. Well, as I point out in my testimony, if you define the markets for gas transmission services in Florida properly, you start with very disaggregated markets to individual receipt points on the FPL system and then move up to slightly more aggregated markets to the FPL system as a whole, transmission to that system.

The entry of the Florida EnergySecure Line will provide a new competitor to serve those markets, and the result of that new entry will be downward pressure on prices in those gas transmission markets.

- Q. Even though the new EnergySecure Line will not be used to compete in the gas transmission capacity markets?
- A. I would not agree that it would not be used to compete in the gas transmission market. Again, the important thing is to define that market or those markets, there is really more than one, correctly. And, again, starting from the least aggregated of the gas transmission markets, namely to specific receipt points on the FPL system, we have a new entrant to serve those markets. The effect of new entry is to put powerful

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pressure, downward pressure on prices and to promote competition.

So I very strongly would conclude that there will be additional competition from this. In the case of some of the receipt points, there is only one incumbent, so we would have a second supplier of gas transmission services. To the FPL system as a whole, there are two incumbents. We would have a third in that case.

All right, thank you. Ο.

Would you agree that FPL's proposed pipeline is requesting regulatory treatment for the recovery of pipeline costs in electric rate base which is different from the regulatory treatment afforded other Florida FERC regulated interstate transmission pipelines as well as other Florida Public Service Commission regulated intrastate transmission pipelines?

- Let me break that down a little bit if I could in my answer. I'm aware that it's different from the regulatory treatment of the interstate pipelines, the FERC regulated pipelines in Florida. I am not as familiar with the regulation of the intrastate pipelines in Florida.
- Do you believe that this different regulatory treatment might have adverse market implications?

- A. No, I don't.
- Q. If FPL's proposed pipeline is approved as proposed, FPL's pipeline would have the competitive advantage of being treated as electric plant with the regulatory assessment fee of .0072 percent while other intrastate pipelines not included in electric rate base would be assessed a fee of .25 percent, correct?
- A. I am not familiar with the concept of a regulatory assessment fee, and so I really don't know the answer to that question.
- Q. Right. But we're in the process of copying one of those rules. It's the Commission's Rules 25-7.101, Regulatory Assessment Fees for Gas Utilities, Intrastate Pipeline Gas Facilities, and 25-6.0131, Regulatory Assessment Fees for Investor-owned Electric Companies. We will pass that out to you so you can look.

We are also passing out a Public Service Commission order that established that .25 percent.

MR. PERKO: Mr. Chairman, I'm not sure that this relates to the witness' direct testimony at all.

I'm not seeing a direct relationship here.

CHAIRMAN CARTER: Let's just kind of see where we're going.

Ms. Brown.

MS. BROWN: Yes. The reason that I asked 1 about adverse market implications was so that I can then 2 demonstrate that perhaps there are some differences in 3 4 regulatory treatment. CHAIRMAN CARTER: Well, let's kind of just let 5 it go for now, Mr. Perko. Obviously you're entitled to 6 7 object at any point in time, but let's just see where it 8 is going right now. Make sure that all the parties --9 MS. BROWN: Actually that's the end of the 10 questions on the regulatory assessment fees and the 11 difference between them. 12 CHAIRMAN CARTER: Hang on for a second. 13 make sure everyone is on the same page here. Does the 14 witness -- Mr. Ogur, do you have this information? 15 THE WITNESS: Yes, Mr. Chairman, I have the 16 order. 17 CHAIRMAN CARTER: Okay. There's two other 18 pages, right? Did you get those? 19 THE WITNESS: Yes, I have all three pages now. 20 MS. BROWN: All right. 21 CHAIRMAN CARTER: Thank you. 22 BY MS. BROWN: 23 Would you agree that if FPL's pipeline is Q. 24 approved as proposed, FPL would not be required to set 25 up a separate affiliate to own and operate the pipeline,

correct?

- A. That's my understanding, yes.
- Q. And isn't it true that by not being required to set up a separate ownership arrangement with its additional attendant costs, FPL would have a competitive market advantage?
 - A. Over whom?
- Q. Over other intrastate and interstate gas transmission companies.
 - A. No, I would not agree with that.
- Q. We are passing out one more exhibit for you.

 Actually it is already in Staff's Comprehensive Exhibit.

 It's Interrogatory Number 112. If you would take a

 minute to read through that interrogatory.
- A. This is the last document that was given to me?
- Q. Yes. Staff's Seventh Set of Interrogatories, Interrogatory Number 112.
 - A. Yes. Okay, I will. (Pause.)
 Yes, I have read that.
- Q. And you see that the answer to this interrogatory -- the question is what is the accounting treatment for an intrastate pipeline when it is structured as a separate entity as opposed to being included in an electric company's rate base. And just

to paraphrase the answer, it begins to discuss the 1 establishment of separate financial statements, separate 2 capital structure, accounting systems to track capital 3 property, tax reporting and general accounting functions. Do you see that? 5 Yes, I see that. 7 And then if you'll look to the order that we Q. 8 passed out. Do you see that? 9 A. I see the order, yes. All right. If you would look at Page 5, the 10 11 second full paragraph there. 12 Yes, I see that. Α. 13 If you would skim that order, you'll see that 14 the Commission approved the establishment of an 15 intrastate pipeline as long as it was a separate 16 affiliate from a local distribution company. Do you see 17 that? 18 Where in that order does that appear? Could 19 you direct me to the place? 20 Q. Give me a minute and I'll find it. 21 Α. Sure. 22 Q. If I look at the first background paragraph 23 halfway down, the order states, "By Order 24 PSC-06-0023-DS-GP, we found that Peninsula, as a

corporation with a separate legal identity from its

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parent, qualified as a natural gas transmission company as defined in Section 368.103." Do you see that?

A. Yes, I see that.

Q. So, back to my question, isn't it true that by not being required to set up a separate ownership arrangement with its additional attendant costs, FPL would have a competitive market advantage over at least intrastate natural gas transmission pipelines?

Well, no, I would not agree. I think if you Α. want to talk about competitive advantages -- I mean, in the first place, my main focus in my analysis is on competition, promoting competition. The concept of competitive advantages it seems to me relates more to effects on competitors rather than effects on competition. So it really is not the main focus of my testimony. Nevertheless, I think in thinking about this secondary effect on competitors you would have to look at the relevant market in which this concern is -- this effect is allegedly taking place. In other words, in my analysis in my testimony, I defined specific relevant markets in which the Florida EnergySecure Line will be entering as a new entrant against very large entrenched incumbents. And in order to have some effect on intrastate competitors they would have to be in that relevant market.

In fact, in the relevant markets that I analyzed that the Florida EnergySecure Line will enter, I'm not aware of any intrastate pipelines. So in that sense, I don't see that there would be a competitive -- adverse competitive effect on other intrastate competitors.

- Q. If FPL is permitted to recover the costs and investment associated with the EnergySecure Line in its monopoly electric rate base, would the Commission's action here create an incentive for other Florida electric utilities to propose similar pipeline projects due to the increase in earnings to shareholders versus a pass-through of fuel costs?
- A. I really don't know the answer to that question.
- Q. All right. Assuming for purposes of discussion that the Commission's action here would create an incentive for other electric utilities to follow suit, would you agree that if other major pipelines are placed into electric rate base and shielded from market forces, this may have an adverse effect on the natural gas markets in the state of Florida?
- A. I disagree with the premise of your question that they would be shielded from market forces. I think

the Florida EnergySecure Line is very much not shielded 1 from market forces. Whether despite or even if it's 2 included in electric rate base, the Florida EnergySecure 3 Line is a new entrant trying to enter highly 4 concentrated markets now served by large incumbent 5 pipelines that have large market shares, maybe 6 exercising market power, maybe reducing rates in 7 response to the threat of entry, which could have the 8 effect of discouraging entry and making it unprofitable. 9 So I would disagree that the Florida 10 EnergySecure Line is shielded from the effects of 11 competition. I mean, we have already seen declines in 12 FGT's bid for alternatives to the Florida EnergySecure 13 Line, to some extent in response to the self-supply 14 15 alternative of FPL. So I would not agree that it's 16 shielded from competition. MS. BROWN: All right. Thank you. 17 No further questions. 18 CHAIRMAN CARTER: Thank you, staff. 19

Anything from the bench?

Commissioner Skop, you're recognized, sir.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

Good afternoon, Mr. Ogur, or Doctor Ogur.

THE WITNESS: Good afternoon, Commissioner

Skop.

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COMMISSIONER SKOP: I noticed in your prefiled testimony that you received a Ph.D in Economics from Cornell, so I guess you're qualified to speak as to competition and market harm potential. I know staff has addressed that in great detail, but I wanted to go back to something that was previously mentioned by you and make sure I understand what your testimony is.

If the proposed pipeline project that, you know, has initially excess capacity were to be used solely for electric generation and the needs of FPL as a utility, I think, if I understood you correctly, that your testimony would be that there would be no market harm associated with that to the extent that they weren't seeking to penetrate other markets with the excess capacity. Is that correct?

THE WITNESS: Commissioner, quite the contrary. Not only would there be no market harm, there would be promotion of competition in the markets that I analyzed.

commissioner skop: Right. And that's where I was trying to get to, but I'm trying to definitize it to the extent that the capacity is related to core operations as opposed to trying to go -- you know, bring traditional LDC customers over to some other market service or what have you.

But with respect to the current pipelines that are serviced, I mean, you have FGT and you have Gulfstream, and so FPL I'm sure negotiates the best deal it can get for its customers by leveraging the two existing pipelines. But to some degree they would be a captive customer because we're capacity constrained in terms of what we can bring in the state to serve generation needs.

So I think, if I heard you correctly, the additional pipeline would probably immediately have a downward price pressure on additional capacity on a forward-going basis, is that correct?

THE WITNESS: Yes, that's correct, Commissioner.

commissioner skop: Okay. Now, if the excess capacity were used to perhaps -- and I think I have this right -- horizontally integrate into other traditional LDC functions, such as, you know, looking for big box retailers to take some of this excess capacity, there could be potential market harm, or in your professional opinion could there be potential market harm associated with that to the existing gas companies operating within the state?

THE WITNESS: Commissioner, I would not call that market harm. Rather, I would call that potentially

adverse effects on other competitors rather than on 1 2 market competition. **COMMISSIONER SKOP:** Okay. 3 THE WITNESS: I would make that distinction. 4 COMMISSIONER SKOP: That is probably fair, a 5 better one. Maybe my word choice was a little too 6 harsh. I didn't mean it that way. But, yes, certainly, 7 providing additional competition is generally a good 8 thing; but, you know, if it comes at the expense of a 9 new market entrant, again, there could be some adverse 10 effects, as I think that you mentioned. But that was 11 just what I wanted to try and clarify or flesh out based 12 upon what I heard in the staff questions. 13 14 Thank you. THE WITNESS: Yes. Thank you, Commissioner. 15 CHAIRMAN CARTER: Thank you, Commissioners. 16 Anything further from the bench? 17 18 Redirect? MR. PERKO: No redirect. 19 CHAIRMAN CARTER: Exhibits. I think we're 20 looking at 50 and 51. Mr. Self, any objection? 21 22 MR. SELF: No objections. 23 CHAIRMAN CARTER: Without objection, show it That will be Exhibits 50 and 51. 24 (Exhibit Number 50 and 51 admitted into the 25

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1 record.) 2 CHAIRMAN CARTER: Now, do we have Mr. Ogur 3 coming back for rebuttal? Okay. You are on recess. 4 Call your next witness. MR. PERKO: FPL calls Timothy C. Sexton. 5 Mr. Sexton, have you been sworn? 6 THE WITNESS: No, I have not. 7 8 CHAIRMAN CARTER: Would you please stand and 9 raise your right hand. 10 (Witness sworn.) CHAIRMAN CARTER: Thank you. Please be 11 12 seated. TIMOTHY C. SEXTON 13 was called as a witness on behalf of Florida Power and 14 15 Light Company, and having been duly sworn, testified as 16 follows: 17 DIRECT EXAMINATION BY MR. PERKO: 18 19 Could you please state your full name and 20 business address for the record? 21 Yes. My name is Timothy C. Sexton, and my A. 22 business address is 14811 St. Mary's Lane, Houston, 23 Texas 77079. 24 Mr. Sexton, did you prepare and cause to be 25 filed Direct Testimony consisting of 58 pages in this

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1	case along with exhibits labeled TCS-1 through TCS-7?
2	A. Yes, I did.
3	Q. And did you prepare an errata sheet that was
4	filed on July 24th?
5	A. Yes, I did.
6	$oldsymbol{Q}.$ Other than the changes noted on the errata,
7	are there any other changes to your testimony or
8	exhibits?
9	A. No, there are not.
10	$oldsymbol{Q}.$ If I were to ask you the same questions today
11	that are in your testimony, would your answers be the
12	same?
13	A. Yes, they would.
14	MR. PERKO: At this time, Mr. Chairman, we
15	would ask to introduce the testimony, Prefiled Testimony
16	of Timothy C. Sexton into the record as if read.
17	CHAIRMAN CARTER: The prefiled testimony of
18	the witness will be inserted into the record as though
19	read.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2 .		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF TIMOTHY C. SEXTON
4		DOCKET NO. 09EI
5		
6	Q.	Please state your name, position and business address.
7	A.	My name is Timothy C. Sexton. I am Vice President of Gas Supply
8		Consulting, Inc. My business address is 14811 St. Mary's, Suite 175,
9		Houston, TX 77079.
10	Q.	On whose behalf are you testifying in this proceeding?
11	A.	I am testifying on behalf of Florida Power & Light Company (FPL).
12	Q.	Please describe your education, background and qualifications.
13	A.	I received a Bachelor of Science degree in Civil Engineering from the
14		University of Texas in May 1989 and a Masters in Business Administration
15		from the University of Houston in August 1993. I am also a licensed
16		professional engineer in the state of Texas. I have been with Gas Supply
17		Consulting, Inc. since June 1994. Prior to that, I was employed by Koch
18		Gateway Pipeline Company (formerly United Gas Pipeline Company and
19		currently Gulf South Pipeline Company) in various engineering, operations,
20		planning and marketing positions culminating in the position of Regional
21		Manager of Supply Services. At Gas Supply Consulting, Inc., I perform
22		various consulting functions on behalf of client companies. Some of the
23		functions that I performed over the past several years have included:

(a) evaluated local natural gas supply and pipeline infrastructure to assess ability of such infrastructure to receive large quantities of natural gas from proposed liquefied natural gas (LNG) facilities in various states; (b) evaluated large scale greenfield pipeline project infrastructure alternatives on behalf of utility clients in Wisconsin; (c) represented client interests in negotiations with interstate pipeline companies upstream and/or downstream of client facilities; (d) acted as a technical representative in evaluating regulatory filings; and (e) evaluated pipeline expansion projects and conducted feasibility studies of such projects.

A.

With respect to the Florida marketplace, I have performed numerous functions on behalf of FPL on various assignments since 1998. These assignments generally focused on assessment of the Florida pipeline infrastructure and its ability to meet the needs of FPL generation expansions at various proposed locations. I have also been engaged by the Florida Reliability Coordinating Council (FRCC) since 2005 to evaluate the reliability of the fuel supply infrastructure serving the state of Florida. Finally, I have directed the development of natural gas supply and capacity portfolios on behalf of two industrial clients with facilities in the state of Florida.

Q. What is the purpose of your testimony?

The purpose of my testimony is to (i) review the need for incremental pipeline capacity to serve future power generation fuel requirements of FPL; (ii) evaluate the capacity solicitation process undertaken by FPL to assess

	alternatives in meetir	ng incremental natural gas pipeline capacity demand; (iii)					
	compare the benefits	compare the benefits provided by the proposed Florida EnergySecure Line					
	versus other alternati	ves available to FPL; and (iv) evaluate FPL's conclusion					
	that the best means	of providing the needed incremental new transportation					
	capacity required to	meet forecasted natural gas fired generation requirements					
	in 2014 and beyond i	s the Florida EnergySecure Line.					
Q.	Are you sponsoring	any exhibits in this proceeding?					
A.	I am sponsoring the	e following exhibits which are attached to my direct					
	testimony:						
	• TCS-1	Resume of Timothy C. Sexton					
	• TCS-2	Florida Pipeline Capacity Load Factor Calculation					
	• TCS-3	Schematic Illustration entitled, "Capacity to Southeast					
		Markets"					
	• TCS-4	Chart of Projected Capacity Upstream of Transco CS					
		85					
	• TCS-5	State by State Comparison of Consumption of Natural					
		Gas for Electric Generation in the United States					
	• TCS-6	Approximate Cost of Service to Transport Natural Gas					
		from Transco CS 85 to Company B Project					
		(Confidential)					
	• TCS-7	Gas Cost Savings Analysis (Confidential)					
	_	compare the benefits versus other alternation that the best means capacity required to a in 2014 and beyond in Q. Are you sponsoring A. I am sponsoring the testimony: TCS-1 TCS-2 TCS-3 TCS-4 TCS-5					

1	Q.	Please summarize your testimony.
2	A.	My testimony examines the current natural gas supply alternatives available to
3		FPL including (i) the existing pipeline infrastructure in the state of Florida;
4		(ii) gas supply access available to the state via this infrastructure; and (iii) the
5		need for new natural gas pipeline capacity into Florida to meet demand
6		requirements of FPL and third party markets.
7		
8		In addition, with respect to potential future natural gas supply access, my
9		testimony (i) summarizes the proposed Florida EnergySecure Line project; (ii)
10		reviews FPL's Solicitation process utilized to assess alternative means
11		available to obtain needed incremental pipeline capacity; (iii) examines FPL's
12		evaluation of proposals received from various bidders into the Solicitation;
13		and (d) develops a comparative economic analysis of the FPL-sponsored
14		project versus alternative proposals received in the Solicitation process.
15		
16		Based upon the review of these subjects, my testimony concludes:
17		(a) The existing pipeline infrastructure does not provide sufficient excess
18		capacity to meet FPL's projected future natural gas requirements;
19		(b) New pipeline infrastructure will need to be constructed to meet the future
20		natural gas demand of FPL as well as third party consumers in Florida;
21		(c) FPL would be well served to expand natural gas supply access beyond its
22		current concentration from traditional onshore Gulf Coast and offshore
23		Gulf of Mexico sources:

- 1 (d) The Solicitation process utilized by FPL was an effective method of
 2 analyzing pipeline alternatives available to meet FPL future natural gas
 3 demand requirements;
 - (e) FPL evaluated the various proposals received in response to its

 Solicitation process in an objective and fair manner; and
 - (f) FPL has made the correct choice in determining that the Florida EnergySecure Line project is the best option to add needed natural gas pipeline infrastructure to meet the needs of FPL's customers.

Q. Please describe FPL's proposed pipeline project.

A.

FPL's pipeline project (the "Project") consists of (i) a pipeline project to be developed by a pipeline operator active in the southeastern United States (Company E) to transport 600,000 Million Btu per day (MMBtu/day) (approximately 600 MMcf/day) of natural gas from a point near Transcontinental Gas Pipeline Company LLC's (Transco) Compressor Station 85 (Transco Station 85) in Choctaw County, Alabama to a point near Florida Gas Transmission, LLC's (FGT) Compressor Station 16 (FGT Station 16) in Bradford County, Florida (the "Upstream Pipeline Project"); and (ii) construction of a new FPL owned and operated intrastate pipeline (the "Florida EnergySecure Line") consisting of approximately 280 miles of 30-inch pipeline from an interconnection with the proposed Upstream Pipeline Project in Bradford County, Florida to a delivery point at FPL's existing Martin generation plants. In addition, the project also includes connections to FPL's modernized Cape Canaveral Next Generation Clean Energy Center

1 (CCEC) and Riviera Beach Next Generation Clean Energy Center (RBEC) 2 facilities (Modernization Projects) via lateral line extensions. The Florida EnergySecure Line has a proposed in-service date of January 2014. 3 4 The Project will initially provide an incremental 600 million cubic feet per 5 day (MMcf/day) of natural gas transportation capacity into the state of Florida 6 which can be expanded to in excess of 1.2 billion cubic feet per day (Bcf/day) 7 8 via compression additions. The Project will initially support the natural gas fuel requirements of FPL's Modernization Projects recently approved by the 9 10 Florida Public Service Commission (FPSC). 11 12 EXISTING NATURAL GAS PIPELINE 13 INFRASTRUCTURE IN FLORIDA 14 15 Q. Please identify pipelines that deliver natural gas into the state of Florida. Currently, natural gas supplies are delivered into the state of Florida by four 16 A. interstate pipeline systems. These pipelines include FGT, Gulfstream Natural 17 18 Gas System L.L.C. (Gulfstream), Southern Natural Gas Company's Cypress 19 Pipeline system (Cypress) and Gulf South Pipeline Company, L.P. (Gulf 20 South). With this said, Cypress has direct deliveries only to markets in the 21 Jacksonville area and Gulf South provides direct deliveries only to markets in 22 the Pensacola area. FGT and Gulfstream, on the other hand operate pipeline

systems that extend into various markets within the state of Florida and

1		provide approximately 90% of the gas transportation capacity available into
2		the state.
3	Q.	Please provide a brief overview of natural gas transportation capacity
4		into Florida via the Gulfstream and FGT systems.
5	А.	FGT has the capacity to transport approximately 2.21 Bcf/day into Florida and
6		Gulfstream, with the recent installation of its Phases III and IV projects, now
7		has the capacity to transport about 1.25 Bcf/day into Florida. Consequently,
8		the total transportation capacity into Florida via these two pipelines is about
9		3.5 Bcf/day. In addition, FGT has recently made a Certificate Filing with
10		FERC to initiate its Phase VIII expansion project which would serve to
11		expand its capacity into Florida markets by an incremental 820,000
12		MMBtu/day (approximately 820 MMcf/day) with a proposed in-service date
13		of April 1, 2011. Thus, after installation of FGT's Phase VIII expansion
14		project, total pipeline capacity into the state from these two pipelines will be
15		approximately 4.3 Bcf/day.
16	Q.	Please provide a description of the Florida Gas Transmission system.
17	A.	FGT's system extends from South Texas through Texas, Louisiana,
18		Mississippi and Alabama to its Florida markets. The system is designed to
19		gather natural gas at supply area interconnects within its Western Division

upstream of the Florida/Alabama state line (supplies received in Texas,

Louisiana, Mississippi and Alabama) for delivery to markets within its Market

Area in the state of Florida. As stated above, FGT's pipeline system currently

1 has the capacity to transport about 2.2 Bcf/day of gas supplies into Florida 2 from Western Division receipt points. 3 Q. Does FGT have any pending expansion projects? 4 A. Yes. FGT has recently filed in FERC Docket Number CP09-17-000 to 5 expand its system by 820,000 MMBtu/day (about 820 MMcf/day). This 6 project is FGT's Phase VIII Expansion Project. After installation of Phase 7 VIII facilities, FGT will maintain in excess of 3 Bcf/day of pipeline capacity into the state of Florida. 8 9 Q. Please describe FGT's filed Phase VIII expansion project. 10 The project consists of the installation of expansion facilities necessary to Α. 11 enable FGT to receive incremental supplies from interconnects in the Mobile 12 Bay Area and transport these quantities to various delivery locations within 13 the state of Florida. 14 15 Per FGT's filing, the Phase VIII project consists of the installation of 16 "(i) approximately 357.3 miles of new pipeline looping on its existing mainline system, (ii) approximately 89.8 miles of new interstate natural gas 17 pipeline, (iii) two customer laterals totaling approximately 36.1 miles, (iv) 18 19 213,600 horsepower of additional mainline compression at eight existing 20 compressor stations and one new compressor station, (v) various new and 21 upgraded meter stations, and (vi) ancillary facilities." In addition, FGT is 22 seeking approval to acquire FPL's Martin Lateral and to operate this facility to

provide service in conjunction with the proposed expansion project. Finally,

the project also includes a requested authorization by FGT to "increase the maximum allowable operating pressure of previously certificated facilities".

FGT also notes in its filing that if its request to increase the maximum allowable operating pressure of its existing facilities is denied, then the project will require an additional 80.5 miles of 36-inch pipeline looping along its existing mainline.

7 Q. Please provide a description of the Gulfstream system.

A.

Gulfstream's system is designed to gather natural gas from various receipt points in the Mobile Bay Area to its mainline Compressor Station near Coden, Alabama. The system then extends from the Coden Compressor Station across the Gulf of Mexico to an onshore landing in the state of Florida near Manatee, Florida. Gulfstream then extends from its onshore landing to various delivery points in Florida and terminates at its delivery point to FPL's West County Energy Center in Palm Beach County, Florida. With its Phases III and IV expansion projects now in service, Gulfstream has a design capacity of approximately 1.25 Bcf/day into Florida.

Q. Please summarize FPL's contractual firm transportation capacity rights on FGT and Gulfstream.

A. As discussed in the testimony of FPL witness Sharra, FPL currently has 874,000 MMBtu/day (approximately 874 MMcf/day) of firm transportation capacity on the FGT system which will expand to a total of 1,274,000 MMBtu/day (approximately 1.27 Bcf/day) after FGT's Phase VIII expansion project is in service; and has a total of about 535,000 MMBtu/day

1		(approximately 535 MMcI/day) on Gulfstream which will rise to 695,000
2		MMBtu/day (approximately 695 MMcf/day) as of June 1, 2009.
3	Q.	Does FPL hold firm transportation capacity on Gulf South or Cypress?
4		No. As the Gulf South and Cypress systems are not configured to provide
5		deliveries directly to FPL markets in the state of Florida, FPL has no firm
6		transportation capacity on either Cypress or Gulf South.
7	Q.	Is firm interstate capacity in Florida constrained today?
8	A.	Yes. Despite the introduction of incremental capacity via Gulfstream's recent
9		Phases III and IV expansion projects as well as the introduction of incremental
10		capacity via the construction of the Cypress Project (Phase I was placed in
11		service in May 2007 and Phase II was placed in service in May 2008),
12		interstate transportation capacity in Florida is still effectively sold out and
13		therefore constrained on a firm contractual basis.
14	Q.	Is a large portion of the firm capacity into the state of Florida
15		underutilized and available for sale in the secondary market under non-
16		peak day conditions?
17	A.	No. The Florida market, dominated by gas consumption in support of electric
18		generation, is a high load factor market. In fact, based upon data compiled by
19		the Energy Information Administration (EIA) of the United States Department
20		of Energy (DOE) over the twelve month period of December 2007 through
21		November 2008 (the most recent 12 month period for which EIA data is
22		available) more than 85% of total gas consumption in Florida was to support
23		electric generation. Total natural gas demand in the state of Florida for the

twelve month period of December 2007 through November 2008 was about 939 Bcf and natural gas demand to support electric generation during this period was about 801 Bcf or approximately 85% of total demand. As depicted in the table attached as Exhibit TCS-2, a comparison of natural gas consumption versus capacity into the state reveals that capacity into the state was utilized at an annual average load factor of nearly 70% of design pipeline capacity during this period. Further, during the peak summer months of June through September, capacity into the state was utilized at an approximate average load factor of almost 80% of available design capacity.

Perhaps most importantly, under peak demand conditions, when capacity is most needed, the pipelines into the state operate at or near capacity. As an example, per FGT's "Operationally Available Capacity" posting on its Electronic Bulletin Board, on August 6 and 7 of 2008, FGT's system through its Compressor Station 12 operated at levels in excess of 96% of design capacity.

As per the provisions of its FERC Gas Tariff, one tool that FGT has to manage its pipeline system is the right to issue Alert Day Notices. Section 13.D.2 of FGT's Tariff states that "Alert Day notices may be issued by Transporter when in its sole discretion, reasonably exercised, Transporter determines that the pipeline is experiencing or may experience in the next gas day high or low line pack operating conditions which threaten the ability to

render firm services." As further evidence of the high capacity utilization on
the FGT system, FGT issued approximately one hundred Alert Day Notices
over the past year and during the peak summer season of June through
September of 2008, FGT issued a total of sixty Alert Day Notices.

A.

Q. In summary, is there capacity available via the existing natural gas pipeline infrastructure in Florida to support incremental firm natural gas demand?

As detailed above, the existing infrastructure is fully subscribed on a long-term firm contractual basis and there is currently no existing pipeline capacity available in the state to be contracted on a long-term firm basis. Further, per FGT's Phase VIII expansion filing, FGT has executed precedent agreements with shippers accounting for fully 731,000 MMBtu/day of the 820,000 MMBtu/day of Phase VIII expansion capacity. Thus, only 89,000 MMBtu/day (approximately 89 MMcf/day) of this Phase VIII expansion capacity is unsubscribed and available. To summarize, absent the introduction of incremental pipeline capacity, the existing natural gas pipeline infrastructure cannot support incremental firm natural gas demand and if FGT's Phase VIII project is considered, only 89,000 MMBtu/day of capacity will be available after installation of Phase VIII facilities to support incremental firm natural gas demand.

NATURAL GAS SUPPLY MIX

2		AVAILABLE TO FLORIDA CONSUMERS
3		
4	Q.	Please provide a description of the natural gas supply mix accessible via
5		FGT.
6	A.	Within its Western Division, the portion of its system upstream of Compressor
7		Station 10 in Perry County, Mississippi, FGT serves to gather gas supplies
8		from traditional onshore Gulf Coast and offshore Gulf of Mexico sources and
9		has a design capacity to gather and transport about 1.33 Bcf/day of gas
10		supplies. Thus, in order to transport its design capacity into Florida, the
11		remainder of gas supplies, about 880 MMcf/day, must be received into FGT
12		between its Compressor Station 10 and the Florida border in and around the
13		Mobile Bay Area.
14		
15		In addition, FGT's Phase VIII expansion project does not include any facility
16		expansions upstream of the Mobile Bay Area. As such, after its Phase VIII
17		expansion is placed into service in 2011, FGT required receipts from the
18		Mobile Bay Area under design day conditions will total about 1.7 Bcf/day.
19		These Mobile Bay Area receipts consist primarily of (i) traditional Mobile
20		Bay supplies, (ii) offshore Gulf of Mexico supplies received via the Destin
21		Pipeline Company system; and (iii) receipts from the recently constructed
22		Southeast Supply Header (SESH) system.

Q.	Please	provide	a	description	of	the	gas	supply	mix	accessible	via
	Gulfstr	ream.									

A.

A. Gulfstream receives 100% of the gas supply into its system from pipeline interconnection points in and around the Mobile Bay Area. Thus, the full 1.25 Bcf/day of supply required into Gulfstream under design day conditions currently must be received into Gulfstream from (i) traditional Mobile Bay area supplies, (ii) offshore Gulf of Mexico supplies received via the Destin Pipeline Company system; and (iii) receipts from the recently constructed SESH system.

Q. In summary, what is the overall supply mix available to the Florida market via FGT and Gulfstream?

As discussed above, after installation of its Phase VIII facilities, FGT will provide access to receipts into its system of approximately 1.33 Bcf/day of traditional onshore Gulf Coast and offshore Gulf of Mexico supply sources and 1.70 Bcf/day of receipts into its system in and around the Mobile Bay Area and Gulfstream has its entire 1.25 Bcf/day of receipt capacity in and around the Mobile Bay Area. In summary, after the installation of FGT's Phase VIII expansion project, these two pipelines will provide the Florida market with access to 1.33 Bcf/day of traditional Gulf of Mexico supply sources and 2.95 Bcf/day of receipts in and around the Mobile Bay Area.

Q.	More specifically,	please summarize	FPL's current	supply access	rights
	on Gulfstream and	I FGT.	•		

Α.

A.

After initiation of service under FGT's Phase VIII expansion project, FPL's primary receipt point rights on FGT will include 680,000 MMBtu/day (approximately 680 MMcf/day) of receipts from points in and around the Mobile Bay Area and 594,000 MMBtu/day (approximately 594 MMcf/day) of receipts from traditional Gulf of Mexico supply locations. Further, FPL's primary receipt point rights on Gulfstream will include 695,000 MMBtu/day (approximately 695 MMcf/day) of receipts from Mobile Bay Area points. In total, FPL will have firm access to about 1.4 Bcf/day of Mobile Bay Area supply and about 0.6 Bcf/day of traditional Gulf Coast / Gulf of Mexico supply.

Q. What is the production outlook for traditional onshore Gulf Coast / offshore Gulf of Mexico supplies in the future?

Traditional Gulf Coast production can be separated into three distinct categories of production including: (i) onshore Gulf Coast production; (ii) shallow (depth less than 200 meters) offshore Gulf of Mexico production; and (iii) deepwater (depth greater than 200 meters) offshore Gulf of Mexico production. Production in these areas has declined over the past several years and in the future, the EIA estimates production in shallow water and onshore Gulf Coast fields will continue to decline slowly through 2030. More specifically, within its "Annual Energy Outlook 2009," the EIA projects that onshore Gulf Coast production will decline from current (2008) levels of

5.5 Trillion cubic feet (Tcf) to 3.3 Tcf in 2030 and further projects that offshore shallow water production will decline from current levels of 1.7 Tcf in 2008 to 0.9 Tcf in 2030. Meanwhile, EIA further projects that deepwater production will rise from a current 2008 level of 1.4 Tcf up to a peak of 3.1 Tcf in 2025 and then remain at levels between 2.9 and 3.1 Tcf each year through 2030. While the EIA projects that deepwater production will provide somewhat of an offset to declines in onshore Gulf Coast and shallow Gulf of Mexico production, deepwater increases are not projected to fully offset these declines. As such, the aggregate EIA projection for these three sources will steadily decline from current levels of 8.6 Tcf per year to 7.3 Tcf per year in 2030.

Α.

Q. Are forecasts for natural gas production in Mobile Bay consistent with Gulf of Mexico forecasts?

Yes. EIA Production forecasts for shallow water Gulf of Mexico production includes gas produced in Mobile Bay area fields. In addition, deepwater gas that flows into Mobile Bay area pipelines is included in the deep water Gulf of Mexico production data discussed above. With this said, data specific to Alabama State Offshore production fields indicates a decline in production consistent with that for the overall shallow water Gulf of Mexico production. In fact, according to EIA data, Alabama State Offshore production peaked at a level of 222 Bcf/year in 1998 and has steadily declined since to a level of 134 Bcf/year in 2007.

1	Ų.	Are there any unique risks associated with onshore Guil Coast and
2		offshore Gulf of Mexico production?
3	A.	Yes. Onshore Gulf Coast as well as offshore Gulf of Mexico production
4		facilities are subject to disruption due to hurricane activity in the Gulf of
5		Mexico. As an illustration, in August 2005, within its "Hurricane Katrina
6		Evacuation and Production Shut-In Statistics" report, the Minerals
7		Management Service (MMS) of the United States Department of the Interior
8		(DOI) reported that as Hurricane Katrina passed over the Gulf of Mexico
9		approximately 88% of normal daily Gulf of Mexico natural gas production
0		(about 8.8 Bcf/day out of a total 10 Bcf/day) was shut in. In addition, in the
1		following month, as Hurricane Rita passed over the Gulf of Mexico, the MMS
12		reported that approximately 80% of normal daily gas production (about 8
13		Bcf/day out of 10 Bcf/day) was shut in. Finally, the MMS reported that over
14		nine months after these two hurricanes had passed by, in June 2006,
15		approximately 11% of offshore Gulf of Mexico production had yet to return
16		online.
17		
18		It is important to note that hurricane events present a unique risk to Gulf Coast
19		production while hurricanes do not present the same impact further inland.
20	Q.	Please describe supply sources available into Mobile Bay area receipt
21		points on Gulfstream and FGT.
22	A.	Gulfstream and FGT share many of the same supply sources in the Mobile
23		Bay Area. These sources include pipeline interconnects with (a) Transco's

1		Mobile Bay Lateral and Gulf South Pipeline Company's Mobile Bay Lateral
2		(both of which receive gas supplies from Mobile Bay Production); (b) Destin
3		Pipeline Company which receives gas supplies from offshore Gulf of Mexico
4		southeastern Louisiana Production Fields; and (c) the newly constructed
5		SESH system.
6	Q.	Are you aware of any new supply sources that will be made available to
7		Gulfstream and FGT in the Mobile Bay area in the near future?
8	Α.	Yes. Gulf LNG Energy, a subsidiary of the El Paso Corporation is currently
9		constructing an LNG regasification facility in Pascagoula, Mississippi. As per
10		Gulf LNG's website, the Gulf LNG plant has a projected in-service date in
11		2011 and will have a peak send-out capacity of 1.3 Bcf/day. The project has
12		proposed interconnections directly with Gulfstream as well as with the
13		proposed Pascagoula Expansion Project pipeline to be jointly owned by FGT
14		and Transco. The Pascagoula Expansion Project will receive gas supplies
15		from the Gulf LNG project and will deliver to FGT's proposed Mobile Bay
16		Project, which in turn would provide access to FGT's mainline. As detailed in
17		a the joint Request for Pre-Filing Review filed in FERC Docket PF08-31-000
18		by Transco and FGT, capacity dedicated to FGT on the Pascagoula Expansion
19		Project is 340,000 MMBtu/day (approximately 340 MMcf/day).
20	Q.	Are there any issues or concerns that need to be considered in evaluating
21		the Gulf LNG facility as a long-term firm gas supply source for FPL?
22	A.	Yes. First, the Gulf LNG facility will be located in Pascagoula, Mississippi
23		on the Gulf Coast. As such, this facility will be subject to the same severe

weather conditions during hurricanes that have the potential to impact onshore Gulf Coast and offshore Gulf of Mexico production sources. Further, LNG trades on a worldwide market and will typically be delivered to the highest value market available at any given time. For example, the EIA reported that during 2008 a total of about 352 Bcf of natural gas as LNG was imported into the U.S. This represented about 45% of the total 771 Bcf of LNG that the EIA reported was imported during 2007. This substantial reduction in LNG imports is due to the fact that United States demand for LNG competes with demand in other parts of the world. As a result, if demand is greater (and values are higher) for LNG elsewhere in the world than in the U.S., the LNG will likely flow to the highest value market.

A.

Q. Please provide a description of the Southeast Supply Header and natural gas supplies accessible via the Southeast Supply Header.

SESH was placed into service during the fall of 2008 and consists of 274 miles of 42 and 36-inch pipeline extending from the Perryville Hub in Northern Louisiana to its terminus at its interconnection with Gulfstream in Coden, Alabama. The pipeline has a maximum transportation capacity of 1.0 Bcf/day. Approximately 95% of this 1 Bcf/day of pipeline capacity is currently subscribed under long-term firm transportation agreements. As such, while SESH has provided a needed addition of supply diversity to Gulfstream and FGT in the Mobile Bay area, the pipeline, as currently configured, is essentially sold out and unavailable to provide incremental supply to the Florida market.

1	Ų.	Does FPL have any contracted capacity on SESH?
2	A.	Yes. FPL has a long-term contract for 500,000 MMBtu/day (approximately
3		500 MMcf/day) of capacity on SESH from the Perryville Hub to Gulfstream
4		and FGT in the Mobile Bay area.
5	Q.	Taking into account FPL's capacity on SESH, please summarize natural
6		gas supply access available to FPL via its connected pipelines.
7	A.	As stated previously in my testimony, after initiation of service under FGT's
8		Phase VIII expansion project, FPL's primary receipt point rights on FGT and
9		Gulfstream will provide access to about 1.4 Bcf/day of Mobile Bay Area
10		receipts and 0.6 Bcf/day of traditional onshore and offshore Gulf of Mexico
11		Area receipts. With SESH capacity providing access to Perryville Hub
12		supplies, FPL's supply mix consists of about (a) 0.5 Bcf/day available from
13		the Perryville Hub via SESH or directly from Mobile Bay Area supply points;
14		(b) 0.9 Bcf/day from non-SESH Mobile Bay Area receipts; and
15		(c) 0.6 Bcf/day of traditional Gulf Coast receipts.
16	Q.	Please provide a description of natural gas available at the Perryville
17		Hub.
18	A.	In addition to receiving traditional Gulf of Mexico production, via upstream
19		connected pipelines the Perryville Hub also receives supplies of natural gas
20		from the Barnett Shale in Texas, the Haynesville Shale in North Louisiana, the
21		Woodford Shale in Southeastern Oklahoma and the Fayetteville Shale in
22		Northeast Arkansas.

Q.	Other	than	SESH,	are	there	any	other	pipeline	projects	under
	develop	pment	that ha	vę th	e pote	ntial	to prov	vide the	Southeast	United
	States	with a	ccess to N	North	Louisia	ana o	r East T	exas Sup	plies?	

A.

A.

Yes. Boardwalk Pipeline is currently in the process of constructing three expansion projects -- the Gulf Crossing Pipeline project, the East Texas to Mississippi Expansion project and the Southeast Expansion Project -- that will serve to transport unconventional supplies to southeast markets. In addition, Kinder Morgan is currently constructing its MidContinent Express Pipeline which will also provide new supply access to shippers in the Southeast. A schematic illustration of SESH as well as the Boardwalk and Kinder Morgan projects is attached as Exhibit TCS-3.

Q. Please provide a description of Boardwalk's Gulf Crossing Pipeline, East Texas to Mississippi Expansion and Southeast Expansion Projects.

The Gulf Crossing Pipeline is a newly-created interstate pipeline. This project consists of 357 miles of 42-inch pipeline extending from Sherman, Texas to the Perryville Hub in Northern Louisiana and when completed will have a capacity of approximately 1.7 Bcf/day. At the Perryville Hub, Gulf Crossing can deliver to third party pipelines or directly into Boardwalk's East Texas to Mississippi Expansion. The pipeline portion of the Gulf Crossing Pipeline was completed and placed in service in February 2009 and initial compression is scheduled to be in-service during the first quarter of 2009. The initial capacity of these facilities is 1.2 Bcf/day. In addition, Boardwalk has applied to the Pipeline and Hazardous Materials Safety Administration (PHMSA) of

the US Department of Transportation (DOT) for the authority to operate the system at higher operating pressures. If this approval is obtained, capacity on the system will be increased to 1.4 Bcf/day. Finally, the second phase of this project, consisting of compression additions, is scheduled to be in service as of the first quarter of 2010 at which time the project will have a capacity of 1.7 Bcf/day.

Part of Boardwalk's existing Gulf South system, the East Texas to Mississippi Expansion originates at its starting point in Carthage, Texas. This project consists of 242 miles of 42-inch pipeline with approximately 1.7 Bcf of peak-day transmission capacity. Already in-service, the East Texas to Mississippi Expansion aggregates deliveries from intra-state pipelines and carries gas through the Perryville Hub. The East Texas to Mississippi Expansion continues from Perryville and terminates at Harrisville, Mississippi, where the gas can continue along the Southeast Expansion.

Finally, Boardwalk's Southeast Expansion is an expansion of the Gulf South system and is designed to carry gas from the Perryville Hub, Gulf Crossing, and the East Texas to Mississippi Expansion. This Southeast Expansion originates in Harrisville, Mississippi and terminates at Transco Station 85. The initial phase of the project, consisting of 111 miles of 42-inch pipeline and associated compression with a capacity of 1.8 Bcf/day has been constructed and is now in service. In addition, Boardwalk has applied to the

PHMSA for the authority to operate the system at higher operating pressures.

If this approval is gained, capacity on the system will be increased to 1.9

Bcf/day.

A.

- Q. Please provide a description of the Midcontinent Express Pipeline

 Project.
 - Midcontinent Express Pipeline is a 50/50 joint venture between Kinder Morgan Energy Partners, L.P. and Energy Transfer Partners, LLC. When the project is completed, the Midcontinent Express Pipeline will consist of approximately 265 miles of 42-inch, 196 miles of 36-inch and 41 miles of 30-inch pipeline, associated compression and up to 13 receipt and/or delivery interconnections. The project will extend from southeast Oklahoma, across northeast Texas, northern Louisiana and central Mississippi, to an interconnection near Transco Station 85 near Butler, Alabama. Midcontinent Express is currently under construction and the first phase of the project extending from Southeast Oklahoma through Delhi, Louisiana has a planned in service date of April 1, 2009 with the remaining pipeline from Delhi, Louisiana to Butler, Alabama planned to be in service on July 15, 2009. The pipeline will have an initial capacity of up to 1.5 Bcf/day with a planned future expansion bringing capacity up to 1.8 Bcf/day.

1	Q.	Please provide a summary of supply sources that will be made available
2		to Southeast markets via the Boardwalk projects and the MidContinent
3		Express projects.
4	A.	Midcontinent Express will provide access to natural gas supplies from the
5		Barnett Shale and Bossier Sands in Texas, the Fayetteville Shale in Arkansas
6		and the Woodford / Caney Shale in Oklahoma.
7		
8		Boardwalk's Gulf Crossing Pipeline is designed to carry gas from the Barnett
9		and Woodford / Caney shales. Next, Boardwalk's East Texas to Mississippi
10		Expansion taps supplies from the Barnett Shale as well as Bossier Sands. Gas
11		supplies from both of these projects may continue downstream into
12		Boardwalk's Southeast Expansion Project. Exhibit TCS-4 provides an
13		illustration of upstream pipeline capacity available in the vicinity of Transco
14		Station 85 over the past few years and projected into the next few years.
15	Q.	What is the outlook for Barnett, Fayetteville, Haynesville and
16		Woodford/Caney shale gas supplies in the future?
17	A.	Unlike traditional Gulf Coast sources discussed previously in my testimony,
18		unconventional shale gas production has been growing rapidly over the past
19		few years and is projected to continue this rapid growth in the future.
20		According to the Texas Railroad Commission, the Barnett Shale play near
21		Fort Worth, Texas has grown from total annual production of less than
22		400 Bcf per year or an average of about 1.1 Bcf/day in 2004 to an annual total
23		in excess of 1.4 Tcf or an average of about 3.8 Bcf/day in 2008.

The Fayetteville, Haynesville and Woodford/Caney Shale plays have been developed more recently than the Barnett Shale and production at these fields has been rapidly increasing over the last several years. As per the Arkansas Oil & Gas Commission, Fayetteville Shale production increased from an annual total of 100 MMcf or an average of about 0.3 MMcf/day in 2004 to an annual total of about 273 Bcf or an average of about 750 MMcf/day in 2008 and is expected to continue to grow over the next several years. Finally, the Haynesville Shale and Woodford Shale production sources are in the initial stages of exploration and production. With this said, these plays are also expected to produce significant quantities of natural gas into the grid within the next few years.

Α.

Q. Do you believe that there are adequate capacity and supplies upstream of the Transco Station 85 area to meet the demands of the FPL markets?

Yes. As discussed previously, after installation of pipeline facilities recently placed in service, currently under construction and planned in the next few years, it is projected that new third party capacity to Transco near its Station 85 will total about 4.7 Bcf/day (1.0 Bcf/day via SESH, 1.9 Bcf/day via Boardwalk Southeast Expansion and 1.8 Bcf/day via MidContinent Express). This capacity coupled with Transco's traditional capacity upstream of its Station 85 of approximately 4.7 Bcf/day can provide a total of about 9.4 Bcf/day to the Transco Station 85 area. This total capacity will be sufficient to meet the demands of all of Transco's customers as well as the demand on the proposed Florida EnergySecure Line.

*	With respect to gas supplies accessible via this capacity, as previously
	mentioned, the new pipeline projects are being constructed to transport the
	growing unconventional supply sources to southeast markets. As discussed in
	detail above, these unconventional supply sources are projected to continue to
	grow in the next several years and the Florida EnergySecure Line will provide
	FPL with access to this growing resource base.
Q.	Do you believe that the construction of the aforementioned pipeline
	projects to provide unconventional supply sources of gas to the Transco
	Station 85 area will have an impact on gas costs in this area?
A.	Yes. I believe that the addition of these incremental natural gas supplies to
	this area via the planned and recently constructed pipeline facilities will result
	in downward pressure on localized gas market prices in the Transco Station 85
	area versus other natural gas supply locations. This can be confirmed in the
	marketplace with a review of market values within Transco's Zone 4 (Transco
	Station 85 is within Transco's Zone 4) over the past few years as well as a
	review of the market's view of future pricing at this location.
	First, with respect to the past few years, prices of natural gas bought and sold
	in Transco's Zone 4 during 2006 and 2007 (before the installation of SESH in
	the fall of 2008) carried an average premium of about \$0.25/MMBtu versus
	gas bought and sold at the Henry Hub, Louisiana. By comparison, natural gas
	bought and sold at this location during the past twelve months (April 2008

through March 2009) carried an average premium of about \$0.10/MMBtu

versus gas bought and sold at the Henry Hub. This indicates that the introduction of incremental supplies via SESH and other recently installed facilities have already exerted downward pressure and resulted in lower prices in the vicinity of Transco Station 85.

A.

Additionally, a review of basis futures contracts as traded on the NYMEX ClearPort Exchange indicates that prices at this location will likely continue to decline over the next few years. More specifically, the Transco Zone 4 Basis Swap Futures Contracts as traded on the NYMEX ClearPort Exchange reflects the market value for gas bought and sold within Transco's Zone 4 versus the NYMEX futures contract for gas delivered at the Henry Hub for a given month. During March 2009, the average of the monthly settlement prices for this Transco Zone 4 Basis Swap averaged a negative \$0.0375 per MMBtu for calendar year 2010. Thus, the forward market currently projects that the value of gas bought and sold within Transco's Zone 4 will continue to decline versus other markets over the next few years.

Q. Do you believe that increased diversity in available supply mix would benefit FPL and the state of Florida?

Yes. With the state of Florida generally and FPL specifically reliant to a large degree on Gulf Coast supplies, I believe that the introduction of access to and expanded natural gas supply mix including unconventional shale gas supplies via the proposed Florida EnergySecure Line will provide supply diversity and will correspondingly increase supply reliability. As discussed previously,

Gulf Coast production is projected to decline whereas shale gas production is projected to grow in the future. In addition, Gulf Coast production remains subject to disruption due to hurricane activity during the peak summer demand period. Diversification of the supply mix will mitigate the impact of such disruptions on the overall natural gas supply portfolio.

FPL FUEL REQUIREMENTS POSITION VS. INDUSTRY

- Q. Please describe FPL's fuel supply mix and reliance upon natural gas as a fuel source.
- 11 A. As described in Table I.A.1: Capacity Resource by Unit Type within FPL's

 12 "Ten-Year Power Plant Site Plan for 2008-2017," as of December 31, 2007,

 13 FPL had a total of 22,135 MW of generating capacity in its portfolio of

 14 generating assets. Of this 22,135 MW of generating capacity, 2,939 MW are

 15 nuclear facilities, 896 MW are coal facilities, 660 MW are oil facilities,

 16 10,876 MW can be fueled by either fuel oil or natural gas and 6,765 MW can

 17 only be fueled with natural gas.
- 18 Q. How does the total quantity of natural gas utilized to generate electricity

 19 in the state of Florida compare to that of other states?
- A. As depicted in the EIA data summarized in Exhibit TCS-5, in a comparison of all fifty states, the state of Florida consumed the third largest quantity of natural gas to generate electricity during 2007. States in which the total amount of power generated using natural gas exceeded that of the state of

Florida included only Texas and California. Further, these three large use states significantly outpace any other state in natural gas utilized to generate electricity. In fact, the state with the fourth largest use of natural gas to generate electricity, New York, utilized only about 50% as much natural gas as that utilized in Florida to generate power. Perhaps more significantly, the total amount of natural gas utilized to generate power in New York was less than that utilized by FPL alone during 2007.

Q. How does natural gas pipeline and supply access in Florida compare to that available in Texas?

Texas is a net exporter of natural gas to other states whereas Florida is a net importer of natural gas from other states. In other words, more natural gas is produced than consumed in the state of Texas whereas virtually all of the natural gas consumed in the state of Florida is produced outside of the state. More specifically, within its "Natural Gas Annual 2007" report, the EIA reported that Florida imported a net of 915 Bcf whereas Texas exported a net of 2,276 Bcf of natural gas in 2007. Because there is significantly more gas produced than consumed in the state of Texas while essentially all natural gas consumed in Florida must be imported into the state, it is clear that supply access in Texas is greater than that available in Florida.

A.

Further, the pipeline network in the state of Texas is well developed with numerous intrastate and interstate pipelines traversing the state and providing a competitive environment for natural gas access available to customers within the state. In contrast, access to gas supply in the state of Florida must be obtained via the interstate pipelines operating within the state. With more than forty intrastate pipeline systems and twenty five interstate pipeline systems operating in the state of Texas compared to the state of Florida, which is primarily served by two interstate pipeline systems (Gulfstream and FGT), it is clear that competitive access to transportation capacity available to enduse consumers is more competitive in Texas than in Florida.

A.

Q. How does natural gas pipeline and supply access in Florida compare to that available in California?

Like Florida, California is a net importer of natural gas with EIA reporting net natural gas imports to California of 2,103 Bcf in 2007. However, the California marketplace is unique in that natural gas is primarily delivered to the state border by multiple long haul interstate pipelines. The gas is then transported within the state via a network of intrastate pipelines owned and operated by California utilities. As reported by the EIA in its report entitled "U.S. Intrastate Natural Gas Pipeline Systems – April 2007," these systems include the Pacific Gas & Electric (PG&E) pipeline system with approximately 3,500 miles of pipeline in service having a capacity of 3.2 Bcf/day, the Southern California (SoCal) Gas system with approximately 1,900 miles of pipeline in service and a capacity of 4 Bcf/day and the San Diego Gas and Electric (SDG&E) pipeline system with approximately 830 miles of pipeline in service and a capacity of about 900 MMcf/day. As such, unlike the Florida market, the California market is not dependent upon

interstate pipelines to deliver natural gas to ultimate consumers within the state, but is only dependent upon such pipelines to transport the gas to the state border. This in effect moves the "point of competition" for natural gas supplies away from individual markets within the state to points of aggregation at the state border. A consumer located on one of these utility systems in California obtains access, via the utility pipeline network, to any of a number of interstate pipelines delivering to the utility pipeline system, which provides the end user with the potential to access multiple supply basins via these upstream interstate pipeline systems. For example, Transwestern Pipeline and El Paso Natural Gas receive supplies from West Texas and San Juan basin sources, Kern River Gas Transmission receives supplies from Rocky Mountain sources and Gas Transmission Northwest (GTN) receives supplies from Canadian and Rocky Mountain sources. Each of these pipelines delivers to the intrastate utility systems, providing end users within California with access to any of these supply sources via the utility pipeline systems. In contrast, within the state of Florida, end use markets (such as FPL generation facilities) can only access supplies made available via the directly connected interstate pipelines of FGT and Gulfstream, which primarily provide access only to Gulf Coast and offshore Gulf of Mexico supply sources.

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Q. What conclusions do you make with respect to natural gas supply access in Florida versus access to supplies available in other states that use comparable quantities of natural gas in support of electric generation?

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As discussed in detail above, California and Texas are the only states that A. utilize natural gas for electric generation to an extent comparable to that of the state of Florida. Generation facilities in California obtain access to multiple interstate pipeline and supply basin alternatives via an extensive utility intrastate pipeline network operating within the state. In Texas, generation facilities often have access to multiple intrastate and interstate pipeline alternatives. Unlike those in Texas and California, generators operating in Florida, such as FPL, typically have access only to supplies delivered by either Gulfstream or FGT and primarily from only onshore Gulf Coast and offshore Gulf of Mexico supply sources. Thus, I would conclude that gas supply access in Florida is not as robust as that available in comparable states such as Texas and California. As such, efforts to diversify the natural gas supply mix and the delivery pipeline alternatives available to the state of Florida will benefit FPL as well as all consumers in the state and should be pursued.

1 NEED FOR NEW NATURAL GAS 2 CAPACITY IN FLORIDA

3		
4	Q.	Please describe your understanding of FPL's natural gas transportation
5		capacity requirements supporting the Florida EnergySecure Line.
6	A.	FPL sought and obtained approval from the FPSC in Docket Nos. 080245-EI
7		and 080246-EI to modernize its CCEC and RBEC plants to natural gas fueled
8		combined cycle facilities effective June 2013 and June 2014 respectively.
9		These Modernization Projects will provide a total of 2,426 MW of new
10		electric generation capacity and will each have a peak natural gas demand
11		requirement of approximately 200 MMcf/day. As such, in 2014, FPL will
12		require approximately 400 MMcf/day of incremental natural gas supply to
13		accommodate the needs of these two units.
14	Q.	Can this incremental natural gas demand be met utilizing existing

- Q. Can this incremental natural gas demand be met utilizing existing natural gas pipeline infrastructure in the state?
- A. No. As mentioned previously in my testimony, the incumbent pipelines serving the state are fully subscribed and will remain almost fully subscribed after completion of proposed expansion projects. As such, the Modernization Projects require the addition of incremental pipeline capacity.

1	Q.	Did FPL consider natural gas supply alternatives other than traditional
2		pipeline expansions such as the use of market area storage or LNG
3		imports to support its future natural gas requirements?
4	A.	Yes. My understanding is that in its initial review process, FPL considered
5		other alternative gas infrastructure options such as the use of market-area
6		storage or LNG imports to meet its incremental demand. However, these
7		alternatives represent supply alternatives rather than capacity and supply
8		alternatives to serve the market. As such, the use of either market area storage
9		or LNG imports would still require the installation of pipeline infrastructure
10		necessary to transport the imported LNG or stored supplies to the ultimate
11		markets at FPL's plant site locations.
12		
13		Further, with respect to LNG imports, FPL also determined that reliance upon
14		LNG imports located at coastal locations and subject to severe hurricane
15		weather conditions did not provide the supply diversity and security that the
16		company desired when targeting unconventional supplies available at the
17		proposed inlet to the Florida EnergySecure Line project.
18		
19		Finally, with respect to market area storage facilities there are no known
20		suitable geologic formations within the state of Florida to provide in-ground
21		storage. As such, the only storage that could be constructed in the state would
22		be above ground tank storage. However, FPL anticipates that the generation
23		facilities to be served by the Florida EnergySecure Line will be operated as

1		base load facilities, requiring a consistent supply source to support fuel
2		requirements. As a result, the operating parameters associated with above
3		ground in-tank storage (cycling requirements and total stored capacity
4		available) are not compatible with the baseload supply requirements of these
5		generation assets.
6	Q.	Does FPL's load forecast include any additional natural gas requirements
7		in support of power generation demand beyond the CCEC and RBEC
8		Modernization Projects?
9	A.	Yes. FPL's Base Case Resource Plan as submitted in the testimony of FPL
10		witness Enjamio indicates that FPL will require significant quantities of
11		natural gas in support of generation requirements in 2021 and beyond. In fact,
12		during the years of 2021 through 2040, FPL projects that it will require an
13		incremental 14,931 MW of natural gas fired generation capacity requiring
14		approximately 2.36 Bcf/day of natural gas as fuel to support generation
15		requirements. This 2.36 Bcf/day requirement is incremental to the
16		400 MMcf/day required in support of the Modernization Projects.
17	Q.	In addition to FPL natural gas demand increases, are third parties in the
18		state of Florida projected to increase natural gas consumption in support
19		of generation requirements?
20	A.	The 2008 Regional Load and Resource Plan published in July 2008 by the
21		Florida Reliability Coordinating Council (FRCC) included a projection of
22		future natural gas consumption in support of natural gas fired generation
23		requirements. At the time the report was published, total natural gas

consumption in the state of Florida in support of natural gas fired generation requirements was projected to increase by approximately 23.5% between the years 2012 and 2017 from an annual usage of about 1,021 Bcf/year in 2012 to an annual usage of about 1,261 Bcf/year in 2017. Assuming that this 23.5% increase in demand is accompanied by a 23.5% increase in required transportation capacity into the state, natural gas transportation into the state would need to increase from the Post FGT Phase VIII statewide capacity level of 4.6 Bcf/day in 2012 to a total capacity of 5.7 Bcf/day by the year 2017. FPL's proposed pipeline project would initially provide about 60% of this capacity into the state upon its in-service date in 2014 and could be economically expanded to support 100% of this increased incremental 1.1 Bcf/day of statewide demand for natural gas transportation capacity to support generation requirements.

It is worth noting that since the development of the FRCC Load and Resource Plan, economic conditions in the overall economy have deteriorated. As such, it is reasonable to assume that natural gas demand growth for electric generation in the near future may be slower than that predicted in the FRCC Plan. With this said, while it is likely that natural gas demand growth for electric generation may be delayed, it is unlikely that this growth will not come to fruition in the long-term.

1	Q.	You have discussed natural gas demand to support electric generation. Is
2		there also potential growth in non electric generation related natural gas
3		demand in the state of Florida?
4	A.	EIA data indicates that natural gas demand for electric power generation has
5 .		represented roughly 80 to 85% of overall natural gas demand in the state of
6		Florida during the past five years. This EIA data also indicates that natural
7		gas demand for residential, commercial and industrial consumers has been
8		relatively flat at about 135 Bcf per year over the past five years. Although this
9		non-electric generation natural gas demand has been relatively flat over the
10		past five years, any increase in this demand will only add to the pressure for
11		additional natural gas pipeline capacity into the state in the future.
12	Q.	Will the Florida EnergySecure Line create a long-term surplus of
13		transportation capacity into Florida?
14	A.	No. As stated above, in its first year of operation in 2014, FPL will require
15		400 MMcf/day of the initial 600 MMcf/day of Florida EnergySecure Line
16		capacity to meet the fuel requirements of its CCEC and RBEC Modernization
17		Projects. Subsequently, as depicted in the Base Case Resource Plan in FPL
18		witness Enjamio's testimony, FPL will require the entire potential expanded
19		1.25 Bcf/day of capacity for system operations by the year 2025.
20		
21		In addition, if (a) economic conditions should change such that FPL's long-
22		term load forecast reverts to conditions similar to earlier projections such as
23		those projected in its 2008 Ten-Year Power Plant Site Plan, or (b) the

regulatory process associated with the proposed construction of two new nuclear units at Turkey Point is delayed, FPL may well utilize the remaining 200 MMcf/day of the initial 600 MMcf/day of capacity within the first five years of pipeline operation.

A.

Further, as illustrated in the FRCC's regional load and resource plan, the FRCC projects that natural gas demand to meet electric requirements will expand by approximately 16.5% or an average of about 750,000 MMBtu/day (approximately 750 MMcf/day) by 2015. As mentioned above, while this growth may be delayed due to current economic conditions, the overall demand requirement would exceed the initial 600 MMcf/day capacity of the pipeline project.

Q. With respect to third party demand for natural gas in Florida, would the Florida EnergySecure Line need to be connected to these markets to serve this demand?

No. As mentioned above, the proposed pipeline will be connected to FPL's CCEC, RBEC and Martin Plant sites. Additionally, after installation of FGT's Phase VIII project, FPL will have contractual firm transportation rights on the FGT system of up to 744,000 MMBtu/day to the Martin plant, 192,000 MMBtu/day to the CCEC and 180,000 MMBtu/day to the RBEC. Further, FPL maintains firm transportation rights of up to 350,000 MMBtu/day to the Martin Plant on the Gulfstream system. In the event that a third party facility requires natural gas supplies upstream of these points on the FGT or

1		Gulfstream systems, FPL would have the potential to release its firm
2		transportation capacity from these locations on FGT or Gulfstream to the third
3		party and replace such capacity with incremental capacity on the new pipeline.
4		For example, if a third party required 200 MMcf/day of transportation
5		capacity in the Tampa area (upstream of Martin on FGT or Gulfstream), FPL
6		could release 200 MMcf/day of its own transportation capacity on FGT or
7		Gulfstream currently directed to the FPL Martin Plant to such third party and
8		utilize an additional 200 MMcf/day on the new pipeline to the Martin plant to
9		displace the released capacity.
10		
11		As such, the new pipeline can provide competitive access to markets
12		throughout the state of Florida utilizing a combination of FPL's existing
13		capacity portfolio as well as capacity made available through construction of
14		the new pipeline.
15		
16	AD	DITIONAL BENEFITS TO FLORIDA OF BUILDING THE FLORIDA
17	E	ENERGYSECURE LINE VS. EXPANSIONS OF EXISTING SYSTEM
18		
19	Q.	In addition to the infusion of needed pipeline capacity, does the Florida
20		EnergySecure Line provide other enhancements to the natural gas
21		pipeline infrastructure within Florida?
22	A.	Yes. The addition of this pipeline will provide other benefits including
23		improved reliability and security of natural gas deliveries to market areas in

Peninsular Florida, including protection against mainline outages, supply losses and the loss of single pipe service to some locations.

- Q. Please describe the protection against mainline outages that can be provided by the new pipeline.
- A. As described previously in my testimony, the majority of the gas delivered to Florida markets is delivered via the FGT and Gulfstream pipeline systems. Portions of these pipeline systems have been looped with one or more pipes, which provide a degree of protection in the event service in one pipe is interrupted, while other portions of these systems rely on deliveries through a single pipe. As the new pipeline will provide another source of natural gas into Peninsular Florida it would be available to offset a portion of the delivery capacity lost due to any potential mainline outages on the existing pipelines.

Further, with respect to potential compressor outages, it is important to note that the full utilization of the existing systems is dependent upon the operation of compression facilities located both within Florida as well as upstream on these pipeline systems in other states. As is the case with any pipeline system designed to operate at or near capacity in meeting contractual delivery obligations, the interruption or loss of localized compression or transmission facilities anywhere along the pipeline system can, to some degree, impact the ability of the affected pipeline to meet its firm contractual service requirements at downstream locations. Once again, the introduction of a new large diameter pipeline into this service area will provide another delivery

1		option and will serve to mitigate the impact of any upstream compressor
2		outages on local markets.
3	Q.	The design of the new pipeline initially includes connections to only the
4		FPL markets of RBEC, CCEC and Martin. As such, how can the new
5		pipeline be utilized to provide protection against mainline outages at
6		other locations?
7	A.	In order to provide protection against mainline outages at other locations, the
8		new pipeline can be utilized to displace transportation quantities from
9		connected markets to upstream markets on the affected pipelines. This would
10		not require a direct connection to the existing pipeline. As discussed earlier in
11		my testimony, FPL has firm transportation rights with both Gulfstream and
12		FGT to provide service to FPL's Martin generation plant and has firm
13		transportation contract rights with FGT to its RBEC and CCEC facilities. In
14		the event that there is an outage on the Gulfstream system, FPL could flow
15		natural gas supplies to its Martin Plant via the new pipeline and displace a like
16		amount of capacity on the Gulfstream system. Similarly, in the event that
17		there is a capacity restriction on FGT due to an upstream outage, FPL could
18		flow natural gas supplies to its Martin, RBEC or CCEC facilities via the new
19		pipeline and displace a like amount of capacity on the FGT system.
20		
21		In addition to displacement, because the new pipeline will be located in the
22		vicinity of both FGT and Gulfstream near FPL's Martin Plant, the pipeline
22		could in the future be connected to the EGT and/or Gulfstream systems at this

location to serve additional markets in Florida. (This would require blanket certificate approval from the Federal Energy Regulatory Commission pursuant to 18 C.F.R § 284.224). Further, due to its close proximity to FGT near the RBEC, the new pipeline could in the future also be connected to the FGT system near the RBEC. With direct connections, the new pipeline could be utilized as an operational loop of the existing pipeline systems providing gas supplies into the existing pipelines at these locations. If connections are installed, in the event that there is an outage on either FGT or Gulfstream, the new pipeline could be utilized to provide gas supplies into the affected pipeline to serve Florida markets to offset capacity restrictions created by the outage.

A.

Q. Please describe the protection against single pipe outages provided by the new pipeline.

FPL generation facilities at Cape Canaveral and Riviera are currently capable of receiving supplies only from the FGT system. My understanding is that, at each of these locations, FGT delivers into the FPL plants via a single delivery lateral. As such, with the current configuration, in the event that there is a failure of this delivery lateral, the plants would have no available source of gas supply. After connections with the new pipeline are installed at these locations, there will be two pipelines physically connected to each plant (FGT and the new pipeline). This will provide protection against the total loss of natural gas supplies to the plant in the event that there is a failure on one of the two pipelines serving the plant.

Q.	Please describe the protection against supply losses that can be provided
	by the new pipeline.
A.	As described in detail previously in my testimony, Gulfstream and FGT are
	designed to source gas supplies primarily from traditional onshore Gulf Coast
	and offshore Gulf of Mexico supply sources. The new pipeline will provide
	supplies from unconventional shale gas locations in North Louisiana,
	Arkansas and East and Central Texas. This diversity of supply created with
	the new pipeline will decrease the portion of FPL's fuel requirements that are
	dependent upon traditional Gulf Coast and Gulf of Mexico sources. As a
	result, a smaller percentage of FPL's overall supply portfolio (and generation

This diversity of supply has the potential to provide an operational benefit through access to non-impacted supply sources during isolated weather events. In addition, recognizing that short-term or long-term reductions in Gulf Coast natural gas supply due to hurricanes can result in spikes in Gulf Coast supply prices, the diversity of supply created via the Florida EnergySecure Line has the potential to also provide a financial benefit through access to non-impacted supply sources during such events.

capacity) will be impacted by isolated weather events such as hurricane

disruptions in the Gulf of Mexico.

Q. Will the new pipeline provide FPL and other Florida consumers with increased competitive alternatives for future gas transportation capacity?

A.

Yes. The new pipeline will introduce competition to the connected FPL markets of Riviera and Cape Canaveral where today there is no competition for transportation services. In addition, the majority of Peninsular Florida markets are currently accessed only by FGT. The construction of a new large diameter pipeline through Peninsular Florida will provide FPL as well as other Florida customers with access to a competitive large diameter pipeline alternative in this portion of the state. To the benefit of all consumers in these areas, the project will provide pipe-on-pipe competition for interstate pipeline services and will provide consumers with options as to pipeline services in the future. While the option value associated with this type of project is difficult to quantify, a project that permanently alters the competitive environment for services such as the Florida EnergySecure Line project has the potential to reap unforeseen benefits for the participant, as well as other consumers in the vicinity of the pipeline.

1		THE SOLICITATION PROCESS
2		
3	Q.	What process did FPL use to determine that the Florida EnergySecure
4		Line was the most favorable method to obtain incremental gas
5		transportation capacity to support its natural gas requirements?
6	A.	As discussed in detail in the testimony of FPL witness Stubblefield, in July
7		2008 FPL issued a solicitation to a broad cross section of pipeline companies
8		for interstate transportation capacity to meet its future transportation
9		requirements (the "Solicitation").
10	Q.	What is your understanding of the goals of FPL's Solicitation process?
11	A.	The goals of the Solicitation were to meet the fuel supply needs of FPL's
12		Modernization Projects, increase physical pipeline capacity into the state of
13		Florida, add to the reliability and diversity of supply available to the state and
14		insure future transportation capacity availability.
15	Q.	Were these goals addressed in the Solicitation?
16	A.	Yes. The Solicitation clearly stated that in addition to meeting the gas
17		delivery needs of the CCEC and RBEC, FPL's goals included finding a
18		solution that would also ensure future gas transportation availability and
19		diversity of supply. In addition, FPL further stated in the Solicitation that one
20		option under consideration was the development of a new intrastate pipeline
21		system to insure that FPL's long-term needs could be met. To this end, FPL
22		stated in the Solicitation that "proposals to deliver supplies directly to its Cape
23		Canaveral and Riviera markets using new or existing pipeline facilities would

1		be considered but that any perceived economic benefit of such proposals
2 .		would be weighed against their more limited role in meeting FPL's long-term
3		needs."
4	Q.	Please describe the pipeline project alternatives requested in the
5		Solicitation.
6	A.	Within the initial Solicitation, FPL requested that bidders provide proposals as
7		to one or more of three alternatives. These included: (Option 1) a pipeline
8		with a primary receipt point at Transco Station 85 and a primary delivery
9		point at FPL plants (Cape Canaveral, Riviera, et al); (Option 2(a)) a pipeline
10		with a primary receipt point at Transco Station 85 and a primary delivery
11		point near FGT Station 16; and (Option 2(b)) a pipeline with a primary receipt
12		point near FGT Station 16 and primary delivery points at the above referenced
13		FPL plants.
14		
15		Once again, with respect to Option 2(b), FPL also notified the bidders that it
16		was also considering an FPL-developed intrastate pipeline as an alternative to
17		the third party proposals.
18	Q.	Please describe the transportation service quantities requested in the
19		Solicitation.
20	A.	The initial Solicitation included a request for three delivery quantity scenarios.
21		These scenarios included requests for (i) 1.0 Bcf/day, (ii) 800 MMcf/day and
22		(iii) 400 MMcf/day to various FPL delivery points in the state of Florida. All
23		scenarios included a requirement that 200 MMcf/day be deliverable to the

1 RBEC and approximately 200 MMcf/day be deliverable to the CCEC. In 2 addition, the scenarios required deliveries to other FPL sites at varying 3 quantities. 4 5 After issuing the initial Solicitation, FPL's internal forecast of generation 6 facility requirements was revised downward such that it was clear that the 1.0 Bcf/day and 800 MMcf/day service quantity levels would exceed FPL's 7 fuel requirements in the near future. It also became apparent that due to 8 9 economies of scale required with these projects, a 400 MMcf/day project 10 originating at Transco Station 85 would not significantly reduce overall costs 11 versus a 600 MMcf/day project from this location and would limit potential 12 for expansions in the future. As such, FPL followed up the initial Solicitation with an additional request that the bidders develop updated proposals with a 13 service quantity of 600 MMcf/day. 14 15 Q. Did bidders respond to FPL's Solicitation? 16 A. Yes. FPL received proposals from seven different pipeline bidders with each 17 bidder providing multiple proposals. After reviewing bids received in the Solicitation process, did FPL identify 18 Q. 19 the proposals that provided the lowest cost opportunities for FPL's 20 customers? Yes. As discussed in detail in the testimony of FPL witness Stubblefield, after 21 A. 22 review of the proposals received in response to its Solicitation, FPL

determined that among the proposals received from third party bidders, the

1		proposal from Company B coupled with a pipeline project from the chosen
2		supply location of Transco Station 85 to Company B's proposed project
3		receipt point represented the lowest cost opportunity for FPL's customers. In
4		addition, FPL further determined that the combination of the Upstream
5		Pipeline Project with its Florida EnergySecure Line project also provided a
6		low cost alternative for its customers.
7	Q.	Did the proposal that FPL received from Company B provide access to
8		the preferred Transco Station 85 supply location?
9	A.	No. The proposal received from Company B did not provide access to the
0		preferred Transco Station 85 supply location.
1	Q.	As Company B did not include facilities in its proposal to transport gas
2		supplies from FPL's chosen supply location near Transco Station 85, did
3		you develop an analysis to approximate the cost of facilities to transport
4		supplies from Transco Station 85 to Company B's proposed project
5		receipt point?
6	A.	Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility
7		design and cost estimate to transport 600 MMcf/day of natural gas supplies
8		from Transco Station 85 to the supply location included within the Company
9		B proposal and have developed an approximate cost of service for such
.0		facilities based upon recent comparable projects. As illustrated in the Exhibit,
1		I estimate that this lateral extension would add a cost of service of
2		approximately \$0.20 per MMBtu of design capacity plus required compressor

1	Q.	In comparing the proposals received in response to its Solicitation
2		process, do you believe that FPL applied its evaluation criteria in an
3		objective and fair manner?
4	A.	Yes. FPL utilized consistent criteria in evaluating the bid proposals and
5		developed its comparison analyses of the various bids in an objective and fair
6		manner.
7	Q.	Based upon your review of the Solicitation and bid responses, do you
8		agree with FPL's initial assessment that the Upstream Pipeline Project as
9		proposed by Company E combined with the Florida EnergySecure Line
10		project and the proposal from Company B are the two lowest cost
11		opportunities available that meet the goals of the Solicitation?
12	A.	Yes. I agree with FPL's assessment that these were the two lowest cost
13		opportunities available that met the goals of the Solicitation.
14	Q.	Do you believe that FPL's Solicitation process was effective in providing
15		FPL with a comprehensive view of pipeline infrastructure alternatives
16		available in the marketplace versus the Florida EnergySecure Line
17		project?
18	A.	Yes. As stated above, FPL issued its Solicitation to a broad cross section of
19		pipeline companies active in the Southeastern United States. Furthermore, the
20		Solicitation, while specific with respect to the requested receipt and delivery
21		points, provided the bidders with flexibility as to facilities to install and as to
22		the structure of the bids. Through this process, FPL obtained various
23		alternative bid proposals from various bidders. In addition, after initial bids

were received, FPL continued discussions and negotiations with bidders that presented the most cost effective alternatives and subsequently received refined proposals from these bidders. I believe that this process was effective in providing FPL with a full understanding of pipeline alternatives available in the marketplace.

GAS COST SAVINGS ANALYSIS

- Q. Did you develop an independent evaluation of the overall cost of gas impact associated with the Florida EnergySecure Line versus competitive proposals received by FPL in its solicitation process?
- A. Yes. As described in the testimony of FPL witness Stubblefield, the lowest cost proposal received by FPL (other than the combined Upstream Pipeline Project / Florida EnergySecure Line project) was the proposal received from Company B. As such, I have developed an independent comparative cost analysis between this proposal from Company B and the combined Upstream Pipeline Project / Florida EnergySecure Line. This comparative analysis is attached as Exhibit TCS-7.
- Q. Did the results of this analysis favor the Florida EnergySecure Line or Company B's pipeline expansion proposal?
- A. The results of this analysis, which include, in my opinion, very favorable assumptions regarding costs associated with the proposal received from

1		Company B, still favor the Florida EnergySecure Line alternative. These
2		results are illustrated on Page 1 of the Exhibit TCS-7.
3	Q.	Please describe the "very favorable" assumptions you referred to above
4		regarding the proposal received from Company B.
5	A.	In this analysis, it is assumed that Company B's proposal will have the same
6		competitive impact on costs paid by FPL and other consumers within the state
7		of Florida as the construction of a new pipeline into this area. More
8		specifically, the analysis evaluates direct delivery costs only and there has
9		been no adjustment made to the analysis to reflect the fact that the
10		introduction of a new incremental pipeline into Peninsular Florida will
11		introduce pipe-on-pipe competition and will change the competitive landscape
12		in this portion of the state for pipeline services. Obviously, this assumption
13		gives Company B's proposal a significant "benefit of the doubt" associated
14		with the value of future competitive alternatives in the state.
15	Q.	Please describe the Gas Cost Savings analysis.
16	Α.	The Gas Cost Savings Analysis compares costs that would be incurred by FPL
17		and its customers for pipeline service during the forty year project life of the
18		Florida EnergySecure Line to costs that would be incurred by FPL and its
19		customers for pipeline service utilizing the Company B proposal alternative.
20	Q.	Please provide a summary of FPL's natural gas fuel requirements for
21		power generation included in the Gas Cost Savings Analysis.
22	A.	The natural gas fuel requirements included in the Gas Cost Savings Analysis
23		represent the next 1,187,500 MMBtu/day (approximately 1.2 Bcf/day) of FPL

1		projected natural gas fuel requirements from FPL's load resource plan. The
2		initial demand associated with the planned CCEC and RBEC Modernization
3		Projects will occur in late 2012 or early 2013 in support of the testing and
4		certification of the CCEC facility. Subsequent to this initial demand, fuel
5		requirements increase through start up of the CCEC and RBEC as well as
6		subsequent capacity additions added in each of the years 2021 through 2026.
7	Q.	What future expansion capacity cost assumptions were utilized in the
8		analyses with respect to the Florida EnergySecure Line?
9	A.	The Florida EnergySecure Line project in Peninsular Florida will consist of
10		approximately 280 miles of 30-inch pipeline that will initiate at the terminus
11		of the proposed Upstream Pipeline Project and terminate at FPL's Martin
12		Plant with lateral extensions to the CCEC and RBEC. The pipeline will have
13		an initial design capacity of 600 MMcf/day and is designed to accommodate
14		low cost future expansions through the installation of one or more mid-line
15		compressor stations.
16		
17		While the initial design capacity of the new pipeline will total only
18		600 MMcf/day, a high pressure (1480 psig MAOP) 30-inch pipeline with
19		supporting compression can support flows in the range of 1.2 Bcf/day to
20		1.3 Bcf/day. As a result of this expandability via compression, significant
21		market expansion can occur along this pipeline without the need to install
22		additional mainline pipeline facilities. Future low cost expandability of this

system is a significant benefit of this system versus expansion of the incumbent pipelines.

A.

With this said, FPL, in conjunction with its third party pipeline contractor developed analyses of facilities and associated costs for the initial project installation at a capacity of 600 MMcf/day as well as expansion increments bringing the capacity up to levels of 800 MMcf/day, 1 Bcf/day and 1.25 Bcf/day. Further, based upon the facility and cost estimates provided, FPL utilized its financial models to develop annual revenue requirements required by the company to offset the costs of installation associated with the initial project as well as each tranche of expansion capacity. I have utilized these annual revenue requirement projections as provided by FPL's financial model to represent the cost impact that the project installation would have on FPL's customers.

Q. What future expansion capacity cost assumptions were utilized in the analyses with respect to the Upstream Pipeline Project?

As a result of the Solicitation process, FPL and Company E have agreed to a transaction reservation fee and a commodity fee with a transportation quantity of 600,000 MMBtu/day (approximately 600 MMcf/day). The transactional rate is utilized in the analysis for the first 600,000 MMBtu/day of transportation capacity. Next, reviewing bids received from Company E in response to FPL's Solicitation for the Upstream Pipeline Project at capacity levels of 800,000 MMBtu/day (approximately 800 MMcf/day) and 1,000,000

MMBtu/day (approximately 1 Bcf/day) reveals that bids were slightly (less than 5%) lower as capacity requirements increased. While this could imply that successive capacity expansions of the Upstream Pipeline Project will be slightly lower in cost than the first expansion, in order to be conservative in cost assumptions, the Gas Cost Savings Analysis incorporates an assumption that the cost of each successive expansion of the Upstream Pipeline Project will have a consistent cost basis with the initial project cost. As such, we have utilized a constant dollar cost equal to the negotiated transaction rates to represent all Upstream Pipeline Project expansion costs through the project life.

3.

A.

Q. Do you believe that this is a conservative assumption with respect to the cost associated with successive expansions of the Upstream Pipeline Project?

Yes. It is important to note that the Upstream Pipeline Project includes the installation of a section of large diameter (36-inch) pipeline that could support transport quantities in excess of 1 Bcf/day without the need for pipeline looping. As such, with respect to this pipeline segment, successive expansions will likely not require looping and/or installation of additional pipeline. This would indicate that successive expansions could likely be accomplished at a lower cost on the Upstream Pipeline Project than the initial project. As such, I believe that holding expansion costs of the Upstream Pipeline Project constant is a conservative assumption that generally overstates expansion costs.

Q.	What future	expansion	capacity	cost	assumptions	were	utilized	in	the
	analyses with	respect to	the propos	sal re	ceived from (Comps	any B?		

A.

- The rate included in Company B's 400,000 MMBtu/day proposal is utilized in the analysis to represent the cost of this first 400,000 MMBtu/day of capacity. Next, reviewing bids received from Company B in response to FPL's Solicitation for service levels of 400,000 MMBtu/day and 600,000 MMBtu/day reveals that Company B's capacity bid for 600,000 MMBtu/day of capacity was slightly (less than 5%) lower than it's bid for 400,000 MMBtu/day of capacity. As such, similar to the Upstream Pipeline Project expansion assumption, in the Gas Cost Savings Analysis, an assumption has been included that the cost of each successive expansion of the Company B system will have a consistent cost basis with the initial project cost.
- Q. Did you make any assumptions with respect to FPL's ability to recover a portion of the cost associated with any excess capacity created via the installation of the Florida EnergySecure Line?
- A. Yes. As noted previously, the Florida EnergySecure Line and the Upstream Pipeline Project will each have an initial capacity in January 2014 of about 600 MMcf/day (approximately 600,000 MMBtu/day). FPL's current load forecast indicates that FPL will require about 400,000 MMBtu/day (approximately 400 MMcf/day) of natural gas to support incremental generation facilities in 2014. Further, timing of successive planned expansions of the Florida EnergySecure Line will not exactly coincide with FPL fuel requirements through the project life. As such, during the initial

years of the project and periodically during later years, there will be capacity available on the project in excess of that needed to support FPL generation requirements. As discussed in detail earlier in my testimony, in order to recover costs of excess capacity, FPL can either sell excess capacity on its new pipeline system to third party shippers or can utilize the excess capacity on the new pipeline for its own account and release a like amount of capacity on either the Gulfstream or FGT systems to third party shippers. In order to reflect potential cost recoveries associated with these releases, the Gas Cost Savings Analysis assumes that FPL releases excess capacity to third parties and thereby recovers a portion of its capacity costs. Finally, it is worth noting that the analysis values excess capacity at one price for the whole of the project (i.e., the Upstream Pipeline Project capacity and the Florida EnergySecure Line capacity) thereby assuming that the capacity values are related to the entire path from the supply point near Transco Station 85 to the ultimate delivery point locations in the state of Florida.

A.

Q. What capacity cost recovery value did you assign to the excess capacity in the Gas Cost Savings Analysis?

Four excess capacity cost recovery value scenarios were utilized to develop four separate Gas Cost Savings Analysis cases. The Gas Cost Savings Analysis identified as Case A incorporates an assumption that FPL obtains a cost recovery for excess capacity equal to the average value paid for capacity on the secondary market by FPL during 2008. The Gas Cost Savings Analysis identified as Case B incorporates an assumption that FPL obtains a cost

1		recovery for excess capacity equal to the maximum tariff rate associated with
2		the transportation capacity in FPL's portfolio that has the highest
3		corresponding tariff rate (FGT's proposed Phase VIII expansion maximum
4		tariff recourse rate). Finally, as a worst case assumption, the Gas Cost
5		Savings Analysis identified as Case C incorporates an assumption that there is
6		no cost recovery for excess capacity.
7	Q.	What were the results of the analyses set forth in Exhibits TCS-7?
8	A.	As depicted on Exhibits TCS-7, in all three cases the Gas Cost Savings
9		Analysis favors the Florida EnergySecure Line / Upstream Pipeline Project
0		alternative. In fact, the Net Present Value of savings utilizing the Florida
1		EnergySecure Line / Upstream Pipeline Project alternative versus the
12		Company B alternative range from about \$230 million to about \$900 million.
13		
14		THE FLORIDA ENERGYSECURE LINE IS THE RIGHT CHOICE
15		
16	Q.	Is FPL's decision to initiate the Florida EnergySecure Line the right
17		choice for FPL and its customers?
18	A.	Yes. The Florida EnergySecure Line meets FPL's stated goals of increasing
19		physical pipeline capacity into the state of Florida, adding to the reliability
20		and diversity of supply available to the state, ensuring future transportation
21		capacity availability and meeting the fuel supply needs of FPL's CCEC and
22		RBEC Modernization Projects. In addition, the economic results depicted in
23		the Gas Cost Analyses in Exhibits TCS-7, reveal that the Florida

EnergySecure Line has favorable economic results versus the most competitive proposal received via the Solicitation process. Finally, the Project also introduces a competitive pipeline alternative and an associated option value to markets in Peninsular Florida where today there is no pipeline competition. While it is difficult to quantify the option value associated with a project of this nature, the introduction of meaningful pipeline competition into Peninsular Florida has the potential to provide unforeseen benefits for FPL and its customers as well as other natural gas consumers in these areas.

- 9 Q. Does this conclude your testimony?
- 10 A. Yes.

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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

ERRATA SHEET

DIRECT TESTIMONY OF TIM C. SEXTON

PAGE #	LINE #	CORRECTION
23 23 25 25 25 25 56 56	18 19 17 18 21 18	Replace "1.5" with "1.0" Replace "1.8" with "1.2" Replace "4.7" with "4.1" Replace "1.8" with "1.2" Replace "9.4" with "8.8" Replace "Four" with "Three" Replace "four" with "three"
EXHIBIT #	PAGE #	CORRECTION
TCS-3	3	The values in the text box entitled "MidContinent Express" are corrected. Replace "1.5" with "1.0". Replace "1.8" with "1.2".
		The values in the text box on the far right of the page are corrected. Replace "9.4" with "8.8". Replace "4.4" with "3.8".

The revised exhibit is attached.

Respectfully submitted this 24th day of July, 2009.

1 BY MR. PERKO:

Q. Mr. Sexton, have you prepared a summary of your testimony?

- A. Yes, I have.
- Q. Could you provide that now, please.
- A. I sure can.

Good afternoon, Chairman Carter and
Commissioners. The purpose of my testimony is to
provide a third party review of the existing natural gas
pipeline infrastructure as well as the natural gas
supply access provided by this infrastructure to Florida
markets. My testimony also reviews infrastructure
expansions that are required to meet FPL's future
natural gas fuel requirements. My testimony reviews
FPL's solicitation and proposal evaluation process that
resulted in the decision to pursue the Florida
EnergySecure Line project.

Finally, my testimony presents the results of my independent cost savings analysis which confirm that the Florida EnergySecure Line project is the most cost-effective alternative to meet FPL's natural gas transportation needs.

As I explained in my testimony, the two interstate pipelines currently serving the bulk of the natural gas demand in the state of Florida, Florida Gas

FLORIDA PUBLIC SERVICE COMMISSION

Transmission and Gulfstream, are substantially sold out on a long-term firm basis and cannot provide the incremental 400 million cubic feet per day of natural gas needed at FPL's Cape Canaveral and Riviera Beach Energy Centers without incremental expansions. As a result, new pipeline capacity is needed to meet FPL's incremental natural gas supply requirements.

As to supply access, the vast majority of gas supplies available via the incumbent pipelines, FGT and Gulfstream, are derived from the offshore Gulf of Mexico and onshore Gulf Coast supply areas. These supply sources have been declining over the past several years and are projected to continue to decline in the near future.

In contrast to these declining supply sources, unconventional sources have been growing and are projected to continue to grow in the future. As a result, I conclude that FPL made the correct decision in developing a supply diversification strategy that targets these unconventional supplies available at Transco Station 85, which is the upstream receipt point for the Company E Interstate Pipeline that will serve the Florida EnergySecure Line project.

With respect to the Florida EnergySecure Line project itself, in addition to the direct economic

benefits provided by the project, my testimony concludes that the project will also provide benefits associated with supply diversification, protection against single pipe outages, operational benefits resulting from multiple delivering pipelines, and long-term economic benefits of pipe-on-pipe competition.

As to the process undertaken by FPL to determine the best option to expand natural gas pipeline capacity available to meet future needs, FPL issued a solicitation to a broad cross-section of pipeline operators, including FGT and Gulfstream, requesting bids to provide infrastructure expansion alternatives to meet FPL's future natural gas supply needs. Within that solicitation, FPL made it clear to the bidders that it would also be considering a self-build alternative.

Based on my review of the solicitation and the responses received, I conclude that FPL evaluated the various proposals in an objective and fair manner, and that the solicitation process was effective in providing FPL with a full understanding of available pipeline alternatives.

Finally, I developed an independent evaluation of the overall long-term cost of gas impact associated with the Florida EnergySecure Line versus the next most competitive proposal received through the solicitation

process. As discussed in my testimony, based on the 1 results of my economic evaluation and the supply 2 diversification and reliability benefits of the Florida 3 EnergySecure Line, I conclude that FPL made the best 4 choice for its customers in selecting the Florida 5 EnergySecure Line project to meet its future gas supply 6 7 needs. MR. PERKO: We tender the witness for 8 cross-examination. 9 10 CHAIRMAN CARTER: Thank you. Mr. Self. 11 MR. SELF: No questions, Mr. Chairman. 12 CHAIRMAN CARTER: Staff? 13 MS. BROWN: No questions. 14 15 CHAIRMAN CARTER: Commissioner Skop. 16 COMMISSIONER SKOP: Thank you, Mr. Chairman. Just to Mr. Butler, were you able to get that 17 point clarified in terms of Mr. Sexton's rebuttal 18 19 testimony and the cumulative present value revenue requirement difference between his and the prior 20 witness? 21 22 MR. BUTLER: I think so. What we 23 understand -- first of all, to be sure we understand 24 your question. There is a figure that is essentially

\$580 million as a total benefit that shows up in what

Mr. Enjamio uses as his example. But if you look at what Mr. Sexton has, there is essentially a \$600 million difference subtracting one number from the other. Is that the differential or the discrepancy that you were pointing out?

COMMISSIONER SKOP: No. Let me be a little more clear.

In Page 7 of Mr. Sexton's rebuttal testimony on Lines 6 through 7 he indicates that the net present value of savings utilizing FPL's proposed project versus the Company B alternative range from 123 million to 757 million. And I think that differed a little bit from the other witness' testimony to the extent that I think the range was a little higher, 240 to 500, subject to check, whatever the numbers were.

What I'm concerned about on this rebuttal testimony is the lower number, the 123 million in relation to my question about the current gas prices. Again, the margin there is starting to shrink. I know that FPL did extensive analysis on 36 sensitivities and most of those showed present value. What I am trying to do is get a better handle, though, on this particular instance and how sensitive this number might be to the choice of gas forecasts that was used in the near-term November versus current.

1 MR. BUTLER: Thank you for that clarification. 2 Unfortunately, we are going to have to go back to the 3 drawing board and get you an answer, because we were 4 sort of misunderstanding a little bit what your question 5 was. 6 CHAIRMAN CARTER: Not a problem. Thank you. MR. BUTLER: Certainly. 8 COMMISSIONER SKOP: And I will present the 9 question to Mr. Sexton. 10 MR. BUTLER: Okay. Thank you. 11 CHAIRMAN CARTER: Commissioner, you have 12 further questions for Mr. Sexton? 13 COMMISSIONER SKOP: Yes, Mr. Chair. Thank 14 you. 15 Again, Mr. Sexton, I don't really want to get 16 into rebuttal testimony now. I quess we will take that 17 up later. But one of the things, again, I was trying to 18 ascertain was two-fold. I know that on Page 24 of your 19 Direct Testimony you talk about the various 20 mid-continent shale reserves and their availability. 21 Under current pricing for natural gas, do you 22 expect those reserves to be developed? I know when 23 natural gas prices were higher it certainly was 24 economically feasible to go and try and extract natural

gas from those shale deposits, but at \$3.50 or 3.80 per

MMbtu is it still going to be economically feasible? D
we expect those specific shale reserves to materialize
and be brought to market?

think you're right, today the gas price is \$3.00. If you look forward four or five years, it is quite a bit more. The \$3.00 is a near-term price, and that near-term price has resulted in a reduction in the drilling rigs that are active across the industry, not just with shale gas, but with conventional supplies.

However, one thing that you note if you look at shale gas drilling and production right now, even with the economic conditions that we have been going through with gas prices that have been declining over the past several months, the drilling is still going on. The rig count has gone down quite a bit, but if you look at a few public sources, look at the Texas Railroad Commission, for example, what you will find is that there's more active wells today than there were at the end of 2008.

If you look at information from the Arkansas
Oil and Gas Commission, what you will find is that with
Fayetteville shale, there is more Fayetteville shale gas
being produced today than there was at the end of 2008.

If we look at the Louisiana Department of

Natural Resources, what you will find is that there is four times as many active wells in the Hainesville shale in the second quarter of 2009 versus what was going on

in 2008.

So even though the drilling rig activity has reduced quite a bit, I think the shale gas -- I expect that to be a major part of the future resource base, and I think any projection -- if you look at DOE information from the EIA, the same thing. They will project that shale gas is going to be a large part of our resource base in the future.

COMMISSIONER SKOP: Okay. And then, secondly, I guess based on your testimony and that of Witness Sharra that the Transco 85 interconnection point in terms of the upstream pipeline is appropriate over that of the Perryville. Is that correct for the upstream pipeline?

THE WITNESS: I want to make sure I understand the question. I think the Transco Station 85, we believe, provides access to significant quantities of shale gas. As you can see from -- as you read in the testimony, a lot of pipeline capacity that's going to Transco Station 85, over 3 Bcf of new capacity that was supported by producers of shale gas that bought the capacity to go to Station 85. So what that provides

access to is the direct access to the shale gas as well as gas at the Perryville Hub without the need to build a pipeline back to Perryville. I think it may be useful to look at the map and see where these locations are.

commissioner skop: Well, I guess just from my perspective, and, again, perhaps you can elaborate on this, it seems that the Transco 85 is kind of like a crossroads of being able to access gas from many different directions, whereas the Perryville, although it is further west and probably proximate to the shale, it's not as proximate to the east coast final destinations and it doesn't really kind of leverage some of the intersections of not only from the Gulf, but from the east and from the north. So, again, if you would just elaborate on that a little bit. I think it was covered a lot, extensively in the testimony.

THE WITNESS: I'm not sure I understand the question with respect to east coast from Perryville or from Station 85.

commissioner skop: Okay. It's late in the day, so my framing of the question is probably not as good, given our current workload that we have. But the discussion was -- I guess FGT was making a substantial argument that Perryville was the more appropriate interconnection point in terms of taking gas as a point

of delivery to bring it to Florida, whereas FPL asserts that for the upstream pipeline purposes that Transco Station 85, by virtue of the fact that many producers have subscribed to the existing pipeline that will deliver it from Transco 85 to the FGT Station 16 is more appropriate, and that is what I was trying to --

THE WITNESS: And if you don't mind me looking at the map.

COMMISSIONER SKOP: That's fine.

THE WITNESS: Is this still working? What we have done here -- this was my Exhibit TCS-9 that was actually an exhibit to the rebuttal testimony. We can start with this, and then this is actually a blow up of TCS-9, so you can see kind of a real good shot of the Perryville and Station 85's area.

But I think your question was first is Station 85 versus Perryville a more appropriate location for FPL to source gas for these projects. And if you look at the location of Station 85 versus the location of Perryville, in order to get back to Perryville, for example, you know, Station 85 you would have to go another 2 or 300 miles to get back to Perryville from Station 85, or about 250 miles from the start of the FGT project.

I think what needs to be said here is that the

proposal to FPL that came from FGT did not provide direct access to Perryville. What it provided was access to the FGT system in their Zone 3 down here around Mobile Bay. Now, in order to get back to Perryville on the FGT system, someone has to build back to Perryville. That's 300 miles of pipe. So we think Station 85 is a much more appropriate smaller investment to get access to shale gas.

And, in addition, your other question about Station 85, will there be sufficient volumes of gas, and I think, once again, the pipelines that have been built from Perryville to Station 85 over the last few years, that is 3 Bcf of new capacity that come from shale gas basins all the way to Transco Station 85, and those pipelines were supported by the investments of the same producers of that shale gas supplies. So those producers are looking to transport their gas to Station 85 versus other markets. They're trying to get it out of east Texas and north Louisiana and down to markets in the east. So I think from that perspective, Station 85 is an appropriate location.

Now, you also mentioned something about northeast markets that has come up in this conversation. If you're looking at northeast markets, I think you also have to realize that Perryville, itself, is a hub with

1	many pipelines coming into the Perryville area as well		
2	as going out of the Perryville area. Those pipelines go		
3	to many markets. Some go the northeast, some go to the		
4	midwest. And as with Station 85, Transco does go		
5	towards the northeast markets, but you are looking at a		
6	new 3 Bcf of capacity into a system at a point there		
7	without new capacity going northeast at the current		
8	time. So you have got 3 Bcf into this area looking for		
9	a market to sell. It could sell to on-system customers		
10	on Transco, but this is a great opportunity for a new		
11	buyer to go into that market and pick up 400,000 or		
12	600,000 of supplies.		
13	COMMISSIONER SKOP: Thank you. And I'll		
14	reserve my final question for your rebuttal. Thank you.		
15	CHAIRMAN CARTER: Thank you.		
16	Commissioners, anything further from the		
17	bench?		
18	Redirect?		
19	MR. PERKO: No redirect, Your Honor.		
20	COMMISSIONER EDGAR: Exhibits.		
21	MR. PERKO: We would move Exhibits 52 through		
22	58.		
23	CHAIRMAN CARTER: Mr. Self, any objections?		
24	MR. SELF: No objections.		
25	CHAIRMAN CARTER: Without objection, show it		

1 done. (Exhibit Numbers 52 through 58 admitted into 2 3 the record.) CHAIRMAN CARTER: Okay. You are on recess. 4 Mr. Self, do you need a couple of minutes to 5 get ready? 6 MR. SELF: Well, yes, sir. And, in addition, 7 I believe I have talked with the staff, there was a 8 group of exhibits that I guess I had misunderstood what 9 was going as part of the stipulated exhibit list. And 10 11 the staff had suggested, I think, doing it at this time. 12 Yes? CHAIRMAN CARTER: Ms. Brown. 13 MS. BROWN: I thought we were going to wait 14 until the bitter end, but maybe I misunderstood, until 15 16 the end of rebuttal testimony. MR. SELF: Okay. That's fine. 17 18 **CHAIRMAN CARTER:** Is that okay? MS. BROWN: And we'll have a chance to read 19 from the same page by the time we get there, I promise, 20 21 Mr. Chairman. CHAIRMAN CARTER: Okay. Somebody flag that so 22 23 when we get to that point we'll be ready for it. 24 Mr. Self, are you ready? Do you need a minute 25 to --

FLORIDA PUBLIC SERVICE COMMISSION

MR. SELF: Could we take just five minutes, 1 2 please? 3 CHAIRMAN CARTER: Commissioners, we will come back at ten after. 4 (Brief recess.) CHAIRMAN CARTER: We are back on the record. 6 We have had a meeting of the minds with the 7 parties and staff, and because we are beginning a new 8 section, FGT will be doing their case in chief and they 9 won't have an opportunity to really get going, and there 10 11 is a substantial amount of cross for this witness, we 12 will just start anew tomorrow morning at 9:30. And, like I said to you guys earlier, make 13 14 sure you eat your Wheaties. Make sure you eat your 15 Wheaties, because we have got a long day tomorrow. 16 Okay. 17 We are adjourned. 18 (The hearing adjourned at 5:10 p.m.) 19 20 21 22 23 24 25

1	STATE OF FLORIDA)				
2	: CERTIFICATE OF REPORTER				
3	COUNTY OF LEON)				
4					
5	I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do				
6	hereby certify that the foregoing proceeding was heard at the time and place herein stated.				
7	IT IS FURTHER CERTIFIED that I				
8	stenographically reported the said proceedings; that same has been transcribed under my direct supervision				
9	and that this transcript constitutes a true transcription of my notes of said proceedings.				
10	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor				
11	am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I				
12	financially interested in the action.				
13	DATED THIS 31st day of July, 2009.				
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15	JAMA FAUROT, RPR				
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