### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

## DOCKET NO. 09 <u>OLA</u>EI FLORIDA POWER & LIGHT COMPANY

### IN RE: FLORIDA POWER & LIGHT COMPANY'S PETITION TO DETERMINE NEED FOR FLORIDA ENERGYSECURE LINE

**DIRECT TESTIMONY & EXHIBITS OF:** 

**TIMOTHY C. SEXTON** 

DOCUMENT NO. DATE <u>03071-09</u> <u>417109</u> FPSC - COMMISSION CLERK

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	А.	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	Ά.	I am testifying on behalf of Florida Power & Light Company (FPL).
12	Q.	Please describe your education, background and qualifications.
13	Α.	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:

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1 (a) evaluated local natural gas supply and pipeline infrastructure to assess 2 ability of such infrastructure to receive large quantities of natural gas from 3 proposed liquefied natural gas (LNG) facilities in various states; (b) evaluated 4 large scale greenfield pipeline project infrastructure alternatives on behalf of 5 utility clients in Wisconsin; (c) represented client interests in negotiations with interstate pipeline companies upstream and/or downstream of client facilities; 6 7 (d) acted as a technical representative in evaluating regulatory filings; and (e) 8 evaluated pipeline expansion projects and conducted feasibility studies of 9 such projects.

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11 With respect to the Florida marketplace, I have performed numerous functions 12 on behalf of FPL on various assignments since 1998. These assignments 13 generally focused on assessment of the Florida pipeline infrastructure and its 14 ability to meet the needs of FPL generation expansions at various proposed 15 locations. I have also been engaged by the Florida Reliability Coordinating 16 Council (FRCC) since 2005 to evaluate the reliability of the fuel supply 17 infrastructure serving the state of Florida. Finally, I have directed the 18 development of natural gas supply and capacity portfolios on behalf of two 19 industrial clients with facilities in the state of Florida.

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#### Q. What is the purpose of your testimony?

A. 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

1		alternatives in meeting in	ncremental natural gas pipeline capacity demand; (iii)
2		compare the benefits pr	rovided by the proposed Florida EnergySecure Line
3		versus other alternatives	available to FPL; and (iv) evaluate FPL's conclusion
4		that the best means of p	providing the needed incremental new transportation
5		capacity required to mee	t forecasted natural gas fired generation requirements
6		in 2014 and beyond is th	e Florida EnergySecure Line.
7	Q.	Are you sponsoring any	v exhibits in this proceeding?
8	A.	I am sponsoring the fo	ollowing exhibits which are attached to my direct
9		testimony:	
10		• TCS-1 Re	esume of Timothy C. Sexton
11		• TCS-2 Flo	orida Pipeline Capacity Load Factor Calculation
12		• TCS-3 Sc	hematic Illustration entitled, "Capacity to Southeast
13		М	arkets"
14		• TCS-4 Cł	nart of Projected Capacity Upstream of Transco CS
15		85	
16		• TCS-5 Sta	ate by State Comparison of Consumption of Natural
17		Ga	as for Electric Generation in the United States
18		• TCS-6 A <sub>I</sub>	oproximate Cost of Service to Transport Natural Gas
19		tro	om Transco CS 85 to Company B Project
20		(C	onfidential)
21		• TCS-7 Ga	as Cost Savings Analysis (Confidential)

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**Q**.

#### Please summarize your testimony.

A. My testimony examines the current natural gas supply alternatives available to FPL including (i) the existing pipeline infrastructure in the state of Florida;
(ii) gas supply access available to the state via this infrastructure; and (iii) the need for new natural gas pipeline capacity into Florida to meet demand requirements of FPL and third party markets.

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.

- 16 Based upon the review of these subjects, my testimony concludes:
- (a) The existing pipeline infrastructure does not provide sufficient excess
   capacity to meet FPL's projected future natural gas requirements;
  - (b) New pipeline infrastructure will need to be constructed to meet the future natural gas demand of FPL as well as third party consumers in Florida;
- (c) FPL would be well served to expand natural gas supply access beyond its
   current concentration from traditional onshore Gulf Coast and offshore
   Gulf of Mexico sources;

- (d) The Solicitation process utilized by FPL was an effective method of analyzing pipeline alternatives available to meet FPL future natural gas 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.

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10 A. FPL's pipeline project (the "Project") consists of (i) a pipeline project to be 11 developed by a pipeline operator active in the southeastern United States 12 (Company E) to transport 600,000 Million Btu per day (MMBtu/day) 13 (approximately 600 MMcf/day) of natural gas from a point near 14 Transcontinental Gas Pipeline Company LLC's (Transco) Compressor Station 15 85 (Transco Station 85) in Choctaw County, Alabama to a point near Florida 16 Gas Transmission, LLC's (FGT) Compressor Station 16 (FGT Station 16) in Bradford County, Florida (the "Upstream Pipeline Project"); and 17 (ii) 18 construction of a new FPL owned and operated intrastate pipeline (the 19 "Florida EnergySecure Line") consisting of approximately 280 miles of 30-20 inch pipeline from an interconnection with the proposed Upstream Pipeline 21 Project in Bradford County, Florida to a delivery point at FPL's existing Martin generation plants. In addition, the project also includes connections to 22 23 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
3		EnergySecure Line has a proposed in-service date of January 2014.
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5		The Project will initially provide an incremental 600 million cubic feet per
6		day (MMcf/day) of natural gas transportation capacity into the state of Florida
7		which can be expanded to in excess of 1.2 billion cubic feet per day (Bcf/day)
8		via compression additions. The Project will initially support the natural gas
9		fuel requirements of FPL's Modernization Projects recently approved by the
10		Florida Public Service Commission (FPSC).
11		
12		EXISTING NATURAL GAS PIPELINE
12		EXISTING NATONAL GASTITELINE
12		INFRASTRUCTURE IN FLORIDA
13	Q.	
13 14	<b>Q.</b> A.	INFRASTRUCTURE IN FLORIDA
13 14 15	-	INFRASTRUCTURE IN FLORIDA Please identify pipelines that deliver natural gas into the state of Florida.
13 14 15 16	-	INFRASTRUCTURE IN FLORIDA 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
13 14 15 16 17	-	INFRASTRUCTURE IN FLORIDA 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 interstate pipeline systems. These pipelines include FGT, Gulfstream Natural
13 14 15 16 17 18	-	INFRASTRUCTURE IN FLORIDA 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 interstate pipeline systems. These pipelines include FGT, Gulfstream Natural Gas System L.L.C. (Gulfstream), Southern Natural Gas Company's Cypress
13 14 15 16 17 18 19	-	NFRASTRUCTURE IN FLORIDA 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 interstate pipeline systems. These pipelines include FGT, Gulfstream Natural Gas System L.L.C. (Gulfstream), Southern Natural Gas Company's Cypress Pipeline system (Cypress) and Gulf South Pipeline Company, L.P. (Gulf
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	-	INFRASTRUCTURE IN FLORIDA 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 interstate pipeline systems. These pipelines include FGT, Gulfstream Natural Gas System L.L.C. (Gulfstream), Southern Natural Gas Company's Cypress Pipeline system (Cypress) and Gulf South Pipeline Company, L.P. (Gulf South). With this said, Cypress has direct deliveries only to markets in the

provide approximately 90% of the gas transportation capacity available into the state.

Q. Please provide a brief overview of natural gas transportation capacity into Florida via the Gulfstream and FGT systems.

**A**. FGT has the capacity to transport approximately 2.21 Bcf/day into Florida and 5 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.

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#### Q. Please provide a description of the Florida Gas Transmission system.

A. FGT's system extends from South Texas through Texas, Louisiana,
Mississippi and Alabama to its Florida markets. The system is designed to
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	А.	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
8		into the state of Florida.
9	Q.	Please describe FGT's filed Phase VIII expansion project.
10	А.	The project consists of the installation of expansion facilities necessary to
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.
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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
17		mainline system, (ii) approximately 89.8 miles of new interstate natural gas
18		pipeline, (iii) two customer laterals totaling approximately 36.1 miles, (iv)
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
23		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.

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

8 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, 9 10 Alabama. The system then extends from the Coden Compressor Station 11 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 12 13 various delivery points in Florida and terminates at its delivery point to FPL's 14 West County Energy Center in Palm Beach County, Florida. With its Phases 15 III and IV expansion projects now in service, Gulfstream has a design 16 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 MMcf/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	А.	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
		the Energy mormation Administration (EIA) of the Officed States Department
20		of Energy (DOE) over the twelve month period of December 2007 through
20 21		
		of Energy (DOE) over the twelve month period of December 2007 through
21		of Energy (DOE) over the twelve month period of December 2007 through November 2008 (the most recent 12 month period for which EIA data is

1 twelve month period of December 2007 through November 2008 was about 2 939 Bcf and natural gas demand to support electric generation during this 3 period was about 801 Bcf or approximately 85% of total demand. As depicted 4 in the table attached as Exhibit TCS-2, a comparison of natural gas 5 consumption versus capacity into the state reveals that capacity into the state 6 was utilized at an annual average load factor of nearly 70% of design pipeline 7 capacity during this period. Further, during the peak summer months of June 8 through September, capacity into the state was utilized at an approximate 9 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.

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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

1		render firm services." As further evidence of the high capacity utilization on
2		the FGT system, FGT issued approximately one hundred Alert Day Notices
3		over the past year and during the peak summer season of June through
4		September of 2008, FGT issued a total of sixty Alert Day Notices.
5	Q.	In summary, is there capacity available via the existing natural gas
6		pipeline infrastructure in Florida to support incremental firm natural gas
7		demand?
8	А.	As detailed above, the existing infrastructure is fully subscribed on a long-
9		term firm contractual basis and there is currently no existing pipeline capacity
10		available in the state to be contracted on a long-term firm basis. Further, per
11		FGT's Phase VIII expansion filing, FGT has executed precedent agreements
12		with shippers accounting for fully 731,000 MMBtu/day of the 820,000
13		MMBtu/day of Phase VIII expansion capacity. Thus, only 89,000
14		MMBtu/day (approximately 89 MMcf/day) of this Phase VIII expansion
15		capacity is unsubscribed and available. To summarize, absent the introduction
16		of incremental pipeline capacity, the existing natural gas pipeline
17		infrastructure cannot support incremental firm natural gas demand and if
18		FGT's Phase VIII project is considered, only 89,000 MMBtu/day of capacity
19		will be available after installation of Phase VIII facilities to support
20		incremental firm natural gas demand.

#### NATURAL GAS SUPPLY MIX

#### **AVAILABLE TO FLORIDA CONSUMERS**

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## Please provide a description of the natural gas supply mix accessible via 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 from traditional onshore Gulf Coast and offshore Gulf of Mexico sources and 8 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.

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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
 Gulfstream.

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.

# 10 Q. In summary, what is the overall supply mix available to the Florida 11 market via FGT and Gulfstream?

12 As discussed above, after installation of its Phase VIII facilities, FGT will Α. provide access to receipts into its system of approximately 1.33 Bcf/day of 13 14 traditional onshore Gulf Coast and offshore Gulf of Mexico supply sources 15 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 16 around the Mobile Bay Area. In summary, after the installation of FGT's 17 Phase VIII expansion project, these two pipelines will provide the Florida 18 19 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. 20

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

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3 A. After initiation of service under FGT's Phase VIII expansion project, FPL's 4 primary receipt point rights on FGT will include 680,000 MMBtu/day (approximately 680 MMcf/day) of receipts from points in and around the 5 6 Mobile Bay Area and 594,000 MMBtu/day (approximately 594 MMcf/day) of 7 receipts from traditional Gulf of Mexico supply locations. Further, FPL's primary receipt point rights on Gulfstream will include 695,000 MMBtu/day 8 9 (approximately 695 MMcf/day) of receipts from Mobile Bay Area points. In 10 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 11 12 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 15 A. categories of production including: (i) onshore Gulf Coast production; (ii) 16 shallow (depth less than 200 meters) offshore Gulf of Mexico production; and 17 (iii) deepwater (depth greater than 200 meters) offshore Gulf of Mexico 18 19 production. Production in these areas has declined over the past several years 20 and in the future, the EIA estimates production in shallow water and onshore 21 Gulf Coast fields will continue to decline slowly through 2030. More 22 specifically, within its "Annual Energy Outlook 2009," the EIA projects that onshore Gulf Coast production will decline from current (2008) levels of 23

1		5.5 Trillion cubic feet (Tcf) to 3.3 Tcf in 2030 and further projects that
2		offshore shallow water production will decline from current levels of 1.7 Tcf
3		in 2008 to 0.9 Tcf in 2030. Meanwhile, EIA further projects that deepwater
4		production will rise from a current 2008 level of 1.4 Tcf up to a peak of
5		3.1 Tcf in 2025 and then remain at levels between 2.9 and 3.1 Tcf each year
6		through 2030. While the EIA projects that deepwater production will provide
7		somewhat of an offset to declines in onshore Gulf Coast and shallow Gulf of
8		Mexico production, deepwater increases are not projected to fully offset these
9		declines. As such, the aggregate EIA projection for these three sources will
10		steadily decline from current levels of 8.6 Tcf per year to 7.3 Tcf per year in
11		2030.
12	Q.	Are forecasts for natural gas production in Mobile Bay consistent with
12 13	Q.	Are forecasts for natural gas production in Mobile Bay consistent with Gulf of Mexico forecasts?
	<b>Q.</b> A.	
13		Gulf of Mexico forecasts?
13 14		Gulf of Mexico forecasts? Yes. EIA Production forecasts for shallow water Gulf of Mexico production
13 14 15		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
13 14 15 16		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
13 14 15 16 17		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
13 14 15 16 17 18		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
13 14 15 16 17 18 19		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.

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**Q**.

## Are there any unique risks associated with onshore Gulf Coast and offshore Gulf of Mexico production?

Α. 3 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 10 (about 8.8 Bcf/day out of a total 10 Bcf/day) was shut in. In addition, in the 11 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.

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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.

A. Gulfstream and FGT share many of the same supply sources in the Mobile
Bay Area. These sources include pipeline interconnects with (a) Transco's

Mobile Bay Lateral and Gulf South Pipeline Company's Mobile Bay Lateral
 (both of which receive gas supplies from Mobile Bay Production); (b) Destin
 Pipeline Company which receives gas supplies from offshore Gulf of Mexico
 southeastern Louisiana Production Fields; and (c) the newly constructed
 SESH system.

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### Q. Are you aware of any new supply sources that will be made available to 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).

20Q.Are there any issues or concerns that need to be considered in evaluating21the Gulf LNG facility as a long-term firm gas supply source for FPL?

A. Yes. First, the Gulf LNG facility will be located in Pascagoula, Mississippi
on the Gulf Coast. As such, this facility will be subject to the same severe

1 weather conditions during hurricanes that have the potential to impact onshore Gulf Coast and offshore Gulf of Mexico production sources. Further, LNG 2 3 trades on a worldwide market and will typically be delivered to the highest 4 value market available at any given time. For example, the EIA reported that 5 during 2008 a total of about 352 Bcf of natural gas as LNG was imported into 6 the U.S. This represented about 45% of the total 771 Bcf of LNG that the EIA 7 reported was imported during 2007. This substantial reduction in LNG 8 imports is due to the fact that United States demand for LNG competes with 9 demand in other parts of the world. As a result, if demand is greater (and 10 values are higher) for LNG elsewhere in the world than in the U.S., the LNG will likely flow to the highest value market. 11 12 Q. Please provide a description of the Southeast Supply Header and natural 13 gas supplies accessible via the Southeast Supply Header. 14 A. SESH was placed into service during the fall of 2008 and consists of

15 274 miles of 42 and 36-inch pipeline extending from the Perryville Hub in 16 Northern Louisiana to its terminus at its interconnection with Gulfstream in 17 Coden, Alabama. The pipeline has a maximum transportation capacity of 18 1.0 Bcf/day. Approximately 95% of this 1 Bcf/day of pipeline capacity is 19 currently subscribed under long-term firm transportation agreements. As 20 such, while SESH has provided a needed addition of supply diversity to 21 Gulfstream and FGT in the Mobile Bay area, the pipeline, as currently 22 configured, is essentially sold out and unavailable to provide incremental 23 supply to the Florida market.

### Q. 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. A. 7 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 the Perryville Hub via SESH or directly from Mobile Bay Area supply points: 13 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. In addition to receiving traditional Gulf of Mexico production, via upstream 18 Α. 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.

1	Q.	Other than SESH, are there any other pipeline projects under
2		development that have the potential to provide the Southeast United
3		States with access to North Louisiana or East Texas Supplies?
4	А.	Yes. Boardwalk Pipeline is currently in the process of constructing three
5		expansion projects the Gulf Crossing Pipeline project, the East Texas to
6		Mississippi Expansion project and the Southeast Expansion Project that will
7		serve to transport unconventional supplies to southeast markets. In addition,
8		Kinder Morgan is currently constructing its MidContinent Express Pipeline
9		which will also provide new supply access to shippers in the Southeast. A
10		schematic illustration of SESH as well as the Boardwalk and Kinder Morgan
11		projects is attached as Exhibit TCS-3.
12	Q.	Please provide a description of Boardwalk's Gulf Crossing Pipeline, East
13		Texas to Mississippi Expansion and Southeast Expansion Projects.
14	А.	The Gulf Crossing Pipeline is a newly-created interstate pipeline. This project
15		consists of 357 miles of 42-inch pipeline extending from Sherman, Texas to
16		the Perryville Hub in Northern Louisiana and when completed will have a
17		capacity of approximately 1.7 Bcf/day. At the Perryville Hub, Gulf Crossing
18		can deliver to third party pipelines or directly into Boardwalk's East Texas to
19		Mississippi Expansion. The pipeline portion of the Gulf Crossing Pipeline
20		was completed and placed in service in February 2009 and initial compression
21		is scheduled to be in-service during the first quarter of 2009. The initial
22		capacity of these facilities is 1.2 Bcf/day. In addition, Boardwalk has applied
23		to the Pipeline and Hazardous Materials Safety Administration (PHMSA) of

1the US Department of Transportation (DOT) for the authority to operate the2system at higher operating pressures. If this approval is obtained, capacity on3the system will be increased to 1.4 Bcf/day. Finally, the second phase of this4project, consisting of compression additions, is scheduled to be in service as5of the first quarter of 2010 at which time the project will have a capacity of61.7 Bcf/day.

8 Part of Boardwalk's existing Gulf South system, the East Texas to Mississippi 9 Expansion originates at its starting point in Carthage, Texas. This project 10 consists of 242 miles of 42-inch pipeline with approximately 1.7 Bcf of peak-11 day transmission capacity. Already in-service, the East Texas to Mississippi 12 Expansion aggregates deliveries from intra-state pipelines and carries gas 13 through the Perryville Hub. The East Texas to Mississippi Expansion 14 continues from Perryville and terminates at Harrisville, Mississippi, where the 15 gas can continue along the Southeast Expansion.

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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.

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### Q. Please provide a description of the Midcontinent Express Pipeline Project.

6 A. Midcontinent Express Pipeline is a 50/50 joint venture between Kinder 7 Morgan Energy Partners, L.P. and Energy Transfer Partners, LLC. When the project is completed, the Midcontinent Express Pipeline will consist of 8 9 approximately 265 miles of 42-inch, 196 miles of 36-inch and 41 miles of 30-10 inch pipeline, associated compression and up to 13 receipt and/or delivery 11 interconnections. The project will extend from southeast Oklahoma, across 12 northeast Texas, northern Louisiana and central Mississippi, to an 13 interconnection near Transco Station 85 near Butler, Alabama. Midcontinent 14 Express is currently under construction and the first phase of the project 15 extending from Southeast Oklahoma through Delhi, Louisiana has a planned 16 in service date of April 1, 2009 with the remaining pipeline from Delhi, 17 Louisiana to Butler, Alabama planned to be in service on July 15, 2009. The 18 pipeline will have an initial capacity of up to 1.5 Bcf/day with a planned 19 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 Barnett Shale and Bossier Sands in Texas, the Fayetteville Shale in Arkansas 5 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. Q. 15 What is the outlook for Barnett, Fayetteville, Haynesville and 16 Woodford/Caney shale gas supplies in the future? A. Unlike traditional Gulf Coast sources discussed previously in my testimony, 17 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.

1 The Fayetteville, Haynesville and Woodford/Caney Shale plays have been 2 developed more recently than the Barnett Shale and production at these fields 3 has been rapidly increasing over the last several years. As per the Arkansas 4 Oil & Gas Commission, Fayetteville Shale production increased from an 5 annual total of 100 MMcf or an average of about 0.3 MMcf/day in 2004 to an 6 annual total of about 273 Bcf or an average of about 750 MMcf/day in 2008 7 and is expected to continue to grow over the next several years. Finally, the 8 Haynesville Shale and Woodford Shale production sources are in the initial 9 stages of exploration and production. With this said, these plays are also 10 expected to produce significant quantities of natural gas into the grid within 11 the next few years.

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?

14 Α. Yes. As discussed previously, after installation of pipeline facilities recently 15 placed in service, currently under construction and planned in the next few 16 years, it is projected that new third party capacity to Transco near its Station 17 85 will total about 4.7 Bcf/day (1.0 Bcf/day via SESH, 1.9 Bcf/day via 18 Boardwalk Southeast Expansion and 1.8 Bcf/day via MidContinent Express). 19 This capacity coupled with Transco's traditional capacity upstream of its 20 Station 85 of approximately 4.7 Bcf/day can provide a total of about 21 9.4 Bcf/day to the Transco Station 85 area. This total capacity will be 22 sufficient to meet the demands of all of Transco's customers as well as the 23 demand on the proposed Florida EnergySecure Line.

1	,	With respect to gas supplies accessible via this capacity, as previously
2		mentioned, the new pipeline projects are being constructed to transport the
3		growing unconventional supply sources to southeast markets. As discussed in
4		detail above, these unconventional supply sources are projected to continue to
5		grow in the next several years and the Florida EnergySecure Line will provide
6		FPL with access to this growing resource base.
7	Q.	Do you believe that the construction of the aforementioned pipeline
8		projects to provide unconventional supply sources of gas to the Transco
9		Station 85 area will have an impact on gas costs in this area?
10	А.	Yes. I believe that the addition of these incremental natural gas supplies to
11		this area via the planned and recently constructed pipeline facilities will result
12		in downward pressure on localized gas market prices in the Transco Station 85
13		area versus other natural gas supply locations. This can be confirmed in the
14		marketplace with a review of market values within Transco's Zone 4 (Transco
15		Station 85 is within Transco's Zone 4) over the past few years as well as a
16		review of the market's view of future pricing at this location.
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18		First, with respect to the past few years, prices of natural gas bought and sold
19		in Transco's Zone 4 during 2006 and 2007 (before the installation of SESH in
20		the fall of 2008) carried an average premium of about \$0.25/MMBtu versus
21		gas bought and sold at the Henry Hub, Louisiana. By comparison, natural gas
22		bought and sold at this location during the past twelve months (April 2008
23		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.

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6 Additionally, a review of basis futures contracts as traded on the NYMEX 7 ClearPort Exchange indicates that prices at this location will likely continue to 8 decline over the next few years. More specifically, the Transco Zone 4 Basis 9 Swap Futures Contracts as traded on the NYMEX ClearPort Exchange reflects 10 the market value for gas bought and sold within Transco's Zone 4 versus the 11 NYMEX futures contract for gas delivered at the Henry Hub for a given 12 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 13 calendar year 2010. Thus, the forward market currently projects that the value 14 15 of gas bought and sold within Transco's Zone 4 will continue to decline 16 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?

A. 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,

1 Gulf Coast production is projected to decline whereas shale gas production is projected to grow in the future. In addition, Gulf Coast production remains 2 subject to disruption due to hurricane activity during the peak summer 3 4 demand period. Diversification of the supply mix will mitigate the impact of 5 such disruptions on the overall natural gas supply portfolio. 6 7 **FPL FUEL REQUIREMENTS POSITION VS. INDUSTRY** 8 Q. Please describe FPL's fuel supply mix and reliance upon natural gas as a 9 10 fuel source. A. As described in Table I.A.1: Capacity Resource by Unit Type within FPL's 11 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. Q. How does the total quantity of natural gas utilized to generate electricity 18 19 in the state of Florida compare to that of other states? 20 A. As depicted in the EIA data summarized in Exhibit TCS-5, in a comparison of 21 all fifty states, the state of Florida consumed the third largest quantity of 22 natural gas to generate electricity during 2007. States in which the total 23 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 10 A. importer of natural gas from other states. In other words, more natural gas is 11 produced than consumed in the state of Texas whereas virtually all of the 12 13 natural gas consumed in the state of Florida is produced outside of the state. 14 More specifically, within its "Natural Gas Annual 2007" report, the EIA 15 reported that Florida imported a net of 915 Bcf whereas Texas exported a net 16 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 17 consumed in Florida must be imported into the state, it is clear that supply 18 19 access in Texas is greater than that available in Florida.

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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

1		within the state. In contrast, access to gas supply in the state of Florida must
2		be obtained via the interstate pipelines operating within the state. With more
3	•	than forty intrastate pipeline systems and twenty five interstate pipeline
4		systems operating in the state of Texas compared to the state of Florida, which
5		is primarily served by two interstate pipeline systems (Gulfstream and FGT),
6		it is clear that competitive access to transportation capacity available to end-
7		use consumers is more competitive in Texas than in Florida.
8	Q.	How does natural gas pipeline and supply access in Florida compare to
9		that available in California?
10	А.	Like Florida, California is a net importer of natural gas with EIA reporting net
11		natural gas imports to California of 2,103 Bcf in 2007. However, the
12		California marketplace is unique in that natural gas is primarily delivered to
13		the state border by multiple long haul interstate pipelines. The gas is then
14		transported within the state via a network of intrastate pipelines owned and
15		operated by California utilities. As reported by the EIA in its report entitled
16		"U.S. Intrastate Natural Gas Pipeline Systems - April 2007," these systems
17		include the Pacific Gas & Electric (PG&E) pipeline system with
18		approximately 3,500 miles of pipeline in service having a capacity of
19		3.2 Bcf/day, the Southern California (SoCal) Gas system with approximately
20		1,900 miles of pipeline in service and a capacity of 4 Bcf/day and the San
21		Diego Gas and Electric (SDG&E) pipeline system with approximately
22		830 miles of pipeline in service and a capacity of about 900 MMcf/day. As
23		such, unlike the Florida market, the California market is not dependent upon

interstate pipelines to deliver natural gas to ultimate consumers within the 1 2 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 3 4 supplies away from individual markets within the state to points of 5 aggregation at the state border. A consumer located on one of these utility 6 systems in California obtains access, via the utility pipeline network, to any of 7 a number of interstate pipelines delivering to the utility pipeline system, which 8 provides the end user with the potential to access multiple supply basins via 9 these upstream interstate pipeline systems. For example, Transwestern 10 Pipeline and El Paso Natural Gas receive supplies from West Texas and San Juan basin sources, Kern River Gas Transmission receives supplies from 11 12 Rocky Mountain sources and Gas Transmission Northwest (GTN) receives 13 supplies from Canadian and Rocky Mountain sources. Each of these pipelines 14 delivers to the intrastate utility systems, providing end users within California 15 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 16 facilities) can only access supplies made available via the directly connected 17 interstate pipelines of FGT and Gulfstream, which primarily provide access 18 19 only to Gulf Coast and offshore Gulf of Mexico supply sources.

What conclusions do you make with respect to natural gas supply access 1 **Q**. 2 in Florida versus access to supplies available in other states that use 3 comparable quantities of natural gas in support of electric generation? As discussed in detail above, California and Texas are the only states that 4 A. 5 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 6 7 interstate pipeline and supply basin alternatives via an extensive utility 8 intrastate pipeline network operating within the state. In Texas, generation 9 facilities often have access to multiple intrastate and interstate pipeline 10 alternatives. Unlike those in Texas and California, generators operating in 11 Florida, such as FPL, typically have access only to supplies delivered by 12 either Gulfstream or FGT and primarily from only onshore Gulf Coast and 13 offshore Gulf of Mexico supply sources. Thus, I would conclude that gas 14 supply access in Florida is not as robust as that available in comparable states 15 such as Texas and California. As such, efforts to diversify the natural gas 16 supply mix and the delivery pipeline alternatives available to the state of 17 Florida will benefit FPL as well as all consumers in the state and should be 18 pursued.

#### NEED FOR NEW NATURAL GAS

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**CAPACITY IN FLORIDA** 

- Please describe your understanding of FPL's natural gas transportation 4 **Q**. capacity requirements supporting the Florida EnergySecure Line. 5 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. These Modernization Projects will provide a total of 2,426 MW of new 9 electric generation capacity and will each have a peak natural gas demand 10 requirement of approximately 200 MMcf/day. As such, in 2014, FPL will 11 require approximately 400 MMcf/day of incremental natural gas supply to 12 accommodate the needs of these two units. 13 Can this incremental natural gas demand be met utilizing existing 14 **Q**. natural gas pipeline infrastructure in the state? 15 16 Α. No. As mentioned previously in my testimony, the incumbent pipelines 17 serving the state are fully subscribed and will remain almost fully subscribed
- 19 Projects require the addition of incremental pipeline capacity.

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after completion of proposed expansion projects. As such, the Modernization

1Q.Did FPL consider natural gas supply alternatives other than traditional2pipeline expansions such as the use of market area storage or LNG3imports to support its future natural gas requirements?

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A. Yes. My understanding is that in its initial review process, FPL considered other alternative gas infrastructure options such as the use of market-area storage or LNG imports to meet its incremental demand. However, these alternatives represent supply alternatives rather than capacity and supply alternatives to serve the market. As such, the use of either market area storage or LNG imports would still require the installation of pipeline infrastructure necessary to transport the imported LNG or stored supplies to the ultimate markets at FPL's plant site locations.

- Further, with respect to LNG imports, FPL also determined that reliance upon LNG imports located at coastal locations and subject to severe hurricane weather conditions did not provide the supply diversity and security that the company desired when targeting unconventional supplies available at the proposed inlet to the Florida EnergySecure Line project.
- Finally, with respect to market area storage facilities there are no known suitable geologic formations within the state of Florida to provide in-ground storage. As such, the only storage that could be constructed in the state would be above ground tank storage. However, FPL anticipates that the generation facilities to be served by the Florida EnergySecure Line will be operated as

base load facilities, requiring a consistent supply source to support fuel requirements. As a result, the operating parameters associated with above ground in-tank storage (cycling requirements and total stored capacity available) are not compatible with the baseload supply requirements of these generation assets.

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Q. Does FPL's load forecast include any additional natural gas requirements
in support of power generation demand beyond the CCEC and RBEC
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, during the years of 2021 through 2040, FPL projects that it will require an 12 incremental 14,931 MW of natural gas fired generation capacity requiring 13 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.

Q. In addition to FPL natural gas demand increases, are third parties in the
 state of Florida projected to increase natural gas consumption in support
 of generation requirements?

A. The 2008 Regional Load and Resource Plan published in July 2008 by the Florida Reliability Coordinating Council (FRCC) included a projection of future natural gas consumption in support of natural gas fired generation requirements. At the time the report was published, total natural gas

consumption in the state of Florida in support of natural gas fired generation 1 requirements was projected to increase by approximately 23.5% between the 2 years 2012 and 2017 from an annual usage of about 1,021 Bcf/year in 2012 to 3 an annual usage of about 1,261 Bcf/year in 2017. Assuming that this 23.5% 4 5 increase in demand is accompanied by a 23.5% increase in required 6 transportation capacity into the state, natural gas transportation into the state 7 would need to increase from the Post FGT Phase VIII statewide capacity level 8 of 4.6 Bcf/day in 2012 to a total capacity of 5.7 Bcf/day by the year 2017. 9 FPL's proposed pipeline project would initially provide about 60% of this 10 capacity into the state upon its in-service date in 2014 and could be 11 economically expanded to support 100% of this increased incremental 12 1.1 Bcf/day of statewide demand for natural gas transportation capacity to 13 support generation requirements.

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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.

Q. You have discussed natural gas demand to support electric generation. Is 1 there also potential growth in non electric generation related natural gas 2 demand in the state of Florida? 3 4 EIA data indicates that natural gas demand for electric power generation has A. represented roughly 80 to 85% of overall natural gas demand in the state of 5 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.

# Q. Will the Florida EnergySecure Line create a long-term surplus of transportation capacity into Florida?

- 14A.No. As stated above, in its first year of operation in 2014, FPL will require15400 MMcf/day of the initial 600 MMcf/day of Florida EnergySecure Line16capacity to meet the fuel requirements of its CCEC and RBEC Modernization17Projects. Subsequently, as depicted in the Base Case Resource Plan in FPL18witness Enjamio's testimony, FPL will require the entire potential expanded191.25 Bcf/day of capacity for system operations by the year 2025.
- In addition, if (a) economic conditions should change such that FPL's longterm load forecast reverts to conditions similar to earlier projections such as those projected in its 2008 Ten-Year Power Plant Site Plan, or (b) the

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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.

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6 Further, as illustrated in the FRCC's regional load and resource plan, the 7 FRCC projects that natural gas demand to meet electric requirements will 8 expand by approximately 16.5% or an average of about 750,000 MMBtu/day 9 (approximately 750 MMcf/day) by 2015. As mentioned above, while this 10 growth may be delayed due to current economic conditions, the overall 11 demand requirement would exceed the initial 600 MMcf/day capacity of the 12 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 16 A. 17 CCEC, RBEC and Martin Plant sites. Additionally, after installation of FGT's Phase VIII project, FPL will have contractual firm transportation rights on the 18 FGT system of up to 744,000 MMBtu/day to the Martin plant, 192,000 19 20 MMBtu/day to the CCEC and 180,000 MMBtu/day to the RBEC. Further, 21 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 22 23 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.								
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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.								
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16	AD	DITIONAL BENEFITS TO FLORIDA OF BUILDING THE FLORIDA								
17	Ē	NERGYSECURE LINE VS. EXPANSIONS OF EXISTING SYSTEM								
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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	А.	Yes. The addition of this pipeline will provide other benefits including								
23		improved reliability and security of natural gas deliveries to market areas in								

1		Peninsular Florida, including protection against mainline outages, supply
2		losses and the loss of single pipe service to some locations.
3	Q.	Please describe the protection against mainline outages that can be
4		provided by the new pipeline.
5	А.	As described previously in my testimony, the majority of the gas delivered to
6		Florida markets is delivered via the FGT and Gulfstream pipeline systems.
7		Portions of these pipeline systems have been looped with one or more pipes,
8		which provide a degree of protection in the event service in one pipe is
9		interrupted, while other portions of these systems rely on deliveries through a
10		single pipe. As the new pipeline will provide another source of natural gas
11		into Peninsular Florida it would be available to offset a portion of the delivery
12		capacity lost due to any potential mainline outages on the existing pipelines.
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14		Further, with respect to potential compressor outages, it is important to note
15		that the full utilization of the existing systems is dependent upon the operation

16 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 17 18 designed to operate at or near capacity in meeting contractual delivery obligations, the interruption or loss of localized compression or transmission 19 20 facilities anywhere along the pipeline system can, to some degree, impact the 21 ability of the affected pipeline to meet its firm contractual service requirements at downstream locations. Once again, the introduction of a new 22 23 large diameter pipeline into this service area will provide another delivery

option and will serve to mitigate the impact of any upstream compressor outages on local markets.

Q. The design of the new pipeline initially includes connections to only the FPL markets of RBEC, CCEC and Martin. As such, how can the new pipeline be utilized to provide protection against mainline outages at other locations?

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A. In order to provide protection against mainline outages at other locations, the 7 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 transportation contract rights with FGT to its RBEC and CCEC facilities. In 13 the event that there is an outage on the Gulfstream system, FPL could flow 14 natural gas supplies to its Martin Plant via the new pipeline and displace a like 15 amount of capacity on the Gulfstream system. Similarly, in the event that 16 there is a capacity restriction on FGT due to an upstream outage, FPL could 17 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.

In addition to displacement, because the new pipeline will be located in the vicinity of both FGT and Gulfstream near FPL's Martin Plant, the pipeline could in the future be connected to the FGT and/or Gulfstream systems at this

1 location to serve additional markets in Florida. (This would require blanket 2 certificate approval from the Federal Energy Regulatory Commission pursuant 3 to 18 C.F.R § 284.224). Further, due to its close proximity to FGT near the 4 RBEC, the new pipeline could in the future also be connected to the FGT 5 system near the RBEC. With direct connections, the new pipeline could be 6 utilized as an operational loop of the existing pipeline systems providing gas 7 supplies into the existing pipelines at these locations. If connections are 8 installed, in the event that there is an outage on either FGT or Gulfstream, the 9 new pipeline could be utilized to provide gas supplies into the affected 10 pipeline to serve Florida markets to offset capacity restrictions created by the 11 outage.

# 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 14 Α. 15 of receiving supplies only from the FGT system. My understanding is that, at 16 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 17 failure of this delivery lateral, the plants would have no available source of 18 gas supply. After connections with the new pipeline are installed at these 19 20 locations, there will be two pipelines physically connected to each plant (FGT 21 and the new pipeline). This will provide protection against the total loss of 22 natural gas supplies to the plant in the event that there is a failure on one of 23 the two pipelines serving the plant.

**Q**.

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# Please describe the protection against supply losses that can be provided by the new pipeline.

As described in detail previously in my testimony, Gulfstream and FGT are 3 A. designed to source gas supplies primarily from traditional onshore Gulf Coast 4 and offshore Gulf of Mexico supply sources. The new pipeline will provide 5 supplies from unconventional shale gas locations in North Louisiana, 6 7 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 8 9 dependent upon traditional Gulf Coast and Gulf of Mexico sources. As a 10 result, a smaller percentage of FPL's overall supply portfolio (and generation 11 capacity) will be impacted by isolated weather events such as hurricane 12 disruptions in the Gulf of Mexico.

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14 This diversity of supply has the potential to provide an operational benefit 15 through access to non-impacted supply sources during isolated weather 16 events. In addition, recognizing that short-term or long-term reductions in 17 Gulf Coast natural gas supply due to hurricanes can result in spikes in Gulf 18 Coast supply prices, the diversity of supply created via the Florida 19 EnergySecure Line has the potential to also provide a financial benefit 120 through access to non-impacted supply sources during such events.

Q. Will the new pipeline provide FPL and other Florida consumers with 1 2 increased competitive alternatives for future gas transportation capacity? 3 A. Yes. The new pipeline will introduce competition to the connected FPL 4 markets of Riviera and Cape Canaveral where today there is no competition 5 for transportation services. In addition, the majority of Peninsular Florida markets are currently accessed only by FGT. The construction of a new large 6 diameter pipeline through Peninsular Florida will provide FPL as well as other 7 8 Florida customers with access to a competitive large diameter pipeline 9 alternative in this portion of the state. To the benefit of all consumers in these 10 areas, the project will provide pipe-on-pipe competition for interstate pipeline 11 services and will provide consumers with options as to pipeline services in the 12 future. While the option value associated with this type of project is difficult to quantify, a project that permanently alters the competitive environment for 13 services such as the Florida EnergySecure Line project has the potential to 14 reap unforeseen benefits for the participant, as well as other consumers in the 15 16 vicinity of the pipeline.

# THE SOLICITATION PROCESS

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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	Α.	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

11point near FGT Station 16; and (Option 2(b)) a pipeline with a primary receipt12point near FGT Station 16 and primary delivery points at the above referenced13FPL plants.

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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.

A. The initial Solicitation included a request for three delivery quantity scenarios. These scenarios included requests for (i) 1.0 Bcf/day, (ii) 800 MMcf/day and (iii) 400 MMcf/day to various FPL delivery points in the state of Florida. All scenarios included a requirement that 200 MMcf/day be deliverable to the

RBEC and approximately 200 MMcf/day be deliverable to the CCEC. In addition, the scenarios required deliveries to other FPL sites at varying quantities.

After issuing the initial Solicitation, FPL's internal forecast of generation 5 facility requirements was revised downward such that it was clear that the 6 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 economies of scale required with these projects, a 400 MMcf/day project 9 originating at Transco Station 85 would not significantly reduce overall costs 10 versus a 600 MMcf/day project from this location and would limit potential 11 for expansions in the future. As such, FPL followed up the initial Solicitation 12 with an additional request that the bidders develop updated proposals with a 13 service quantity of 600 MMcf/day. 14

Q. Did bidders respond to FPL's Solicitation?

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A. Yes. FPL received proposals from seven different pipeline bidders with each
bidder providing multiple proposals.

Q. After reviewing bids received in the Solicitation process, did FPL identify
 the proposals that provided the lowest cost opportunities for FPL's
 customers?

A. Yes. As discussed in detail in the testimony of FPL witness Stubblefield, after
 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	А.	No. The proposal received from Company B did not provide access to the
10		preferred Transco Station 85 supply location.
11	Q.	As Company B did not include facilities in its proposal to transport gas
12		supplies from FPL's chosen supply location near Transco Station 85, did
12		
12		you develop an analysis to approximate the cost of facilities to transport
13		you develop an analysis to approximate the cost of facilities to transport
13 14	А.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project
13 14 15	А.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point?
13 14 15 16	А.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point? Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility
13 14 15 16 17	A.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point? Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility design and cost estimate to transport 600 MMcf/day of natural gas supplies
13 14 15 16 17 18	A.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point? Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility design and cost estimate to transport 600 MMcf/day of natural gas supplies from Transco Station 85 to the supply location included within the Company
13 14 15 16 17 18 19	A.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point? Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility design and cost estimate to transport 600 MMcf/day of natural gas supplies from Transco Station 85 to the supply location included within the Company B proposal and have developed an approximate cost of service for such
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> </ol>	A.	you develop an analysis to approximate the cost of facilities to transport supplies from Transco Station 85 to Company B's proposed project receipt point? Yes. As depicted on Exhibit TCS-6, I have developed an approximate facility design and cost estimate to transport 600 MMcf/day of natural gas supplies from Transco Station 85 to the supply location included within the Company B proposal and have developed an approximate cost of service for such facilities based upon recent comparable projects. As illustrated in the Exhibit,

In comparing the proposals received in response to its Solicitation 0. 1 process, do you believe that FPL applied its evaluation criteria in an 2 3 objective and fair manner? Yes. FPL utilized consistent criteria in evaluating the bid proposals and 4 Α. developed its comparison analyses of the various bids in an objective and fair 5 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 opportunities available that meet the goals of the Solicitation? 11 Yes. I agree with FPL's assessment that these were the two lowest cost 12 A. opportunities available that met the goals of the Solicitation. 13 0. Do you believe that FPL's Solicitation process was effective in providing 14 FPL with a comprehensive view of pipeline infrastructure alternatives 15 available in the marketplace versus the Florida EnergySecure Line 16 project? 17 Yes. As stated above, FPL issued its Solicitation to a broad cross section of 18 A. pipeline companies active in the Southeastern United States. Furthermore, the 19 Solicitation, while specific with respect to the requested receipt and delivery 20 points, provided the bidders with flexibility as to facilities to install and as to 21 Through this process, FPL obtained various 22 the structure of the bids. 23 alternative bid proposals from various bidders. In addition, after initial bids

1 were received, FPL continued discussions and negotiations with bidders that 2 presented the most cost effective alternatives and subsequently received 3 refined proposals from these bidders. I believe that this process was effective 4 in providing FPL with a full understanding of pipeline alternatives available in 5 the marketplace. 6 7 GAS COST SAVINGS ANALYSIS 8 Q. 9 Did you develop an independent evaluation of the overall cost of gas 10 impact associated with the Florida EnergySecure Line versus competitive proposals received by FPL in its solicitation process? 11 12 Α. Yes. As described in the testimony of FPL witness Stubblefield, the lowest 13 cost proposal received by FPL (other than the combined Upstream Pipeline Project / Florida EnergySecure Line project) was the proposal received from 14 15 Company B. As such, I have developed an independent comparative cost 16 analysis between this proposal from Company B and the combined Upstream 17 Pipeline Project / Florida EnergySecure Line. This comparative analysis is attached as Exhibit TCS-7. 18 Q. 19 Did the results of this analysis favor the Florida EnergySecure Line or 20 Company B's pipeline expansion proposal? 21 Α. The results of this analysis, which include, in my opinion, very favorable assumptions regarding costs associated with the proposal received from 22

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 **O**. Please describe the Gas Cost Savings analysis. 16 A. 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 Florida EnergySecure Line to costs that would be incurred by FPL and its 18 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 Α. 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	А.	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.

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4 With this said, FPL, in conjunction with its third party pipeline contractor 5 developed analyses of facilities and associated costs for the initial project 6 installation at a capacity of 600 MMcf/day as well as expansion increments 7 bringing the capacity up to levels of 800 MMcf/day, 1 Bcf/day and 8 1.25 Bcf/day. Further, based upon the facility and cost estimates provided. 9 FPL utilized its financial models to develop annual revenue requirements 10 required by the company to offset the costs of installation associated with the 11 initial project as well as each tranche of expansion capacity. I have utilized 12 these annual revenue requirement projections as provided by FPL's financial 13 model to represent the cost impact that the project installation would have on 14 FPL's customers.

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

17A.As a result of the Solicitation process, FPL and Company E have agreed to a18transaction reservation fee and a commodity fee with a transportation quantity19of 600,000 MMBtu/day (approximately 600 MMcf/day). The transactional20rate is utilized in the analysis for the first 600,000 MMBtu/day of21transportation capacity. Next, reviewing bids received from Company E in22response to FPL's Solicitation for the Upstream Pipeline Project at capacity23levels of 800,000 MMBtu/day (approximately 800 MMcf/day) and 1,000,000

1 MMBtu/day (approximately 1 Bcf/day) reveals that bids were slightly (less 2 than 5%) lower as capacity requirements increased. While this could imply 3 that successive capacity expansions of the Upstream Pipeline Project will be 4 slightly lower in cost than the first expansion, in order to be conservative in 5 cost assumptions, the Gas Cost Savings Analysis incorporates an assumption 6 that the cost of each successive expansion of the Upstream Pipeline Project 7 will have a consistent cost basis with the initial project cost. As such, we have 8 utilized a constant dollar cost equal to the negotiated transaction rates to 9 represent all Upstream Pipeline Project expansion costs through the project 10 life.

# 11Q.Do you believe that this is a conservative assumption with respect to the12cost associated with successive expansions of the Upstream Pipeline13Project?

14 A. Yes. It is important to note that the Upstream Pipeline Project includes the 15 installation of a section of large diameter (36-inch) pipeline that could support 16 transport quantities in excess of 1 Bcf/day without the need for pipeline 17 looping. As such, with respect to this pipeline segment, successive expansions will likely not require looping and/or installation of additional 18 19 This would indicate that successive expansions could likely be pipeline. 20 accomplished at a lower cost on the Upstream Pipeline Project than the initial 21 project. As such, I believe that holding expansion costs of the Upstream 22 Pipeline Project constant is a conservative assumption that generally 23 overstates expansion costs.

1Q.What future expansion capacity cost assumptions were utilized in the2analyses with respect to the proposal received from Company B?

3 A. The rate included in Company B's 400,000 MMBtu/day proposal is utilized in 4 the analysis to represent the cost of this first 400,000 MMBtu/day of capacity. 5 Next, reviewing bids received from Company B in response to FPL's 6 Solicitation for service levels of 400,000 MMBtu/day and 600,000 7 MMBtu/day reveals that Company B's capacity bid for 600,000 MMBtu/day 8 of capacity was slightly (less than 5%) lower than it's bid for 400,000 9 MMBtu/day of capacity. As such, similar to the Upstream Pipeline Project 10 expansion assumption, in the Gas Cost Savings Analysis, an assumption has 11 been included that the cost of each successive expansion of the Company B 12 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?

16 Yes. As noted previously, the Florida EnergySecure Line and the Upstream Α. 17 Pipeline Project will each have an initial capacity in January 2014 of about 18 600 MMcf/day (approximately 600,000 MMBtu/day). FPL's current load forecast indicates that FPL will require about 400,000 MMBtu/day 19 20 (approximately 400 MMcf/day) of natural gas to support incremental 21 generation facilities in 2014. Further, timing of successive planned 22 expansions of the Florida EnergySecure Line will not exactly coincide with 23 FPL fuel requirements through the project life. As such, during the initial

1 years of the project and periodically during later years, there will be capacity 2 available on the project in excess of that needed to support FPL generation 3 requirements. As discussed in detail earlier in my testimony, in order to 4 recover costs of excess capacity, FPL can either sell excess capacity on its 5 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 6 7 on either the Gulfstream or FGT systems to third party shippers. In order to 8 reflect potential cost recoveries associated with these releases, the Gas Cost 9 Savings Analysis assumes that FPL releases excess capacity to third parties 10 and thereby recovers a portion of its capacity costs. Finally, it is worth noting 11 that the analysis values excess capacity at one price for the whole of the 12 project (i.e., the Upstream Pipeline Project capacity and the Florida 13 EnergySecure Line capacity) thereby assuming that the capacity values are 14 related to the entire path from the supply point near Transco Station 85 to the 15 ultimate delivery point locations in the state of Florida.

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

A. 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 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 no cost recovery for excess capacity.

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#### **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 10 alternative. In fact, the Net Present Value of savings utilizing the Florida 11 EnergySecure Line / Upstream Pipeline Project alternative versus the 12 Company B alternative range from about \$230 million to about \$900 million.

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## THE FLORIDA ENERGYSECURE LINE IS THE RIGHT CHOICE

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# **O**. Is FPL's decision to initiate the Florida EnergySecure Line the right 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

1 EnergySecure Line has favorable economic results versus the most competitive proposal received via the Solicitation process. Finally, the Project 2 3 also introduces a competitive pipeline alternative and an associated option 4 value to markets in Peninsular Florida where today there is no pipeline 5 competition. While it is difficult to quantify the option value associated with 6 a project of this nature, the introduction of meaningful pipeline competition 7 into Peninsular Florida has the potential to provide unforeseen benefits for 8 FPL and its customers as well as other natural gas consumers in these areas.

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

# **TIMOTHY C. SEXTON**

# **EMPLOYMENT HISTORY**

## Gas Supply Consulting, Inc.

14811 St. Mary's, Suite 175, Houston, Texas 77079

June 1994 - Present Position: Vice President

Selected Experience at Gas Supply Consulting, Inc.

- <u>Natural Gas Infrastructure Analysis</u> Analyzed capabilities of pipeline systems in Florida to support potential natural gas fired generation installations at various locations in Florida on behalf of Florida Power & Light Company, assessed capabilities of natural gas infrastructure in Florida to meet statewide generation fuel requirements on behalf of the Florida Reliability Coordinating Council, analyzed capability of local pipeline infrastructure to receive large quantities of natural gas from proposed regasified LNG facilities in various states on behalf of large LNG importer client, analyzed natural gas pipeline infrastructure and potential infrastructure expansions available to meet utility clients natural gas demand in Wisconsin.
- <u>Solicitation and Acquisition of Natural Gas Supplies and Services</u> Actively involved in and directed natural gas supply and natural gas pipeline service capacity acquisition for utility and industrial clients. Developed RFPs, interacted with suppliers, negotiated agreement terms and negotiated contracts on behalf of clients.
- <u>Long Term Fuel Supply Plan Development</u> Prepared long term fuel supply plans for power generation development clients operating in various states for use in attracting project financing and/or for filing with state commissions as required in regulatory process to obtain construction authorizations.
- <u>Consulting for End User Clients</u> Work with clients assessing natural gas use and requirements, prepare corporate gas supply purchasing plan outlining recommended corporate purchasing strategy. Structure recommended transactions regarding supply, service and price risk management programs. Implement purchasing program on behalf of clients through negotiation of transactions with various suppliers, utilities and service providers.
- <u>Consulting for Other Portions of the Energy Industry</u> Performed consulting services for a broad spectrum of clients, both domestically and internationally, including gas marketing companies, natural gas producers, transportation and storage service providers, and customer groups.

# United Gas Pipeline Company (currently Gulf South Pipe Line Company)

# July 1993 - June 1994

Position: Regional Manager (Supply Services)

- Attracted incremental supplies to the United Gas Pipeline system by structuring service transactions and aggressively pursuing incremental gas supplies;
- Maintained exising supplies on the United Gas Pipeline system by structuring and negotiating long-term transportation agreements with connected producers;
- Cultivated relationships with onsystem gas suppliers to insure that the needs of such suppliers were met on a timely and consistent basis.

# United Gas Pipeline Company (currently Gulf South Pipe Line Company)

June 1989 - July 1993 Position: Staff Engineer (Operations Department) Associate Engineer (Engineering Department) Engineer (System Planning Department) Filled various positions of increasing responsibility within the operations, engineering, planning and marketing departments of Koch Gateway Pipeline Company, and its predecessor United Gas Pipeline Company, over this four-year period.

# **EDUCATION**

University of Houston, Houston, Texas Masters in Business Administration (Concentration in Finance), July 1993

University of Texas, Austin, Texas Bachelor of Science Degree in Civil Engineering, May 1989

# **OTHER**

Currently Licensed as a Professional Engineer in the State of Texas

Month	Natural Gas Delivered to Consumers in Florida (Including Vehicle Fuel) (MMcf) <sup>1/</sup>	Average Daily Quantity of Natural Gas to Florida Consumers (MMcf/day)	FGT Capacity into Florida (MMcf/day) <sup>2/</sup>	Gulfstream Capacity into Florida (MMcf/day) <sup>3/</sup>	Cypress Capacity into Florida (MMcf/day) <sup>4/</sup>	Gulf South Capacity into Florida (MMcf/day) <sup>5/</sup>	Total Pipeline Capacity into Florida (MMcf/day)	Load Factor (Daily Use as % of Transport Capacity)
Dec-2007	67,153	2,166	2,209	1,114	220	190	3,733	58%
Jan-2008	67,031	2,162	2,209	1,114	220	190	3,733	58%
Feb-2008	62,878	2,168	2,209	1,114	220	190	3,733	58%
Mar-2008	72,402	2,336	2,209	1,114	220	190	3,733	63%
Apr-2008	77,101	2,570	2,209	1,114	220	190	3,733	69%
May-2008	87,941	2,837	2,209	1,114	336	190	3,849	74%
Jun-2008	89,266	2,976	2,209	1,114	336	190	3,849	77%
Jul-2008	91,019	2,936	2,209	1,114	336	190	3,849	76%
Aug-2008	97,544	3,147	2,209	1,114	336	190	3,849	82%
Sep-2008	86,186	2,873	2,209	1,114	336	190	3,849	75%
Oct-2008	77,163	2,489	2,209	1,114	336	190	3,849	65%
Nov-2008	63,073	2,102	2,209	1,114	336	190	3,849	55%
Total	938,757							67%
Jun-Sept	· · · · · · · · · · · · · · · · · · ·							78%

# **Florida Pipeline Capacity Load Factor Calculation**

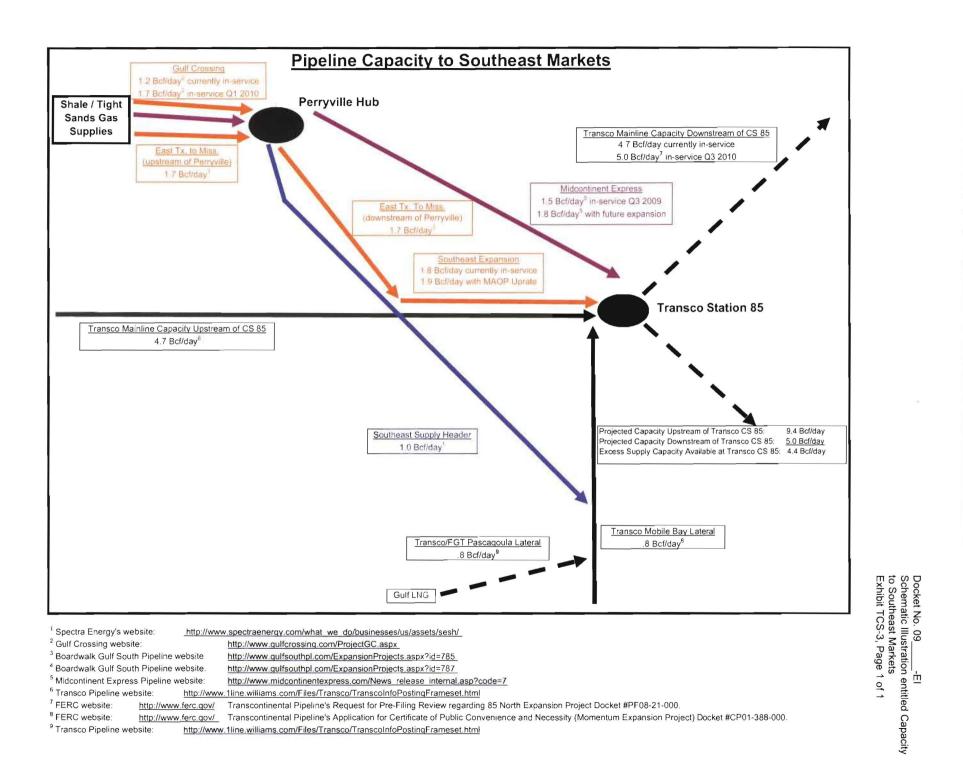
<sup>1/</sup> Natural Gas Delivered to Consumers in Florida data sourced from consumption tables on website of the Energy Information Administration of the US Department of Energy (link: http://tonto.eia.doe.gov/dnav/ng/hist/n3060fl2m.htm).

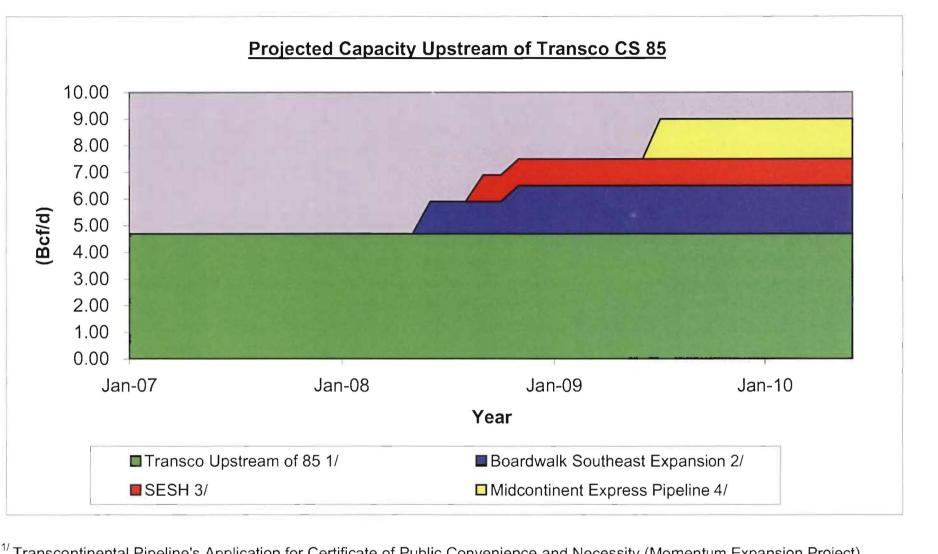
<sup>27</sup> Represents the design capacity through FGT's Compressor Stations 11 and 11A just upstream of the Florida state line and is sourced from Part A (Public and Non-Internet Public Information) of FGT's Annual System Flow Diagrams Report (Form 567) for the year 2007 as filed by FGT on June 1, 2008.

<sup>37</sup> Gulfstream Capacity into Florida represents capacity as of September 1, 2008 listed as "Maximum Firm Capacity" through Gulfstream's Station 420 on Gulfstream's Electronic Bulletin Board under the tab entitled "Unsubscribed Capacity".

<sup>4/</sup> Cypress Capacity represents Phase I capacity in service as of May 1, 2007 and Phase II capacity in service as of May 1, 2008 as depicted on the Cypress Pipeline website at link www.cypresspipeline.com.

<sup>5/</sup> Gulf South capacity into Florida as per EIA report entitled "Interstate Pipeline Capacity on a State-to-State Level" available at the following weblink: http://www.eia.doe.gov/pub/oil\_gas/natural\_gas/analysis\_publications/ngpipeline/StatetoState.xls.





<sup>1/</sup> Transcontinental Pipeline's Application for Certificate of Public Convenience and Necessity (Momentum Expansion Project) Docket #CP01-388-000.

<sup>2</sup> Boardwalk Gulf South Pipeline website: http://www.gulfsouthpl.com/ExpansionProjects.aspx?id=785

<sup>3</sup> Spectra Energy's website:

http://www.spectraenergy.com/what we do/businesses/us/assets/sesh/ <sup>4</sup> Midcontinent Express Pipeline website: http://www.midcontinentexpress.com/News release internal.asp?code=7 Docket No. 09\_\_\_\_-EI State by State Comparison of Natural Gas for Electric Generation in the United States Exhibit TCS-4, Page 1 of 1

# Total Industry - 2007 Fuel Use for Generation by State per EIA

						<u> </u>	
	Coal (Short		Natural Gas		Other Gases		Petroleum
State	Tons)	State	(Mcf)	State	(MMBtu)	State	(Barrels)
тх	102,915,788	тх	1,557,467,131	ΤX	24,744		2,699,279
CA	836,652		860,418,088		16,120		4,486,653
FL	28,518,027		775,930,007			FL	33,151,762
NY	9,543,964		398,102,590			NY	13,855,150
LA	15,462,729		379,661,007		11,560		4,636,252
ок 🛛	20,585,844		287,092,543			ок	266,872
AZ	21,296,832		279,637,794			AZ	89,310
MA	5,129,102		187,294,571			МА	5,208,456
мs	9,895,491		184,958,601			MS	720,755
AL	37,230,701		180,433,849		2,703	AL	236,641
NV	3,446,770		171,658,943			NV	24,955
NJ	4,499,820		147,064,539		2,079	NJ	895,649
PA	55,490,146		142,280,600		8,350		2,665,044
co	19,287,757	1	123,005,046			со	64,963
GA	40,976,098		122,043,388		0	GA	784,578
OR	2,577,187	OR	104,618,128		0	OR	15,891
мі	36,801,697		102,347,005		1,983	МІ	1,260,707
VA	14,430,111		90,658,114			VT	3,408,354
ст	1,838,605		73,046,330	ст	35	СТ	2,341,244
IL I	57,062,208		66,150,433	IL	1,030	IL	273,262
AR	15,652,503	AR	60,447,829	AR	0	AR	149,816
NM	15,958,762	NM	57,885,176	NM	0	NM	82,351
UT	17,064,801	UT	57,645,374	VA	0	UT	73,487
WI	24,080,440	WI	54,497,378	WA	0	WI	1,927,027
WA	5,689,233	WA	52,243,425	WI	1,987	WA	48,581
RI		RI	51,815,261	RI		RI	77,316
sc	16,612,236	SC	49,861,942	SC		SC	414,065
ME	71,304		47,448,773			ME	1,101,979
AK	498,186		41,945,565			AK	1,847,958
мо	44,209,134		40,890,265			МО	139,715
NC	32,300,133		40,396,869			NC	741,845
NH	1,625,233		39,619,806			NH	653,846
IN	60,624,931		35,642,674		25,358		293,899
он	59,546,036		34,874,144		1,821		2,098,628
MN	19,665,192	MN	34,181,437		323	MN	811,090
IA	23,454,310		25,968,547		0	IA	707,004
кs	22,779,650		25,651,861			KS	470,111
MD	11,937,518		21,481,869		4,703		1,790,746
KY	41,064,161		20,887,254			KY	5,565,579
DE	2,483,969		16,764,454		8,201		446,081
ID	19,448		12,326,337			ID	240
NE	12,275,170		10,941,958			NE	76,698
TN	27,621,231		8,228,135				345,015
WY	26,628,197		4,396,066		2,280		84,884
SD	1,690,652		4,235,097			SD WV	139,713
WV	38,067,847		4,048,525			R	356,736
MT	11,928,925		1,044,933			MT ND	824,077
ND	24,731,044		76,706 25,947			VA	99,291 20,538
VT		VA		DC			20,538 197,313
DC				HI	254		13,943,232
HI US-TOTAL	689,627 1,046,795,402	US TOTAL	7,089,342,314		114 004		112,614,638
US-IUTAL	1,040,795,402	US-IUTAL	1,009,342,314	US-IUTAL	114,504	US-IUTAL	112,014,030

Source Link: http://www.eia.doe.gov/cneaf/electricity/epa/consumption\_state.xls

Data from			Used to Approximate Required First Year				
Cost Recovery of			from Transco Station 85				
Pipeline Project		Cost Estimate (\$)	MDQ (MMBtu/day)	Proposed Negotiated Rate <sup>1/</sup> (\$/MMBtu/day)	1'st Year Cost Recovery (%)		

Data from	from from Transco CS 85					e Installation
	Pipe ID (inches)	Length (miles)	Cost Estimate (\$)	Calculated Average Pipe Cost (\$/in-diam-mile)	Capacity (MMBtu/day)	Proposed In Service Date

Estimated Cost and Calculated Approximate Cost of Service of Pipeline from Transco CS 85

							1'st Year	Calculated
Pipeline Length		Unit Cost of	Required	Unit Cost of		Contract	Cost	Unit Cost of
2/	Pipe ID	Pipeline <sup>3/</sup>	Compression 4/	Compression	Total Cost	MDQ	Recovery	Service
(miles)	(inches)	(\$/in-diam-Mile)	HP	\$/HP	(\$)	(MMBtu/day)	(%)	(\$/MMBtu)

1	
2/ Pipeline Length based upon distance between	e Transco Compressor Station 85.
3/ Unit Cost of Pipeline (in \$/in-diam-mile) is equal to average unit cost of	escalated by inflation rate of 2.5% per year from 2011 to 2012.
4/ Required Compression calculated as compression required to deliver 600,000 MMBtu/day	at assumed required pressure of 900 psig assuming a receipt pressure of 800 psig from
	2475202

Docket No. 09 \_\_\_\_\_EI Approximate Cost of Service to Transport Natural Gas from Transco CS 85 to Company B Project Exhibit TCS-6, Page 1 of 1 [Confidential]

# Life Cycle Net Savings of Upstream Pipeline Project / Florida EnergySecure Line Project vs. Company B Proposal

Case	Excess Capacity Value Assumptions	Net Savings (\$MM)	NPV of Savings (\$MM)
Case A	<ul><li>(a) Excess capacity sold at current market values for secondary capacity.</li><li>(b) Underutilized capacity economically dispatched by FPL to FPL Plants.</li></ul>	\$7,811	\$453
Case B	<ul> <li>(a) Excess capacity sold at FGT Proposed Phase VIII Project Recourse Rate.</li> <li>(b) Underutilized capacity economically dispatched by FPL to FPL Plants.</li> </ul>	\$8,933	\$897
Case C	<ul> <li>(a) Excess capacity retained by FPL.</li> <li>(b) Excess and Underutilized capacity economically dispatched by FPL to FPL Plants.</li> </ul>	\$6,962	\$233

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			Durana			Unstream Pinetir	e Project - Florid	a EnergySecure L	ine Project 1/			
Year	Demand Charges to Company B (\$/Year)	Company E Annual Cost of Fuel Retention Gas (\$/Year)	Value of Capacity	Net Gas Transport Costs (\$/Year)	Demand Charges on Upstream Pipeline Project (\$/Year)	Annual Florida EnergySecure Line Revenue Requirements (\$/Year)	Annual Cost of Fuel Gas Retained / Consumed	Upstream Pipeline Project Commodity Charges (\$/Year)	Value of Capacity Release	(\$/Year)	Potential Savings Associated with Economic Dispatch Activity (\$/Year)	Florida Energy Secure Line vs. Company B Net Savings (\$/Year)
Column	1	2	3	4	5	6	7	8	9	10	11	12
Column				Column 1 +						Sum of		Column 4 -
		Attachment II,	Attachment	Column 2 +		Attachment IIIA,	Attachment IV,	Attachment IV,	Attachment	Columns 5	Attachment VI A, Col 16	Column 10 + Column 11
Source	Attachment I	Col 14	VB, Col 5	Column 3	Attachment IIIB	Column 8	Col 13	Col 16	VA, Col 5	through 9	COLIO	Column 11
2012			(\$2,385,639)			\$25,429,102			\$0		s -	
2013			(\$11,374,467)			\$16,748,820			\$0		\$ 5,828,278	
2014			(\$37,787,231)			\$288,374,607			(\$44,124,646) (\$33,957,721)		\$ 4,133,139	
2015			N/A			\$278,493,512					\$ 3,676,767	
2016			N/A			\$267,187,914			(\$34,902,024) (\$35,676,830)		\$ 3,492,079	
2017			N/A			\$256,609,825			(\$36,568,751)		\$ 3,539,604	
2018			N/A			\$246,685,353 \$237,347,420			(\$37,482,970)		\$ 3,941,567	
2019			N/A			\$228,424,559			(\$38,525,305)		\$ 4,533,935	
2020			N/A			\$219,638,646			(\$21,864,117)		\$ 5,856,337	
2021			N/A			\$210,855,067			(\$4,456,380)		\$ 6,986,102	
2022			N/A N/A			\$223,950,971			(\$10,516,113)		\$ 5,583,921	
2023	t		N/A	1		\$229,621,800			(\$35,127,779)		\$ 4,820,803	
2024			N/A N/A			\$272,442,660			(\$52,480,334)		\$ -	
2025			N/A			\$260,520,128			(\$14,155,879)		\$ -	
2026			N/A			\$248,431,383			(\$14,509,776)		\$ -	
2027			N/A			\$236,546,383			(\$14,913,268)		\$-	
2028			N/A			\$226,038,819			(\$15,244,334)		\$ -	
2029			N/A			\$218,048,644			(\$15,625,442)		\$-	
2030			N/A			\$211,315,829			(\$16,016,078)		\$-	
2031			N/A			\$204,612,370			(\$16,461,457)		\$-	
2032			N/A			\$197,884,875			(\$16,826,892)	1	\$-	
2033 2034			N/A			\$191,197,743			(\$17,247,565)		\$ -	
2034			N/A			\$184,516,658			(\$17,678,754)		\$ -	
2035			N/A			\$177,871,805			(\$18,170,368)		\$ -	
2030			N/A			\$171,188,230			(\$18,573,741)		\$ -	
2038			N/A			\$164,611,149			(\$19,038,084)		\$-	
2039			N/A			\$158,275,795			(\$19,514,036)		\$ -	
2040			N/A			\$152,371,651			(\$20,056,687)		\$ - \$ -	
2041			N/A			\$146,968,757			(\$20,501,934)		s -	
2042			N/A			\$141,788,923			(\$21,014,483)		s -	
2043			N/A			\$136,614,736			(\$21,539,845) (\$22,138,829)		š -	
2044			N/A			\$131,446,318			(\$22,630,299)		\$ -	
2045			N/A			\$126,283,794			(\$23,196,057)		s -	
2046			N/A			\$121,865,958			(\$23,775,958)		is -	
2047			N/A			\$117,454,275			(\$24,437,125)		s -	
2048			N/A			\$113,048,878 \$108,649,904			(\$24,979,616)		š -	
2049			N/A			\$108,649,904			(\$25,604,107)		S .	
2050			N/A			\$104,257,493 \$99,630,311			(\$26,244,209)		s -	
2051			N/A			\$95,005,139			(\$26,974,014)		s -	
2052			N/A N/A			\$90,382,030			(\$27,572,822)		\$ -	
2053			N/A	<u>\</u>			Project / Florida F	nergy Secure line		et Savings		\$ 7,811,400,108
						Lipstream Pipeline	Project / Florida E	nergy Secure line	vs. Company B (@	2012) 8.35% NP\	/ Savings	\$ 453,395,071
						opsubant i penne			and the second se	and the second se		

# Summary Comparative Cost Analysis Case A - Excess Capacity Valued at 2008 Market Value

1/ As the Florida EnergySecure Line Project and the Upstream Pipeline project are not projected to be in service prior to January 2014, costs for this option in 2012 and 2013 represent short-term workaround costs required to enable testing and initial usage of the CCEC and RBEC during these years. It is assumed that these initial needs would be served via a combination of (a) re-allocation of firm transportation entitlement rights on FGT (b) acquisition of secondary market capacity and (c) the installation of onsite compression at the CCEC and RBEC care required to increase pressure of delivered gas on FGT to required levels. The RBEC compression cost is added at a level of \$25 million (as estimated by FPL. In addition, as a conservative assumption, it is assumed that econdary capacity required during these years is consistent with quantities purchased from Company B atemative and is purchased at market values (same value as release capacity is presumed sold). Finally, transportation fuel and usage costs are assumed to those with Company B service as the gas would be delivered via Company B during these years with this alternative.

		Company E	3 Proposal	÷		Upstream Pipelir	e Project - Florid	a EnergySecure L	ine Project 1/			
Year	Demand Charges to Company B (\$/Year)	Annual Cost of Fuel Retention	Value of	Net Gas Transport Costs (\$/Year)	Demand Charges on Upstream Pipeline Project (\$/Year)	Annuai Florida EnergySecure Line Revenue Requirements (\$/Year)	Annual Cost of Fuel Gas Retained / Consumed (\$/Year)	Upstream Pipeline Project Commodity Charges (\$/Year)	Value of Capacity Release Credits (\$/Year)		Potential Savings Associated with Economic Dispatch Activity (\$/Year)	Florida Energy Secure Line vs. Company B Net Savings (\$/Year)
Column	1	2	3	4	5	6	7	8	9	10	11	12
Source	Attachment I	Attachment II, Col 14	Attachment VB, Col 7	Column 1 + Column 2 + Column 3	Attachment IIIB	Attachment IIIA, Column 11	Attachment IV, Col 13	Attachment IV, Col 16	Attachment VA, Col 7	Sum of Columns 5 through 9	Attachment VI A, Col 16	Column 4 - Column 10 + Column 11
2012			\$ (7,214,935)			\$26,474,701 \$57,560,910			\$0 \$0		\$- \$-	
2013			\$ (77,857,870)						(\$151,643,803)		\$	
2014			N/A			\$288,374,607 \$278,493,512			(\$113,856,572)		\$ 4,133,139	
2015			N/A N/A			\$267,187,914			(\$114,168,508)		\$ 5,828,278 \$ 4,133,139 \$ 3,676,767	
2016 2017			N/A			\$256,609,825			(\$113,856,572)		\$ 3,492,079	
2017			N/A			\$246,685,353			(\$113,856,572)		\$ 3,539,604	
2018			N/A			\$237,347,420			(\$113,856,572)		\$ 3.941.567	
2013			N/A			\$228,424,559			(\$114,168,508)		\$ 4,533,935	
2021			N/A			\$219,638,646			(\$63,213,278)		\$ 5,856,337	
2022			N/A			\$210,855,067			(\$12,569,984)		\$ 5,856,337 \$ 6,986,102 \$ 5,583,921	
2023		_	N/A			\$223,950,971			(\$28,939,025)			
2024			N/A			\$229,621,800			(\$94,309,508)		\$ 4,820,803 \$ - \$ - \$ -	
2025			N/A			\$272,442,660			(\$137,460,369)		\$-	
2026			N/A			\$260,520,128			(\$36,173,781)		\$ -	
2027			N/A			\$248,431,383			(\$36,173,781)		\$-	
2028			N/A			\$236,546,383			(\$36,272,888)		\$ -	
2029			N/A			\$226,038,819			(\$36,173,781)		\$ - \$ -	
2030			N/A			\$218,048,644			(\$36,173,781)		\$- \$-	
2031			N/A			\$211,315,829			(\$36,173,781)			
2032			N/A			\$204,612,370			(\$36,272,888) (\$36,173,781)		\$- \$-	
2033			N/A			\$197,884,875 \$191,197,743			(\$36,173,781)		\$ -	
2034			N/A N/A			\$191,197,743			(\$36,173,781)		\$ -	
2035			N/A N/A			\$177.871.805			(\$36,272,888)		\$ -	
2036 2037			N/A			\$171,188,230			(\$36,173,781)		s -	
2037			N/A			\$164,611,149			(\$36,173,781)		- S	
2038			N/A			\$158,275,795			(\$36,173,781)		\$ -	
2039			N/A			\$152,371,651			(\$36,272,888)		\$-	
2040			N/A			\$146,968,757			(\$36,173,781)		\$-	
2042			N/A			\$141,788,923			(\$36,173,781)		- \$	
2043			N/A			\$136,614,736			(\$36,173,781)		\$-	
2044			N/A			\$131,446,318			(\$36,272,888)		\$-	
2045			N/A			\$126,283,794			(\$36,173,781)		\$ -	
2046			N/A			\$121,865,958			(\$36,173,781)		\$-	
2047			N/A			\$117,454,275			(\$36,173,781)		\$-	
2048			N/A			\$113,048,878			(\$36,272,888)		\$ -	
2049			N/A			\$108,649,904			(\$36,173,781)		\$-	
2050			N/A			\$104,257,493			(\$36,173,781)		\$ -	
2051			N/A			\$99,630,311			(\$36,173,781)		\$ - \$ -	
2052			N/A			\$95,005,139 \$90,382,030			(\$36,272,888) (\$36,173,781)		ф -	
2053			N/A				Deale at (Electric E	Canada Para			Ψ	\$ 8,933,363,977
								nergy Secure line			V Sovinge	\$ 8,933,363,977 \$ 896,913,707
						upstream Pipeline	Project / Fiorida E	nergy Secure line	vs. Company B (@	W2012 0.30% NP	v Gavings	φ 050,513,707

# Summary Comparative Cost Analysis Case B - Excess Capacity Valued at FGT Phase VIII Maximum Tariff Rate

1/ As the Florida EnergySecure Line Project and the Upstream Pipeline project are not projected to be in service prior to January 2014, costs for this option in 2012 and 2013 represent short-term workaround costs required to enable testing and initial usage of the CCEC and RBEC during these years. It is assumed that these initial needs would be served via a combination of (a) re-allocation of firm transportation entitlement rights on FGT (b) acquisition of secondary market capacity and (c) the installation of onsite compression at the CCEC and RBEC as required to increase pressure of delivered gas on FGT to required levels. The RBEC compression costs are embedded in overall Energy Secure Line project estimate and the CCEC on-site compression cost is added at a level of \$25 million (as estimated by FPL. In addition, as a conservative assumption, it is assumed that secondary capacity required during these years is consistent with quantities purchased from Company B under the Company B alternative and is purchased at market values (same value as release capacity is presumed sold). Finally, transportation fuel and usage costs are are sumed identical to those with Company B service as the gas would be delivered via Company B during these years with this alternative.

## Summary Comparative Cost Analysis Case C - Excess Capacity Given No Value in Marketplace

		Company E	3 Proposal			Upstream Pipelin	ne Project - Florid	a EnergySecure L	ine Project 1/			
Year	Demand Charges to Company B (\$/Year)	Annual Cost of	Value of	Net Gas Transport Costs (\$/Year)	Demand Charges on Upstream Pipeline Project (\$/Year)	Annual Florida EnergySecure Line Revenue Requirements (\$/Year)	Annual Cost of Fuel Gas Retained / Consumed (\$/Year)	Upstream Pipeline Project Commodity Charges (\$/Year)	Value of Capacity Release Credits (\$/Year)	(\$/Year)	Potential Savings Associated with Economic Dispatch Activity (\$/Year)	Florida Energy Secure Line vs. Company B Net Savings (\$/Year)
Column	1	2	3	4	5	6	7	8	9	10	11	12
				Column 1 +					A	Sum of	Attack man (1) (I D	Column 3 -
		Attachment II,	Attachment	Column 2 +	Attachment III	Attachment IIIA, Column 14	Attachment IV, Col 13	Attachment IV, Col 16	Attachment VA, Col 9	Columns 5 through 9	Attachment VI B, Col 16	(Column 10 - Column 11)
Source	Attachment I	Col 14	VB, Col 9	Column 3	Attachment in		60113	COLIN	\$0	unougira		column (1)
2012		\$ -	\$0 \$0			\$25,000,000 \$0			\$0 \$0		\$- \$-	
2013		\$ 10,111,164 \$ 27,496,720	\$0			\$288,374,607			\$0		\$ 15,029,194	
2014 2015		\$ 27,496,720 \$ 35,646,988	\$0			\$278,493,512			\$0		\$ 15,029,194 \$ 11,328,875	
2015		\$ 39,853,091	\$0			\$267,187,914			\$0		\$ 11,178,973	
2010		\$ 43,404,627	\$0			\$256,609,825			\$0		\$ 11,328,223	
2018		\$ 47,367,421	\$0			\$246,685,353			\$0		\$ 11,868,681	
2019		\$ 51,136,030	\$0			\$237,347,420			\$0		\$ 12,902,034	
2020		\$ 52,543,249	\$0			\$228,424,559			\$0		\$ 13,906,389 \$ 11,104,481	
2021		\$ 64,100,375	\$0			\$219,638,646			\$0		\$ 11,104,481	
2022		\$ 77,111,429	\$0			\$210,855,067			\$0		\$ 8,041,577	
2023		\$ 102,583,566	\$0	-		\$223.950.971	-		\$0		\$ 7,072,966	
2024		\$ 117,153,656	\$0			\$229,621,800			\$0		\$ 8,562,322 \$ -	
2025		\$ 144,060,449	\$0			\$272,442,660			\$0 \$0			
2026		\$ 172,326,039	\$0			\$260,520,128			\$0		\$- \$- \$-	
2027		\$ 175,759,610	\$0			\$248,431,383 \$236,546,383			\$0		\$ \$	
2028		\$ 179,752,972 \$ 182,834,115	\$0 \$0			\$226,038,819			\$0			
2029 2030		\$ 186,477,823	\$0			\$218,048,644			\$0		\$- \$-	
2030		\$ 190,194,397	\$0			\$211,315,829			\$0		\$-	
2032		\$ 194,516,761	\$0			\$204,612,370			\$0		\$-	
2033		\$ 197,852,001	\$0			\$197,884,875			\$0		\$	
2034		\$ 201,796,033	\$0			\$191,197,743			\$0		\$-	
2035		\$ 205,818,937	\$0			\$184,516,658			\$0		\$-	
2036		\$ 210,497,420	\$0			\$177,871,805			\$0		\$-	
2037		\$ 214,107,701	\$0			\$171,188,230			\$0		\$ -	
2038		\$ 218,376,811	\$0			\$164,611,149			\$0		\$-	
2039		\$ 222,731,293	\$0			\$158,275,795			\$0		\$- \$-	
2040		\$ 227,795,246	\$0			\$152,371,651			\$0 \$0		s -	
2041		\$ 231,703,238	\$0 \$0			\$146,968,757 \$141,788,923			\$0 \$0		s -	
2042		\$ 236,324,219 \$ 241,037,609	\$0 \$0			\$141,788,923 \$136,614,736			\$0		\$ -	
2043 2044		\$ 246,518,805	\$0			\$131,446,318			\$0		\$ -	
2044 2045		\$ 250,749,045	\$0			\$126,283,794			\$0		\$-	
2045		\$ 255,750,899	\$0			\$121,865,958			\$0		\$ -	
2040		\$ 260,852,779	\$0			\$117,454,275			\$0		\$ -	
2048		\$ 266,785,608	\$0			\$113,048,878			\$0		\$-	
2049		\$ 271,364,658	\$0			\$108,649,904			\$0		\$-	
2050		\$ 276,778,777	\$0			\$104,257,493			\$0		\$ -	
2051		\$ 282,301,168	\$0			\$99,630,311			\$0		5 -	
2052		\$ 288,722,853	\$0			\$95,005,139			\$0 \$0		\$ -	
2053		\$ 293,679,462	\$0			\$90,382,030		<u> </u>			ф -	£ 6 064 044 CO4
								nergy Secure line v			Souines	\$ 6,961,944,691 \$ 232,799,677
						upstream ripeline	Floject / Florida El	nergy Secure line v	s. Company B (@	(2012) 0.35% NPV	Javillys	\$ 232,799,677

1/ As the Florida EnergySecure Line Project and the Upstream Pipeline project are not projected to be in service prior to January 2014, costs for this option in 2012 and 2013 represent short-term workaround costs required to enable testing and initial usage of the CCEC and RBEC during these years. It is assumed that these initial needs would be served via a combination of (a) re-allocation of firm transportation entitlement rights on FGT (b) acquisition of secondary market capacity and (c) the installation of onsite compression at the CCEC and RBEC as required to increase pressure of delivered gas on FGT to required levels. The RBEC compression costs are embedded in overall Energy Secure Line project estimate and the CCEC on-site compression costs is added at a level of \$25 million (as estimated by FPL. In addition, as a conservative assumption, it is assumed that secondary capacity required during these years is consistent with quantities purchased from Company B under the Company B alternative and is purchased at market values (same value as release capacity is presumed sold). Finally, transportation fuel and usage costs are assumed in distance of the service as the gas would be delivered via Company B during these years with this alternative.

#### ATTACHMENT I:

2012

# Project Demand Charges Incurred with Company B Offer

2013

2014

2016

2015

2017 2018

Company B Fuel Rate Fransco 85 to Company B Fuel Rate	0.30%
Year	
Company B Proposed Rate - Escalated at 2.5	5% per year 1/
Company B Proposed Rate - Escalated at 2.5 Rate for Potential Pipeline from Transco 85 to FPL Demand (MMBtu/day)	Company B - Escalated at 2.5% per year

2.50%

Annual Cost Escalator

Company B Proposed Rate - Escalated at 2.5% per year 1/ Rate for Potential Pipeline from Transco 85 to Company B - Escalated at 2.5% per year 2/ FPL Demand (MMBtu/day)	N/A	\$	0.200	\$ 0.202 400,000	0.207 400,000	\$ 0.212 400,000		\$ 0.223 400,000
Company B Base Proposal Company B MDQ (MMBtu/day) Company B Res. Fee (\$/MMBtu)	50.000		100.000		400.000	400.000		
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	4 <sup>.</sup> \$	13,479 0.200	413,479 \$ 0.200	413,479 0.200	413,479 \$ 0.200		
Capacity Addition 1 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				- -	\$ -	\$	- - -	- s
Capacity Addition 2 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				\$ -	\$ -	\$	s	- 
Capacity Addition 3 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				\$	\$ -	- \$	- \$	- \$
Capacity Addition 4 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				\$	\$ -	\$	\$	- \$
Capacity Addition 5 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				- \$	\$ -	- \$	- \$	- \$
Capacity Addition 6 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)				\$	\$ 	- - \$	- \$	- s
Annual Cost of Reservation Charges	Γ							!

1/ In support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esclated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for sixteen months and the remaining 87.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

#### ATTACHMENT I:

#### Project Demand Charges Incurred with Company B Offer

Annual Cost Escalator Company B Fuel Rate Transco 85 to Company B Fuel Rate



				1	2021	202	_		2023		2024		2025		2026
\$	0.228 400,000	\$	0.234 400,000	\$	0.240 487,500			\$	0.252 750,000	\$	0.258 837,500	\$	0.265 1,012,500	\$	0.27 1,187,50
			400.000		400.000	_4	100.000		400.000		400.000		400.000		400.00
\$			413,479 0.200	\$	413,479 0.200			\$	413,479 0.200	\$	413,479 0.200		413,479 0.200	\$	413,47 0.20
\$	-	\$	-	\$	90,449 0.240			\$	90,449 0.240	\$	90,449 0.240	\$	90,449 0.240	\$	90,44 0.24
\$	-	\$	-	\$	-	\$	90,449 0.246	\$	90,449 0.246	\$	90,449 0.246	\$	90,449 0.246	\$	90,44 0.24
	-		-				-		175.000		175.000		175.000		175.00
Company B Base Proposal       400.000         Company B MDQ (MMBtu/day)       400.000         Company B Res. Fee (\$/MMBtu)       (grossed up for Company B Fuel)       413,479         Transco 85 to Company B Reservation Charge (\$/MMBtu)       \$ 0.200       \$         Capacity Addition 1       MDQ (MMBtu/day)       \$ 0.200       \$         MDQ (MMBtu/day)       Reservation Charge (\$/MMBtu)       (grossed up for Company B Fuel)       -         MDQ on Transco 85 to Company B (\$/MMBtu)       (grossed up for Company B Fuel)       -       \$         Transco 85 to Company B Reservation Charge (\$/MMBtu)       \$ -       \$       -       \$         MDQ on Transco 85 to Company B Reservation Charge (\$/MMBtu)       \$ -       \$       -       \$         MDQ on Transco 85 to Company B Reservation Charge (\$/MMBtu)       \$ -       \$       -       \$         Capacity Addition 2       MDQ (MMBtu/day)       \$       -       \$       \$       -       \$         MDQ (MMBtu/day)       Reservation Charge (\$/MMBtu)       (grossed up for Company B Fuel)       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$	\$	-	\$	-	\$	-	\$	180,897 0.252	\$	180,897 0.252	\$	180,897 0.252	\$	180,89 0.25	
	_		-		-		-		_		87,500		87,500		87,50
\$	-	\$	-	\$	-	\$	-	\$	-	\$	90,449 0.258	\$	90,449 0.258	\$	90,44 0.25
	-		-		-		-		-		-		175,000		175,00
\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	180,897 0.265	\$	180,89 0.26
	_		-		-		-		-		-		-		175,00
\$	-	\$	-	\$	-	\$	-	\$		\$	-	\$	-	\$	180,89 0.27
	\$	400,000 400,000 413,479 \$ 0.200 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	400,000 400,000 413,479 \$ 0.200 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	400,000 400	400,000 400,000 400,000 400,000 413,479 5 0.200 3 0.200 5 0	400,000       400,000       487,500         400,000       400,000       400,000         413,479       413,479       413,479         \$ 0.200       \$ 0.200       \$ 0.200	400,000       400,000       487,500       5         400,000       400,000       400,000       400,000       400,000         \$             413,479	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	400,000       400,000       487,500       575,000       750,000         400,000       400,000       400,000       400,000       400,000       400,000         413,479       413,479       413,479       413,479       413,479       413,479         \$       0.200       \$       0.200       \$       0.200       \$       0.200         \$       0.200       \$       0.200       \$       0.200       \$       0.200         \$       -       \$       0.240       \$       0.240       \$       0.240         \$       -       \$       0.240       \$       0.240       \$       0.240         \$       -       \$       -       \$       0.240       \$       0.240         \$       -       \$       0.246       \$       0.246       \$       0.246         \$       -       \$       -       \$       -       \$       0.252       \$       0.252         \$       -       \$       -       \$       -       \$       -       \$       0.252         \$       -       \$       -       \$       -       \$       -       \$       0.252 <td><math display="block">\begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td> <td>400,000       400,000       487,500       575,000       750,000       837,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       413,479       413,479       413,479       413,479       413,479       413,479         \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$       0.200         \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$         \$       -       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.252       \$       0.252       \$<!--</td--><td><math display="block">\begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td>400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       414,9       90,449       90,449       90,449       90,449       90,</td><td>400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       &lt;</td></td>	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	400,000       400,000       487,500       575,000       750,000       837,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       413,479       413,479       413,479       413,479       413,479       413,479         \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$       0.200         \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$       0.200       \$         \$       -       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.240       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.246       \$       0.252       \$       0.252       \$ </td <td><math display="block">\begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td> <td>400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       414,9       90,449       90,449       90,449       90,449       90,</td> <td>400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       &lt;</td>	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       414,9       90,449       90,449       90,449       90,449       90,	400,000       400,000       487,500       575,000       750,000       837,500       1,012,500         400,000       400,000       400,000       400,000       400,000       400,000       400,000       400,000         413,479       <

1/ in support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esclated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

### Project Demand Charges Incurred with Company B Offer

Annual Cost Escalator Company B Fuel Rate Transco 85 to Company B Fuel Rate



Year		2027	1	2028		2029		2030		2031		2032		2033
Company B Proposed Rate - Escalated at 2.5% per year 1/						0.000		0.299		0.307		0.315	¢	0.32
Rate for Potential Pipeline from Transco 85 to Company B - Escalated at 2.5% per year 2/ FPL Demand (MMBtu/day)	\$	0.278 1,187,500	1	0.285	3	0.292 1,187,500	•	0.299	>	1,187,500	3	1,187,500	3	1,187,50
FPL Demand (MMBRU/day)	_	1,107,500		1,107,500		1,107,000		1,107,000		1,107,000		1,107,000		1,107,00
Company B Base Proposal											İ.			
Company B MDQ (MMBtu/day)		400.000		400.000		400.000		400.000		400.000		400.000		400.00
Company B Res. Fee (\$/MMBtu)	-			440.470	1	440.470	1	140.470	1	413,479	ŀ	413,479		413.47
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		413,479 0.200		413,479 0.200	e	413,479 0.200	e	413,479 0.200		413,479	e	413,479 0.200	¢	413,47
Transco 85 to Company B Reservation Charge (\$/MMBtu)		0.200		0.200	\$	0.200	1	0.200	+	0.200	+	0.200	<b>–</b>	0.20
Capacity Addition 1					ļ									
MDQ (MMBtu/day)	1	87,500		87.500		87,500		87,500		87.500	1	87.500		87.50
Reservation Charge (\$/MMBtu)	<b>.</b>		1			00.440	1	00.440	1	00.140	I	00.440		00.44
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449 0.240		90,449 0.240		90,449 0.240		90,449 0,240		90,449 0.240	¢	90,449 0,240	e	90,44 0.24
Transco 85 to Company B Reservation Charge (\$/MMBtu)		0.240	1-2	0.240	<b>₽</b>	0.240	1	0.240	l P	0.240	1-2	0.240	-	0.24
Capacity Addition 2														
MDQ (MMBtu/day)		87,500		87,500		87,500		87,500		87,500		87,500		87,50
Reservation Charge (\$/MMBtu)		00.440	1	90,449		90,449	ł	90,449		90,449	1	90,449		90,44
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)	s	90,449 0.246	e	90,449	e	90,449	l e	90,449 0.246	6	0.246	e e	0.246	s	0.24
Transco 85 to Company B Reservation Charge (\$/MMBtu)		0.240	<u>+</u> *	0.240	\$	0.240	L.	0.240	<b>├</b> ╨──	0.240	<b>*</b>	0.240	<u> </u>	0.24
Capacity Addition 3														
MDQ (MMBtu/day)		175.000		175.000		175.000		175.000		175.000		175.000	وعدينا	175.000
Reservation Charge (\$/MBtu)	1	400 007		180,897	1	180.897	1	180.897		180.897	I	180.897		180.89
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	s	180,897 0.252	e	0.252	e	0.252	•	0.252	e	0.252	¢	0.252	\$	0.25
Transco 65 to Company B Reservation Charge (\$7000bit)	+*	0.252	┞	0.202	Ť	0.202	<u> </u> ₩	0.202	۱Ť	0.202	<u>ا</u> ٹ	0.202	<u> </u>	0.20
Capacity Addition 4														
MDQ (MMBtu/day)		87,500		87,500		87,500		87,500		87,500		87,500		87,500
Reservation Charge (\$/MMBtu)		90,449	1	90,449		90,449	1	90,449		90,449		90,449		90,44
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	s	0.258	s	0.258	\$	0.258	\$	0.258	s	0.258	s	0.258	\$	0.25
Transco os to company o reast valor charge (unimoto)	Ť	01200	<u> </u>		Ť		ŕ							
Capacity Addition 5						.==		175 000		175 000		475 000		475.00
MDQ (MMBtu/day)		175,000		175,000		175,000		175,000		175,000	1	175,000		175,000
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897	1	180,897	1	180,897		180,897		180,897		180,897		180,89
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.26
Capacity Addition 6		175,000	1	175,000		175,000		175,000		175,000		175,000		175,00
MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)		175,000	1	175,000		175,000		175,000		175,000		10,000	انتصا	173,00
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897	1	180,897	1	180,897	1	180,897		180,897		180,897		180,89
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.27
											Į			
Annual Cost of Reservation Charges														

1/ In support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esclated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for sixteen months and the remaining 87.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

### Project Demand Charges Incurred with Company B Offer

Annual Cost Escalator 2.50% Company B Fuel Rate Transco 85 to Company B Fuel Rate 0.30%										
Year	2034		2035	2036		2037	2038	2039	2040	2041
Company B Proposed Rate - Escalated at 2.5% per year 1/ Rate for Potential Pipeline from Transco 85 to Company B - Escalated at 2.5% per year 2/ FPL Demand (MMBtu/day)	\$0.3 1,187,5	30 <b>\$</b> 00	0.339 1,187,500		).347 7,500	\$ 0.356 1,187,500	\$ 0.365 1,187,500	\$ 0.374 1,187,500	\$ 0.383 1,187,500	\$ 0.393 1,187,500
Company B Base Proposal Company B MDQ (MMBtu/day)	400,0	00	400,000	40	0,000	400,000	400,000	400,000	400,000	400,000
Company B Res. Fee (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	413,4 \$ 0.2	79 00 \$	413,479 0.200		3,479 0.200	\$ 413,479 0.200	\$ 413,479 0.200	\$ 413,479 0.200	\$ 413,479 0.200	\$ 413,479 0.200
Capacity Addition 1 MDQ (MMBtu/day)	87.5	00	87.500	8	7.500	87.500	87.500	87.500		87.500
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	90,4 \$ 0.2	49 40 \$	90,449 0 <u>.240</u>		),449 ).240	\$ 90,449 0.240	\$ 90,449 0.240	90,449 0.240	\$ 90,449 0.240	\$ 90,449 0.240
Capacity Addition 2 MDQ (MMBtu/day)	87,5	00	87,500		7,500	87,500	87,500	87,500	87,500	87,500
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	90,4 \$ 0.2	49 46 \$	90,449 0.246		),449 ).246	\$ 90,449 0.246	\$ 90,449 0.246	\$ 90,449 0.246	\$ 90,449 0.246	\$ 90,449 0.246
Capacity Addition 3 MDQ (MMBtu/day)	175,0	00	175,000	17	5,000	175,000	175,000	175,000	175,000	175,000
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	180,8 \$ 0.2	97 52 <b>\$</b>	180,897 0.252		),897 ).252	\$ 180,897 0.252	\$ 180,897 0.252	\$ 180,897 0.252	\$ 180,897 0.252	\$ 180,897 0.252
Capacity Addition 4 MDQ (MMBtu/day)	87,5	00	87,500	8	7,500	87,500	87,500	87,500	87,500	87,500
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	90,4 \$	49 58 \$	90,449 0.258		),449 ).258	\$ 90,449 0.258	\$ 90,449 0.258	\$ 90,449 0.258	\$ 90,449 0.258	\$ 90,449 0.258
Capacity Addition 5 MDQ (MMBtu/day)	175,0	00	175,000	17	5,000	175,000	175,000	175,000	175,000	175,000
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	180,8 \$ 0.2	97 65 \$	180,897 0.265		),897 ).265	\$ 180,897 0.265	\$ 180,897 0.265	\$ 180,897 0.265	\$ 180,897 0.265	\$ 180,897 0.265
Capacity Addition 6 MDQ (MMBlu/day)	175.0	00	175.000	17	5.000	175.000	175.000	175.000	175.000	175.000
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel) Transco 85 to Company B Reservation Charge (\$/MMBtu)	180,8 \$ 0.2	97 71 \$	180,897 0.271	18 \$	),897 ).271	\$ 180,897 0.271	\$ 180,897 0.271	\$ 180,897 0.271	\$ 180,897 0.271	\$ 180,897 0.271
Annual Cost of Reservation Charges										

1/ In support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esciated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for sixteen months and the remaining 87.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

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### Project Demand Charges Incurred with Company B Offer

Annual Cost Escalator	
Company B Fuel Rate	
Transco 85 to Company B Fuel Rate	

2.50% 0.30%

Year		2042		2043		2044		2045		2046		2047		2048		2049
Company B Proposed Rate - Escalated at 2.5% per year 1/	s	0.403	l c	0.413	C	0.423	¢	0.434	\$	0.444	¢	0.456	s	0.467	1 \$	0.47
Rate for Potential Pipeline from Transco 85 to Company B - Escalated at 2.5% per year 2/ FPL Demand (MMBtu/day)	1	1,187,500	L.	1,187,500	<b>°</b>	1,187,500	ľ	1,187,500		1,187,500	Ψ	1,187,500	Ŧ	1,187,500	Ľ.	1,187,50
			1				T									
Company B Base Proposal								100.000		400.000		400.000		400.000		400.00
Company B MDQ (MMBtu/day)		400,000		400,000		400,000		400,000		400,000		400,000		400,000		400,0
Company B Res. Fee (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		413,479	r	413,479		413,479	1	413,479		413,479		413,479		413,479		413.4
Transco 85 to Company B Reservation Charge (\$/MMBtu)	s	0.200	s	0.200	s	0,200	s	0.200	\$	0.200	s	0.200	\$	0.200	s	0.2
Transco os to company o reservation charge (@MMD.td)	Ť	0.200	Ť		Ť		<u> </u>		*						-	
Capacity Addition 1																
MDQ (MMBtu/day)		87,500		87,500		87,500		87,500		87,500		87,500		87,500		87,5
Reservation Charge (\$/MMBtu)							1	00.440.		90,449		00.440		00.440	6	90.4
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449 0.240	<b>^</b>	90,449 0,240		90,449 0,240		90,449 0.240	•	90,449 0,240	\$	90,449 0,240	e	90,449 0,240	le l	90,4
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.240	3	0.240	-≫	0.240	₽_	0.240	\$	0.240	\$	0.240	\$	0.240	<del>ہ</del>	0.2
apacity Addition 2																
MDQ (MMBtu/day)		87,500		87,500		87,500		87,500		87,500		87,500		87,500		87,5
Reservation Charge (\$/MMBtu)																
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449		90,449		90,449		90,449		90,449		90,449		90,449		90,4
Fransco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.246	\$	0.246	\$	0.246	\$	0.246	\$	0.246	\$	0.246	\$	0.246	\$	0.2
capacity Addition 3		175,000		175,000		175,000		175.000		175,000		175,000		175.000		175.0
MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)		175,000		175,000		110,000		110,000		170,000		110,000				
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180.897	Γ	180,897		180,897		180,897		180,897		180,897		180,897		180,8
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.252	\$	0.252	\$	0.252	\$	0.252	\$ ·	0.252	\$	0.252	\$	0.252	\$	0.2
Capacity Addition 4 MDQ (MMBtu/day)		87,500		87,500		87,500		87,500		87,500		87,500		87,500		87,5
Reservation Charge (\$/MMBtu)		07,000		0.,000			L.,	0110000								
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449		90,449		90,449		90,449		90,449		90,449		90,449		90,4
Fransco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.258	\$	0.258	\$	0.258	\$	0.258	\$	0.258	\$	0.258	\$	0.258	\$	0.2
a a star Astalita a P																
apacity Addition 5 MDQ (MMBtu/day)		175,000		175,000		175,000		175,000		175,000		175,000		175,000		175,0
Reservation Charge (\$/MMBtu)		113,000		110,000		110,000		110,000			Ĩ					
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897		180,897		180,897		180,897		180,897		180,897		180,897		180,8
Fransco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.265	\$	0.2
apacity Addition 6		475 000		475.000		175,000		175,000		175,000		175,000		175,000		175.0
MDQ (MMBtu/day)		175,000		175,000		1/5,000		175,000		175,000		175,000		175,000		175,0
Reservation Charge (\$/MMBtu) /IDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897		180,897		180,897		180,897		180,897		180,897		180.897		180.8
Transco 85 to Company B Reservation Charge (\$/MMBtu)	s	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.271	\$	0.2
Talloo oo lo company o riccortatori chargo (pinino a)	+															
Annual Cost of Reservation Charges																

1/ In support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esciated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

### Project Demand Charges Incurred with Company B Offer

Annual Cost Escalator	2.50%
Company B Fuel Rate	
Transco 85 to Company B Fuel Rate	0.30%

Year		2050	20	51		2052		2053
Company B Proposed Rate - Escalated at 2.5% per year 1/								
Rate for Potential Pipeline from Transco 85 to Company B - Escalated at 2.5% per year 2/	\$	0.491		0.503	\$	0.515	\$	0.528
FPL Demand (MMBtu/day)		1,187,500	1,	187,500		1,187,500		1,187,500
Company B Base Proposal								
Company B MDQ (MMBtu/day)		400,000		400.000		400.000		400,00
Company B Res. Fee (\$/MMBtu)								
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		413,479		413,479		413,479		413,479
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.200	\$	0.200	\$	0.200	\$	0.200
apacity Addition 1								
MDQ (MMBtu/day)		87.500		87.500		87,500		87.50
Reservation Charge (\$/MMBtu)		01,000		01,000				0,100
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449		90,449		90,449		90,44
Transco 85 to Company B Reservation Charge (\$/MMBtu)	s	0.240	s	0.240	\$	0.240	\$	0.24
Transco os to company o reservator charge (environte)	+	0.210	<u> </u>	0.210	<u>*</u>		<u> </u>	
Capacity Addition 2		87,500		87,500		87,500		87,50
MDQ (MMBtu/day)		67,300		01,000		07.000		07,50
Reservation Charge (\$/MMBtu) MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449	1	90,449		90,449		90,44
Fransco 85 to Company B Reservation Charge (\$/MMBtu)	s	0.246	s	0.246	¢	0.246	s	0.24
Transco 85 to Company & Reservation Charge (animatic)		0.240	Ψ.	0.240	¥	0.240	<b>*</b>	0.24
apacity Addition 3						175 000		475.00
MDQ (MMBtu/day)		175,000		175,000		175,000		175,00
Reservation Charge (\$/MMBtu)		100 007	1	400 007		400.007	[	400.00
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897		180,897 0.252		180,897		180,89
Transco 85 to Company B Reservation Charge (\$/MMBtu)	-  \$	0.252	\$	0.252	\$	0.252	-⊅	0.25
Sapacity Addition 4								
MDQ (MMBtu/day)		87,500		87,500		87,500		87,50
Reservation Charge (\$/MMBtu)			1		_			
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		90,449		90,449	_	90,449		90,44
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.258	\$	0.258	\$	0.258	\$	0.25
apacity Addition 5								
MDQ (MMBtu/day)		175,000		175,000		175,000		175,00
Reservation Charge (\$/MMBtu)								
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897		180,897		180,897		180,89
Transco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.265	\$	0.265	\$	0.265	\$	0.26
apacity Addition 6								
MDQ (MMBtu/day)		175,000		175,000		175,000		175,00
Reservation Charge (\$/MMBtu)								
MDQ on Transco 85 to Company B (\$/MMBtu) (grossed up for Company B Fuel)		180,897		180,897		180,897		180,89
Fransco 85 to Company B Reservation Charge (\$/MMBtu)	\$	0.271	\$	0.271	\$	0.271	\$	0.27
Innual Cost of Reservation Charges								

1/ In support of future (beyond proposal capacity) natural gas demand, the Company B proposal rate has been esclated at an annual average of 2.5% per year. As initial proposal included 50,000 MMBtu/day in service Sept 1, 2012 and 350,000 in service Sept 1, 2013, the escalated rate in 2014 includes an escalation of 12.5% of the cost at 2.5% per year for sixteen months and the remaining 87.5% of the cost at 2.5% per year for four months.

2/ Assumes lateral to Transco St 85 placed in service in Sept. 2013.

### Projected Usage / Commodity Charges Incurred by FPL with Company B Offer

			Fuel Gas Reta	ined on Comp	any B System		Fuel Gas Retain	ned on Lateral fro	m Transco 8	5 to Company B	1	Calculated Co	pany B Calculated Cost of Fuel Gas			
		Proposed	Average	Annual			Contract									
	FPL Natural	Contract	Load	Throughput	Company B	Company B	MDQ	Annual	Projected	Lateral		Basis to		Annual		
	Gas Demand	MDQ on	Factor for	on	Fuel	Fuel Gas	Lateral	Throughput	Lateral	Fuel Gas	Henry Hub	Transco	Unit Cost	Cost of		
	Served	Company B	New Capacity	Company B	Rate	Retained	Extension	on Lateral	Fuel Rate	Retained	Cost of Gas	Zone 4	of Fuel Gas	Fuel Gas		
Year	(MMBtu/day)	(MMBtu/day)	(%) 1/	(MMBtu)	%	(MMBtu)	(MMBtu/day)	(MMBtu)	% 2/	(MMBtu)	(\$/MMBtu) 3/	(\$/MMBtu) 4/	(\$/MMBtu)	<u> </u>		
Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	FPL Load						Col 2//1 - Col	Col 7 * days in	See Ecotnote	[Col 8 / (1- Col	See Ecotnote	See Ecotrote		Col 13 * (Col		
Source	Forecast	Col 1	See Footnote	See Footnote		5)] - Col 4	5)	vear * Col 3	2/	9)] - Col 8	3/	4/	12	6 + Col 10)		
2012	50,000	50,000	0%					,	0.30%		\$ 8.130			0 00 10		
2012	400,000	400,000	54%	32,916,000				34,025,222	0.30%	102,383			\$ 8.3453			
2014	400,000	400.000	59%	85,422,300				88,300,910	0.30%	265,700	\$ 8.692		\$ 8,7449			
2015	400,000	400,000	72%	104,757,800				108,287,988	0.30%	325,841	\$ 9.192		\$ 9.2445			
2016	400,000	400,000	76%	111,114,000				114,858,383	0.30%	345,612	\$ 9.692		\$ 9.7440			
2017	400,000	400,000	78%	114,002,300				117,844,015	0.30%	354,596	\$ 10.291		\$ 10.3435			
2018	400,000	400,000	79%	115,486,300				119,378,024	0.30%	359,212	\$ 11.090		\$ 11.1428			
2019	400,000	400,000	78%	114,415,400				118,271,036	0.30%	355,881	\$ 12.089		\$ 12.1420			
2020	400,000	400,000	76%	111,570,500				115,330,267	0.30%	347,032	\$ 12.742		\$ 12.7942			
2021	487,500	487,500	75%	133,453,125				137,950,305	0.30%	415,096	\$ 12.997	\$ 0.0525	\$ 13.0490			
2022	575,000	575,000	75%	157,406,250				162,710,616	0.30%	489,601	\$ 13.256	\$ 0.0525	\$ 13.3089			
2023	750,000	750,000	75%	205,312,500				212,231,238	0.30%	638,610	\$ 13.522	\$ 0.0525	\$ 13.5740			
2024	837,500	837,500	75%	229,893,750			-	237,640,841	0.30%	715,068	\$ 13.792	\$ 0.0525	\$ 13.8444			
2025	1,012,500	1,012,500	75%	277,171,875				286,512,172	0.30%	862,123	\$ 14.068	\$ 0.0525	\$ 14.1202			
2026	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 14.349	\$ 0.0525	\$ 14.4015			
2027	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 14.636	\$ 0.0525	\$ 14.6885			
2028	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%	1,013,902	\$ 14.929	\$ 0.0525	\$ 14.9812			
2029	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 15.227	\$ 0.0525	\$ 15.2797			
2030	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 15.532	\$ 0.0525	\$ 15.5842			
2031	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 15.842	\$ 0.0525	\$ 15.8948			
2032	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%	1,013,902	\$ 16.159	\$ 0.0525	\$ 16.2116			
2033	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 16.482		\$ 16.5348			
2034	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 16.812		\$ 16.8644			
2035	1,187,500	1,187,500	75%	325,078,125				336,032,7 <del>9</del> 4	0.30%	1,011,132	\$ 17.148		\$ 17.2006			
2036	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%	1,013,902	\$ 17.491		\$ 17.5435			
2037	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 17.841		\$ 17.8933			
2038	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 18.198		\$ 18.2501			
2039	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 18.561		\$ 18.6140			
2040	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%		\$ 18.933		\$ 18.9852			
2041	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 19.311		\$ 19.3638			
2042	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 19.697		\$ 19.7500			
2043	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%		\$ 20.091		\$ 20.1439			
2044	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%		\$ 20.493		\$ 20.5457			
2045	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 20.903		\$ 20.9555			
2046	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%	1,011,132	\$ 21.321		\$ 21.3735			
2047	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%		\$ 21.747		\$ 21.7999			
2048	1,187,500	1,187,500	75%	325,968,750				336,953,432	0.30%		\$ 22.182		\$ 22.2348			
2049	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%		\$ 22.626		\$ 22.6784			
2050	1,187,500	1,187,500	75%	325,078,125				336,032,794	0.30%		\$ 23.078		\$ 23.1308			
2051	1,187,500	1,187,500	75% 75%	325,078,125				336,032,794	0.30%		\$ 23.540		\$ 23.5923			
2052 2053	1,187,500 1,187,500	1,187,500 1,187,500	75% 75%	325,968,750 325,078,125				336,953,432 336,032,794	0.30% 0.30%	1,013,902 1,011,132	\$ 24.011 \$ 24.491		\$ 24.0631 \$ 24.5432			

1/ Annual Throughput for the years 2012 through 2020 as per FPL annual gas consumption projections for RBEC and CCEC facilities with Load Factor percentage then calculated as percentage of available capacity. Annual throughput for the years 2021 and beyond based upon assumed 75% capacity usage load factor.

2/ Calculated fuel rate to transport 600,000 MMBtu/day from Transco 85 at 800 psig to Company B at 900 psig via proposed approximate 72 mile 30" pipeline.

3/ Henry Hub Cost of Gas equal to price included in FPL fuel price forecast developed in November 2008.

4/ Basis differential between Henry Hub and Transco Station 85 equal to value included within FPL fuel price forecast developed in November 2008.

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#### Total Annual Revenue Requirements for Florida EnergySecure Line Project

									Value of Incr	emental Capa	city Purchases			1
	RR to offset P	oject Investment	Increme	ntal Capacity Re	quired	Cas	e A - Current M	arket		FGT Phase III		Case C - No	Spot Market Ca	pacity Value
	Cost of On- Site Compression	Annual Florida	Peak Day Demand Served	Florida EnergySecure	incremental Capacity to be	Unit Cost of	Cost of Spot	Total Cost of	Unit Cost of	Cost of Spot		Unit Cost of	Cost of Spot	Total Cost of
	at CCEC	EnergySecure	by Incremental	Line Project	Purchased in	Spot Market	Market	Energy Secure	Spot Market	Market	Energy Secure	Spot Market	Market	Energy Secure
	Facility	Line Revenue	Capacity	Capacity	Spot Market	Capacity	Capacity	Line Project	Capacity	Capacity	Line Project	Capacity	Capacity	Line Project
Year	(\$)	Requirements (\$)	(MMBtu/day)	(MMBtu/day)	(MMBtu/day)	(\$/MMBtu)	(\$)	(\$)	(\$/MMBtu)	(\$)	(\$)	(\$/MMBtu)	(\$)	(\$)
Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		FPL Revenue						0-14 - 0-12 -	See Footnote	Co! 5 * Col 9 *	Col 1 + Col 2 +		Col 5 * Col 12	
	FPL	Requirements	0	C F	Column 3 -	See Footnote	days	Col 1 + Col 2 + Col 7	5/	days	Col 10	See Footnote 6/		Col 13
Source	Engineering	Analysis 1/	See Footnote 2/		Column 4				\$ 1.5857	\$0		6	\$0	\$25,000,000
Sept 1, 2012 - Dec 1, 2012	\$25,000,000	\$0	30.000	0	0 30,000		\$0 \$429,102		3 1.5857 \$ 1.5857	\$0 \$1,474,701	\$25,000,000 \$1,474,701	\$ - ¢	\$0	\$25,000,000
Dec 1, 2012 - Jan 1, 2013	\$U	\$0 \$0	30,000	0	30,000		\$816.678	\$816,678	\$ 1.5857	\$2,806,689		ŝ -	\$0	\$0
Jan 1, 2013 - March 1, 2013	\$0 \$0		50,000	0	50,000		\$4,244,880	\$4,244,880	\$ 1.5857	\$14,588,440		\$ -	\$0	\$0
March 1, 2013 - Sept 1, 2013 Sept 1, 2013 - Dec 1, 2013	\$0 \$0	\$0 \$0	200,000	0	200,000		\$8,397,480	\$8,397,480	\$ 1.5857	\$28,859,740		\$ -	\$0	\$0
Dec 1, 2013 - Jan 1, 2014	\$0 \$0	\$0	230,000	ő	230,000		\$3,289,782		\$ 1.5857	\$11,306,041		š -	\$0	\$0
Jan 1, 2014 - March 1, 2014	\$0		230,000	596,718	0		\$0		\$ 1.5857	\$0		\$ -	\$0	\$46,613,978
March 1, 2014 - June 1, 2014	ŝo		250,000	596,718	ō		\$0		\$ 1.5857	\$0	\$72,686,202	\$ -	\$0	\$72,686,202
June 1 2014 - Jan 1 2015	so	\$169,074,427	400,000	596,718	0	•	\$0		\$ 1.5857	\$0	\$169,074,427	\$ -	\$0	\$169,074,427
2015	\$0	\$278,493,512	400,000	596,718	0	\$ 0.4729	\$0	\$278,493,512	\$ 1.5857	\$0	\$278,493,512	\$-	\$0	\$278,493,512
2016	\$0	\$267,187,914	400,000	596,718	0	\$ 0.4848	\$0	\$267,187,914	\$ 1.5857	\$0	\$267,187,914	\$-	\$0	\$267,187,914
2017	\$0	\$256,609,825	400,000	596,718	0	\$ 0.4969	\$0		\$ 1.5857	\$0		\$-	\$0	\$256,609,825
2018	\$0	\$246,685,353	400,000	596,718	0	\$ 0.5093	\$0	\$246,685,353	\$ 1.5857	\$0		\$-	\$0	\$246,685,353
2019	\$0	\$237,347,420	400,000	596,718	0	\$ 0.5220	\$0	\$237,347,420	\$ 1.5857	\$0		\$-	\$0	\$237,347,420
2020	\$0	\$228,424,559	400,000	596,718	0		\$0	\$228,424,559	\$ 1.5857	\$0		s -	\$0	\$228,424,559
2021	\$0	\$219,638,646	487,500	596,718	0		\$0			\$0		\$ -	\$0	\$219,638,646
2022	\$0	\$210,855,067	575,000	596,718	0		\$0		\$ 1.5857	\$0		\$ -	\$0	\$210,855,067
2023	\$0	\$223,950,971	750,000	800,000	0		\$0	\$223,950,971	\$ 1.5857	\$0		s -	\$0	\$223,950,971
2024	\$0	\$229,621,800	837,500	1,000,000	0		\$0	\$229,621,800		\$0		5 -	\$0	\$229,621,800
2025	\$0	\$272,442,660	1,012,500	1,250,000	0		\$0	\$272,442,660	\$ 1.5857	\$0		<u> </u>	\$0	\$272,442,660
2026	\$0	\$260,520,128	1,187,500	1,250,000	0		\$0	\$260,520,128	\$ 1.5857	\$0		-	\$0 \$0	\$260,520,128 \$248,431,383
2027	\$0	\$248,431,383	1,187,500	1,250,000	0		\$0 \$0	\$248,431,383	\$ 1.5857 \$ 1.5857	\$0 \$0			so	\$236,546,383
2028	\$0	\$236,546,383	1,187,500	1,250,000	0		\$0	\$236,546,383 \$226,038,819	\$ 1.5857	\$0			\$0	\$226,038,819
2029	\$0	\$226,038,819	1,187,500	1,250,000	0		\$0	\$218,048,644	\$ 1.5857	\$0		č –	ŝo	\$218,048,644
2030	\$0	\$218,048,644	1,187,500 1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		s .	so	\$211,315,829
2031	\$0 \$0	\$211,315,829	1,187,500	1,250,000	0		\$0	\$204,612,370	\$ 1.5857	\$0		é .	\$0	\$204,612,370
2032 2033	\$0 \$0	\$204,612,370 \$197,884,875	1,187,500	1,250,000	ŏ	•	\$0	\$197,884,875		\$0		5 -	so	\$197,884,875
2033	\$0 \$0	\$197,004,075	1,187,500	1,250,000	ŏ		\$0	\$191,197,743	\$ 1.5857	so		s -	\$0	\$191,197,743
2034 2035	\$0	\$184,516,658	1,187,500	1,250,000	ŏ		so		\$ 1,5857	\$0		š -	\$0	\$184,516,658
2035	\$0	\$177,871,805	1,187,500	1,250,000	ő		\$0		\$ 1.5857	\$0		\$ -	\$0	\$177,871,805
2030	\$0	\$171,188,230	1,187,500	1,250,000	ŏ		\$0	\$171,188,230	\$ 1.5857	\$0		\$-	\$0	\$171,188,230
2037	\$0	\$164,611,149	1,187,500	1,250,000	ő		\$0	\$164,611,149	\$ 1.5857	\$0		\$-	\$0	\$164,611,149
2039	\$0	\$158,275,795	1,187,500	1,250,000	ō		\$0	\$158,275,795	\$ 1.5857	\$0	\$158,275,795	\$-	\$0	\$158,275,795
2040	\$0	\$152,371,651	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		\$-	\$0	\$152,371,651
2041	\$0	\$146,968,757	1,187,500	1,250,000	0		\$0	\$146,968,757	\$ 1.5857	\$0		\$-	\$0	\$146,968,757
2042	\$0	\$141,788,923	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		\$-	\$0	\$141,788,923
2043	\$0	\$136,614,736	1,187,500	1,250,000	0		\$0			\$0		\$-	\$0	\$136,614,736
2044	\$0	\$131,446,318	1,187,500	1,250,000	0		\$0	\$131,446,318	\$ 1.5857	\$0		\$ -	\$0	\$131,446,318
2045	\$0	\$126,283,794	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		ş -	\$0	\$126,283,794
2046	\$0	\$121,865,958	1,187,500	1,250,000	0		\$0	\$121,865,958	\$ 1.5857	\$0		\$ -	\$0	\$121,865,958
2047	\$0	\$117,454,275	1,187,500	1,250,000	0		\$0	\$117,454,275	\$ 1.5857	\$0		а с	\$0	\$117,454,275
2048	\$0	\$113,048,878	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		· ·	\$0	\$113,048,878
2049	\$0	\$108,649,904	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0	*	÷ -	\$0	\$108,649,904
2050	\$0	\$104,257,493	1,187,500	1,250,000	0		\$0		\$ 1.5857	\$0		÷ -	\$0 \$0	\$104,257,493
2051	\$0	\$99,630,311	1,187,500	1,250,000	0		\$0		\$ 1.5857 \$ 1.5857	\$0 \$0		\$ - \$ -	\$0 \$0	\$99,630,311 \$95,005,139
2052	\$0	\$95,005,139	1,187,500	1,250,000	0		\$0 \$0		\$ 1.5857 \$ 1.5857	\$0 \$0		ŝ	\$0 \$0	
2053	\$0	\$90,382,030	1,187,500	1,250,000	0	\$ 1.2087	\$0	\$90,362,030	φ 1,365/	<u>\$</u> 0	\$90,362,030		au au	#30,302,030

<sup>17</sup> Annual Revenue Requirements for 2014 allocated pro rata to each listed portion of calendar year. For the years 2015 and beyond, the annual revenue requirements is as provided by FPL.

<sup>2</sup> Peak Day Demand for the years 2012 through 2013 based upon test gas schedule using WCEC 2 test gas schedule as a proxy. WCEC 2 test gas schedule (as provided by FPL) is six months in length and has a peak demand of approximately 30,000 MMBtu/day during the first three months of testing and a peak demand slightly in excess of 50,000 MMBtu/day during the final three months of testing. Thus, the analysis, with a requirement that plants are placed in service as of June 1 of the subject year assumes test gas requirements are equal to 50,000 MMBtu/day for the final three months of testing (March - May 2013 for CCEC and March-May 2014 for RBEC), 30,000 MMBtu/day for the previous three months of testing (December 2012 - February 2013 of CCEC and December 2013 - February 2014 for RBEC) and 0 MMBtu/day peak prior to six months before a plant is placed in service. After the in-service date, capacity requirements are set as equal to the lower of the peak demand in FPL's Load Forecast or projected capacity purchased under Company B capacity purchases constructions.

<sup>3</sup> Florida EnergySecure Line Capcity for initial years of project based upon the capacity of the Upstream Pipeline Project to deliver to EnergySecure Line (600,000 MMBtu/day) less fuel retention required on EnergySecure Line at 0.55%. After expansions, commencing in 2023, capacity is based upon proposed EnergySecure Line capacity after each expansion project is placed in service.

<sup>47</sup> Unit cost of spot market capacity based upon average price paid by FPL for secondary or interruptible transportation capacity into Florida (\$0.4614/MMBtu) during 2008. As conservative assumption, this value is assumed constant through 2014 and escalated at a rate of 2.5% per year thereafter.

<sup>57</sup> Unit cost of spot market capacity based upon FGT Phase VIII Projected Maximum Tariff Recourse Rate as per Exhibit N of FGT's FERC Certificate Filing.

<sup>8</sup> Assumes significant excess capacity available in marketplace with incremental capacity having no real value. In this instance, it is likely that FPL would have excess capacity in its portfolio leaving no need to purchase incremental capacity.

# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2013	2014	2015	2016	2017	2018
Company E Proposed Rate - Escalated						
FPL Demand (MMBtu/day)		400,000	400,000	400,000	400,000	400,000
Projected EnergySecure Line Fuel Retention (%)		0.55%	0.55%	0.55%	0.55%	0.55%
MDQ Required on Upstream P/L Project (MMBtu/day)		402,212	402,212	402,212	402,212	402,212
Company E Pipeline Proposal						
MDQ (MMBtu/day)		600,000	600,000	600,000	600,000	600,000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Comparis Addition 4						
Capacity Addition 1 MDQ (MMBtu/day)		-	_	_	_	_
Reservation Charge (\$/MMBtu)						
Treservation Onlarge (Winnerd)						
Capacity Addition 2						
MDQ (MMBtu/day)		-	-	-	-	-
Reservation Charge (\$/MMBtu)						
Capacity Addition 3						
MDQ (MMBtu/day)		-	_		-	-
Reservation Charge (\$/MMBtu)						
Capacity Addition 4						
MDQ (MMBtu/day)		-	-	-	-	-
Reservation Charge (\$/MMBtu)					1	
Annual Cost of Reservation Charges						

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# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2019	2020	2021	2022	2023	2024
Company E Proposed Rate - Escalated					· · ·	
FPL Demand (MMBtu/day)	400,000	400,000	487,500	575,000	750,000	837,500
Projected EnergySecure Line Fuel Retention (%)	0.55%	0.55%	0.55%	0.93%	0.93%	1.07%
MDQ Required on Upstream P/L Project (MMBtu/day)	402,212	402,212	490,196	580,398	757,040	846,558
Company E Pipeline Proposal						
MDQ (MMBtu/day)	600,000	600,000	600,000	600,000	600,000	600,000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Capacity Addition 1						i i
MDQ (MMBtu/day)	_	_	-		157,040	157,040
Reservation Charge (\$/MMBtu)					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,
		Ĩ				
Capacity Addition 2						
MDQ (MMBtu/day)	-	-	-	-		89,518
Reservation Charge (\$/MMBtu)		1				
Capacity Addition 3						
MDQ (MMBtu/day)	-	-	-	-	-	
Reservation Charge (\$/MMBtu)						
Capacity Addition 4 MDQ (MMBtu/day)	-	-	-	-	-	-
Reservation Charge (\$/MMBtu)						
Annual Cost of Reservation Charges						

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# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2025	2026	2027	2028	2029	2030
Company E Proposed Rate - Escalated						
FPL Demand (MMBtu/day)	1,012,500	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
Projected EnergySecure Line Fuel Retention (%)	1.69%	1.69%	1.69%	1.69%	1.69%	1.69%
MDQ Required on Upstream P/L Project (MMBtu/day)	1,029,905	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914
Company E Pipeline Proposal						
MDQ (MMBtu/day)	600,000	600,000	600,000	600,000	600,000	600,000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Capacity Addition 1		İ			İ	
MDQ (MMBtu/day)	157,040	157.040	157,040	157.040	157,040	157,040
Reservation Charge (\$/MMBtu)						
Capacity Addition 2						
MDQ (MMBtu/day)	89,518	89,518	89,518	89,518	89,518	89,518
Reservation Charge (\$/MMBtu)					i	
Capacity Addition 3						
MDQ (MMBtu/day)	183,347	183,347	183,347	183,347	183,347	183,347
Reservation Charge (\$/MMBtu)						
Capacity Addition 4		470.000	479.009	170.000	178.008	178.008
MDQ (MMBtu/day)		178.008	_178.008	178.008	170.000	178.008
Reservation Charge (\$/MMBtu)						
Annual Cost of Reservation Charges						

# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2031	2032	2033	2034	2035	2036
Company E Proposed Rate - Escalated						
FPL Demand (MMBtu/day)	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
Projected EnergySecure Line Fuel Retention (%)	1.69%	1.69%	1.69%	1.69%		1.69%
MDQ Required on Upstream P/L Project (MMBtu/day)	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914
Company E Pipeline Proposal						
MDQ (MMBtu/day)	600,000	600,000	600,000	600,000	600,000	. 600,000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Capacity Addition 1	i					
MDQ (MMBtu/day)	157,040	157,040	157,040	157,040	157,040	157,040
Reservation Charge (\$/MMBtu)		1011010	101,010	101,010		
Capacity Addition 2						
MDQ (MMBtu/day)	89,518	89,518	89,518	89,518	89,518	89,518
Reservation Charge (\$/MMBtu)					2007/00-00-00-00-00-00-00-00-00-00-00-00-00-	
Capacity Addition 3						
MDQ (MMBtu/day)	183,347	183,347	183,347	183,347	183,347	183,347
Reservation Charge (\$/MMBtu)						
Capacity Addition 4	470.000	179 009	178,008	178,008	178,008	178,008
MDQ (MMBtu/day)	178,008	178,008	170,000	170,000	170,000	170,000
Reservation Charge (\$/MMBtu)						
Annual Cost of Reservation Charges						

# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2037	2038	2039	2040	2041	2042
Company E Proposed Rate - Escalated						
FPL Demand (MMBtu/day)	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
Projected EnergySecure Line Fuel Retention (%)	1.69%	1.69%	1.69%	1.69%		1.69%
MDQ Required on Upstream P/L Project (MMBtu/day)	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914
Company E Pipeline Proposal						
MDQ (MMBtu/day)	600.000	600.000	600.000	600.000	600.000	600.000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Conscient Addition 1						
Capacity Addition 1 MDQ (MMBtu/day)	157,040	157,040	157,040	157,040	157,040	157,040
Reservation Charge (\$/MMBtu)	107,040	101,010	101,010	101,010		1011010
						-
Capacity Addition 2						
MDQ (MMBtu/day)	89,518	89,518	89,518	89,518	89,518	89,518
Reservation Charge (\$/MMBtu)					· · · ·	
Capacity Addition 3						
MDQ (MMBtu/day)	183,347	183,347	183,347	183,347	183,347	183,347
Reservation Charge (\$/MMBtu)	100,017	10010				
Capacity Addition 4						
MDQ (MMBtu/day)	178,008	178,008	178,008	178,008	178,008	178,008
Reservation Charge (\$/MMBtu)						
Annual Cost of Reservation Charges						

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# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2043	2044	2045	2046	2047	2048
Company E Proposed Rate - Escalated						
FPL Demand (MMBtu/day)	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
Projected EnergySecure Line Fuel Retention (%)	1.69%	1.69%	1.69%	1.69%	1.69%	1.69%
MDQ Required on Upstream P/L Project (MMBtu/day)	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914
Company E Pipeline Proposal						
MDQ (MMBtu/day)	600.000	600.000	600.000	600.000	600.000	600.000
Upstream Pipeline Project Res. Fee (\$/MMBtu)						
Capacity Addition 1						
MDQ (MMBtu/day)	157.040	157.040	157.040	157.040	157.040	157.040
Reservation Charge (\$/MMBtu)						1
Capacity Addition 2						
MDQ (MMBtu/day)	89,518	89,518	89,518	89,518	89,518	89,518
Reservation Charge (\$/MMBtu)				·· ···································		
Capacity Addition 3						
MDQ (MMBtu/day)	183,347	183,347	183,347	183,347	183,347	183,347
Reservation Charge (\$/MMBtu)					1	
Capacity Addition 4						
MDQ (MMBtu/day)	178.008	178.008	178.008	178.008	178.008	178.008
Reservation Charge (\$/MMBtu)						
				····		
Annual Cost of Reservation Charges						

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# Project Demand Charges Incurred with Company E Upstream Pipeline Project

Annual Cost Escalator

2.50%

Year	2049	2050	2051	2052	2053
Company E Proposed Rate - Escalated					
FPL Demand (MMBtu/day)	1,187,500	1,187,500	1,187,500	1,187,500	1,187,500
Projected EnergySecure Line Fuel Retention (%)	1.69%	1.69%	1.69%	1.69%	1.69%
MDQ Required on Upstream P/L Project (MMBtu/day)	1,207,914	1,207,914	1,207,914	1,207,914	1,207,914
<u>Company E Pipeline Proposal</u> MDQ (MMBtu/day) Upstream Pipeline Project Res. Fee (\$/MMBtu)	600,000	600,000	600,000	600,000	600,000
Capacity Addition 1 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)	157,040	157,040	157,040	157,040	157,040
<u>Capacity Addition 2</u> MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)	89,518	89,518	89,518	89,518	89,518
Capacity Addition 3 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)	183,347	183,347	183,347	183,347	183,347
Capacity Addition 4 MDQ (MMBtu/day) Reservation Charge (\$/MMBtu)	178,008	178,008	178,008	178,008	178,008
Annual Cost of Reservation Charges					

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# Projected Usage / Commodity Charges Incurred by FPL with Upstream Pipeline Project / Florida EnergySecure Line Project

			Fuel Gas Bu	med on Energ	ySecure Line	Fuel Gas	Retained by Up		ne Project		Calculated C	ost of Fuel Gas		Usage Charges		Pipeline Project	Total	Unit Cost of
		Average	Gas		Fuel Gas	Projected	Annual	Upstream					i		Upstream		Upstream	Usage Charges
	FPL	Load	Transported	Florida	Consumed on	Contract MDQ	Throughput	Pipeline	Total					Annual	Pipeline		Pipeline &	per MMBtu
	Natural Gas	Factor for	on Florida	EnergySecure	Florida	on Upstream	Upstream	Project	Projected		Basis to		Annual	Throughput	Proposed	Annual Cost	EnergySecure	Transported on
	Demand	for new	EnergySecure	Line	EnergySecure	Pipeline	Pipeline	Fuel	Fuel Gas	Henry Hub	Transco	Unit Cost	Cost of	Upstream	Comm.	of Usage	Line	Upstream P/L /
	Served	capacity	Line	Fuel Rate	Line	Project	Project	Retention	Retained	Cost of Gas	Zone 4	of Fuel Gas	Fuel Gas	Pipeline	Rate	Charges	Usage Costs	EnergySecure
Year	(MMBtu/day)	(%) <sup>11</sup>	(MMBtu/year)	%	(MMBtu/year)	(MMBtu/day)	(MMBtu/year)	%	(MMBtu/yr)	(\$/MMBtu) 2	(\$/MMBtu) 3/	(\$/MMBtu)	(\$/Year)	(MMBtu/year)		(\$/Year)	(\$/Year)	(\$/MMBtu)
Column	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
								_								Col 1 " days in vear " Col 2 "		
	FPL Load			FPL - Collins		Col 1 * (1 + Col		Company E	[Col 7 / (1- Col			Col 10 + Col	Col 12 * (Col		Footnote 4/	Col 15	Coi 13 + Coi 16	Col 17 / Col 3
Source	Forecast	Footnote 1/	Footnote 1/	Estimates	Col 3 * Col 4	4)	days in year	Proposal	8)] - Col 7		Footnote 3/	11	5 + Col 9)	Col 7	Footnote 4/	COL12	CO(13 + COI 10	C011//C013
2014	400,000	59%	85,422,300	0.55%	469,823	402,200	85,892,123			\$ 8.692	\$ 0.0525	\$ 8.7449		85,892,123				
2015	400,000	72%	104,757,800	0.55%	576,168	402,200	105,333,968			\$ 9.192	\$ 0.0525	\$ 9.2445		105,333,968	1			
2016	400,000	76%	111,114,000	0.55%	611,127	402,200	111,725,127				\$ 0.0525	\$ 9.7440		111,725,127				
2017	400,000	78%	114,002,300	0.55%	627,013	402,200	114,629,313				\$ 0.0525	\$ 10.3435		114,629,313				
2018	400,000	79%	115,486,300	0.55%	635,175	402,200	116,121,475			\$ 11.090	\$ 0.0525	\$ 11.1428		116,121,475				
2019	400,000	78%	114,415,400	0.55%	629,285	402,200	115,044,685			\$ 12.089	\$ 0.0525	\$ 12.1420		115,044,685				
2020	400,000	76%	111,570,500	0.55%	613,638	402,200	112,184,138			\$ 12.742	\$ 0.0525	\$ 12.7942		112,184,138				
2021	487,500	75%	133,453,125	0.55%	733,992	490,181	134, 187, 117			\$ 12.997	\$ 0.0525	\$ 13.0490		134,187,117				
2022	575,000	75%	157,406,250	0.55%	865,734	578,163	158,271,984			\$ 13.256	\$ 0.0525	\$ 13.3089		158,271,984				
2023	750,000	75%	205,312,500	0.93%	1,917,619	757,005	207,230,119			\$ 13.522	\$ 0.0525	\$ 13.5740		207,230,119				
2024	837,500	75%	229,893,750	1.07%	2,459,863	846,461	232,353,613			\$ 13.792	\$ 0.0525	\$ 13.8444		232,353,613 281,856,080				
2025	1,012,500	75%	277,171,875	1.69%	4,684,205	1,029,611	281,856,080			\$ 14.068	\$ 0.0525	\$ 14.1202						
2026	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 14.349	\$ 0.0525	\$ 14.4015 \$ 14.6885		330,571,945 330,571,945				
2027	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 14.636	\$ 0.0525			331,477,622				
2028	1,187,500	75%	325,968,750	1.69%	5,508,872	1,207,569	331,477,622			\$ 14.929	\$ 0.0525 \$ 0.0525	\$ 14.9812 \$ 15.2797		330,571,945				
2029	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 15.227	\$ 0.0525 \$ 0.0525	\$ 15.5842		330,571,945				
2030	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 15.532 \$ 15.842	\$ 0.0525	\$ 15.8948	1	330,571,945				
2031	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 15.642 \$ 16.159	\$ 0.0525	\$ 16.2116		331,477,622	ļ			
2032	1,187,500	75%	325,968,750	1.69%	5,508,872	1,207,569	331,477,622	1		\$ 16.482	\$ 0.0525	\$ 16.5348		330.571.945				
2033	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945 330,571,945			\$ 16.812	\$ 0.0525	\$ 16.8644	11	330,571,945				
2034	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945 330,571,945	ł		\$ 17.148	\$ 0.0525	\$ 17.2006		330,571,945				
2035	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569 1,207,569	331.477.622			\$ 17.491	\$ 0.0525	\$ 17.5435		331,477,622				
2036	1,187,500	75%	325,968,750	1.69%	5,508,872		331,477,622			\$ 17.841	\$ 0.0525	\$ 17.8933		330.571.945				
2037	1,187,500	75%	325,078,125	1.69% 1.69%	5,493,820	1,207,569 1,207,569	330,571,945			\$ 18,198	\$ 0.0525	\$ 18,2501		330,571,945				
2038	1,187,500	75%	325,078,125	1.69%	5,493,820 5,493,820	1,207,569	330,571,945			\$ 18,561	\$ 0.0525	\$ 18.6140		330.571.945				
2039	1,187,500 1,187,500	75% 75%	325,078,125 325,968,750	1.69%	5,493,820	1,207,569	331,477,622			\$ 18.933	\$ 0.0525	\$ 18.9852		331,477,622				
2040 2041	1,187,500	75%	325,966,750	1.69%	5,493,820	1,207,569	330,571,945			\$ 19.311	\$ 0.0525	\$ 19.3638		330.571.945				
2041	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 19.697	\$ 0.0525	\$ 19.7500		330,571,945				
2042	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330.571.945			\$ 20.091	\$ 0.0525	\$ 20.1439		330,571,945				
2043	1,187,500	75%	325,968,750	1.69%	5,508,872	1,207,569	331,477,622			\$ 20.493	\$ 0.0525	\$ 20.5457		331,477,622				
2044	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330.571.945			\$ 20.903	\$ 0.0525	\$ 20.9555		330,571,945				
2045	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 21.321	\$ 0.0525	\$ 21.3735		330,571,945				
2040	1,187,500	75%	325.078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 21.747	\$ 0.0525	\$ 21.7999		330,571,945				
2048	1,187,500	75%	325,968,750	1.69%	5,508,872	1,207,569	331,477,622			\$ 22.182	\$ 0.0525	\$ 22.2348		331,477,622				
2049	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 22.626	\$ 0.0525	\$ 22.6784		330,571,945				
2050	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 23.078	\$ 0.0525	\$ 23.1308		330,571,945				
2051	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 23.540	\$ 0.0525	\$ 23.5923		330,571,945				
2052	1,187,500	75%	325,968,750	1.69%	5,508,872	1,207,569	331,477,622			\$ 24.011	\$ 0.0525	\$ 24.0631		331,477,622				
2053	1,187,500	75%	325,078,125	1.69%	5,493,820	1,207,569	330,571,945			\$ 24.491	\$ 0.0525	\$ 24.5432		330,571,945				

1/ Capacity usage for the years 2014 through 2020 as per FPL annual gas consumption projections for RBEC and CCEC facilities. Capacity usage for the years 2021 and beyond based upon assumed 75% capacity usage load factor.

2/ Henry Hub Cost of Gas equal to price included in FPL fuel price forecast published November 2008.

3/ Basis differential between Henry Hub and Transco Station 85 equal to value included within FPL fuel price forecast published November 2008.

4/ Commodity cost for 2014 based upon Company E's Upstream Pipeline Project proposal and is escalated at 2.5% per year thereafter.

Docket No. 09\_\_\_\_-EI Gas Cost Savings Analysis Exhibit TCS-7, Page 20 of 24

## ATTACHMENT V A:

### Projected Cost Recovery Associated with Florida EnergySecure Line / Upstream Pipeline Project Sales of Excess Capacity

	Cost Recovery for Release/Sale of Excess Capacity Utilizing Various Release Value Assumptions Case A - Current Market Case B - FGT Max Rate Case C - No Value													
				· · · · · · · · · · · · · · · · · · ·	and the second sec				No Value					
Year	FPL Pipeline Natural Gas Project Fuel Delivery Requirements Capacity (MMBtu/day) (MMBtu/day)		Capacity Available For Release (MMBtu/day)	Unit Release Values <sup>1/</sup> (\$/MMBtu)	Revenues from Capacity Release (\$)	Unit Release Values <sup>2/</sup> (\$/MMBtu)	Revenues from Capacity Release (\$)	Unit Release Values (\$/MMBtu)	Revenues from Capacity Release (\$)					
Column	1	2	3	4	5	6	7	8	9					
Column	<u> </u>	<u>_</u>						•						
	Attachment III A,	Attachment		See Footnote	Col 4 * Col 3 *	See Footnote	Col 6 * Col 3 *	Assume No	Col 8 * Col 3 *					
Source	Column 3	IIIA, Column 4	Col 2 - Col 1	. 1/	days	2/	days in year	Value	days in year					
Sept 1, 2012 - Dec 1, 2012	-	-	-	\$ 0.4614	\$0	\$ 1.5857	\$0	\$ -	\$0					
Dec 1, 2012 - Jan 1, 2013	30,000			\$ 0.4614	\$0		\$0	\$-	\$0					
Jan 1, 2013 - March 1, 2013	30,000	-	-	\$ 0.4614	\$0		\$0	<b>\$</b> -	\$0					
March 1, 2013 - Sept 1, 2013	50,000			\$ 0.4614	\$0		\$0	\$-	\$0					
Sept 1, 2013 - Dec 1, 2013	200,000	-	-	\$ 0.4614	\$0		\$0	<b>\$</b> -	\$0					
Dec 1, 2013 - Jan 1, 2014	230,000	-	-	\$ 0.4614	\$0		\$0	\$ -	\$0					
Jan 1, 2014 - March 1, 2014	230,000	596,718	366,718	\$ 0.4614	\$9,983,019		\$34,308,784	\$-	\$0					
March 1, 2014 - June 1, 2014	250,000	596,718	346,718	\$ 0.4614	\$14,717,765		\$50,580,755	\$-	\$0					
June 1 2014 - Jan 1 2015	400,000	596,718	196,718	<u>\$ 0.4614</u>	\$19,423,862		\$66,754,264	\$ -	\$0					
2015	400,000	596,718	196,718	\$ 0.4729	\$33,957,721		\$113,856,572	\$ -	\$0					
2016	400,000	596,718	196,718	\$ 0.4848	\$34,902,024		\$114,168,508		\$Û					
2017	400,000	596,718	196,718	\$ 0.4969	\$35,676,830		\$113,856,572	<b>\$</b> -	\$0					
2018	400,000	596,718	196,718	\$ 0.5093	\$36,568,751		\$113,856,572	<b>\$</b> -	\$0					
2019	400,000	596,718	196,718	\$ 0.5220	\$37,482,970		\$113,856,572	\$ -	\$0					
2020	400,000	596,718	196,718	\$ 0.5351	\$38,525,305		\$114,168,508	\$ -	\$0					
2021	487,500	596,718	109,218	\$ 0.5485	\$21,864,117		\$63,213,278	\$ -	\$0					
2022	575,000	596,718	21,718	\$ 0.5622	\$4,456,380		\$12,569,984	ş -	\$0					
2023	750,000	800,000	50,000	\$ 0.5762	\$10,516,113		\$28,939,025	\$ -	\$0					
2024	837,500	1,000,000	162,500	\$ 0.5906 \$ 0.6054	\$35,127,779		\$94,309,508	\$ -	\$0 \$0					
2025 2026	1,012,500	1,250,000 1,250,000	237,500 62,500	\$ 0.6054 \$ 0.6205	\$52,480,334 \$14,155,879		\$137,460,369 \$36,173,781	\$- \$-	\$0 \$0					
2026	1,187,500 1,187,500	1,250,000	62,500	\$ 0.6205	\$14,135,879		\$36,173,781		\$0 \$0					
2028		1,250,000	62,500	\$ 0.6500 \$ 0.6519	\$14,913,268		\$36,272,888	\$ - \$	\$0 \$0					
2028	1,187,500 1,187,500	1,250,000	62,500	\$ 0.6682	\$15,244,334		\$36,173,781	\$ -	\$0 \$0					
2029	1,187,500	1,250,000	62,500	\$ 0.6850	\$15,625,442		\$36,173,781	\$ -	\$0 \$0					
2030	1,187,500	1,250,000	62,500	\$ 0.7021	\$16,016,078		\$36,173,781		\$0 \$0					
2032	1,187,500	1,250,000	62,500	\$ 0.7196	\$16,461,457		\$36,272,888		\$0					
2032	1,187,500	1,250,000	62,500	\$ 0.7376	\$16,826,892		\$36,173,781	\$ -	\$0					
2034	1,187,500	1,250,000	62,500	\$ 0.7561	\$17,247,565		\$36,173,781		\$0					
2035	1,187,500	1,250,000	62,500	\$ 0.7750	\$17,678,754		\$36,173,781	\$ -	\$0					
2036	1,187,500	1,250,000	62,500	\$ 0.7943	\$18,170,368		\$36,272,888		\$0					
2037	1,187,500	1,250,000	62,500	\$ 0.8142	\$18,573,741		\$36,173,781	\$ -	\$0					
2038	1,187,500	1,250,000	62,500	\$ 0.8345	\$19,038,084		\$36,173,781		\$0					
2039	1,187,500	1,250,000	62,500	\$ 0.8554	\$19,514,036		\$36,173,781	\$ -	\$0					
2040	1,187,500	1,250,000	62,500	\$ 0.8768	\$20,056,687		\$36,272,888		\$0					
2041	1,187,500	1,250,000	62,500	\$ 0.8987	\$20,501,934	\$ 1.5857	\$36,173,781	<b>\$</b> -	\$0					
2042	1,187,500	1,250,000	62,500	\$ 0.9212	\$21,014,483	\$ 1.5857	\$36,173,781	\$ -	\$0					
2043	1,187,500	1,250,000	62,500	\$ 0.9442	\$21,539,845	\$ 1.5857	\$36,173,781	\$ -	\$0					
2044	1,187,500	1,250,000	62,500	\$ 0.9678	\$22,138,829	\$ 1.5857	\$36,272,888	\$-	\$0					
2045	1,187,500	1,250,000	62,500	\$ 0.9920	\$22,630,299		\$36,173,781		\$0					
2046	1,187,500	1,250,000	62,500	\$ 1.0168	\$23,196,057		\$36,173,781		\$0					
2047	1,187,500	1,250,000	62,500	\$ 1.0422	\$23,775,958			\$-	\$0					
2048	1,187,500	1,250,000	62,500	\$ 1.0683	\$24,437,125		****	<b>\$</b> -	\$0					
2049	1,187,500	1,250,000	62,500	\$ 1.0950	\$24,979,616	\$ 1.5857	\$36,173,781	\$ -	\$0					
2050	1,187,500	1,250,000	62,500	\$ 1.1224	\$25,604,107	\$ 1.5857	\$36,173,781	\$ -	\$0					
2051	1,187,500	1,250,000	62,500	\$ 1.1504	\$26,244,209		\$36,173,781	\$ -	\$0					
2052	1,187,500	1,250,000	62,500	\$ 1.1792	\$26,974,014		\$36,272,888	\$ -	\$0					
2053	1,187,500	1,250,000	62,500	\$ 1.2087	\$27,572,822	\$ 1.5857	\$36,173,781	\$ -	\$0					

<sup>1/</sup> Unit release values based upon the average cost paid by FPL for interruptible transportation capacity into Florida (\$0.4614/MMBtu) during 2008. As conservative assumption, this value is assumed constant through 2014 and escalated at a rate of 2.5% per year thereafter.

<sup>2/2</sup> Unit release values based upon FGT Phase VIII Projected Maximum Tariff Recourse Rate as per Exhibit N of FGT's FERC Certificate Filing.

### ATTACHMENT V B:

		Cost Becou	ery for Release	Sale of Excess	Canacity Utilizi	no Various Re	loseo Valuo As	umptions	
		COSTRECOV	ery for Kelease		Irrent Market		GT Max Rate		- No Value
Year	FPL Natural Gas Fuel Requirements (MMBtu/day)	Proposed Company B Delivery Capacity <sup>1/</sup> (MMBtu/day)	Capacity Available For Release (MMBtu/day)	Unit Release Values <sup>2/</sup> (\$/MMBtu)	Revenues from Capacity Release (\$)	Unit Release Values <sup>37</sup> (\$/MMBtu)	Revenues from Capacity Release (\$)	Unit Release Values (\$/MMBtu)	Revenues from Capacity Release (\$)
Column	1	2	3	4	5	6	7	8	9
Source	Attachment VA, Column 1	See Footnote 1/	Col 2 - Col 1	See Footnote 2/	Col 4 * Col 3 * days_in year	See Footnote 3/	Col 6 * Col 3 * days in year	Assume No Value	Col 8 * Col 3 * days
Company B Capacity Project Sept 1, 2012 - Dec 1, 2012		50,000	50,000	\$0.4614	\$2,099,547	\$ 1.5857	\$7,214,935	<b>\$</b> -	\$0
Dec 1, 2012 - Jan 1, 2013	30.000	50,000	20,000	\$0.4614	\$286,092	\$ 1.5657 \$ 1.5857	\$983,134	\$ - \$ -	\$0
Jan 1, 2013 - March 1, 2013	30,000	50,000	20,000	\$0.4614	\$544,498		\$1,871,126	s -	\$0
March 1, 2013 - Sept 1, 2013	50,000	50,000	0	\$0.4614	\$044,430	\$ 1.5857	\$0	\$ -	\$0
Sept 1, 2013 - Dec 1, 2013	200,000	400,000	200,000	\$0.4614	\$8,398,187	\$ 1.5857	\$28,859,740	\$ -	\$0
Dec 1, 2013 - Jan 1, 2014	230,000	400,000	170,000	\$0.4614	\$2,431,783		\$8,356,639	\$ -	\$0
Jan 1, 2014 - March 1, 2014	230,000	400.000	170.000	\$0.4614	\$4,628,231	\$ 1.5857	\$15,904,571	<b>Š</b> -	\$0
March 1, 2014 - June 1, 2014	250,000	400,000	150,000	\$0.4614	\$6,367,856	\$ 1.5857	\$21,882,660	\$ -	\$0
June 1 2014 - Jan 1 2015	400,000	400,000	0	\$0.4614	\$0	\$ 1.5857	\$0	\$ -	\$0
2015	400,000	400,000	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2016	400,000	400,000		\$ -	\$0	\$ 1.5857	\$0	<b>\$</b> -	\$0
2017	400,000	400,000	-	\$ -	\$0	\$ 1.5857	\$0	\$-	\$0
2018	400,000	400,000		<b>\$</b> -	\$0	\$ 1.5857	\$0	\$ -	\$0
2019	400,000	400,000	-	\$-	\$0	\$ 1.5857	\$0	\$ -	\$0
2020	400,000	400,000	- 1	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2021	487,500	400,000	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2022	575,000	400,000		\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2023	750,000	400,000	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2024	837,500	837,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2025	1,012,500	1,012,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2026	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2027	1,187,500	1,187,500	-	\$-	\$0	\$ 1.5857	\$0	\$-	\$0
2028	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2029	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2030	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2031	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2032	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2033	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2034	1,187,500	1,187,500	-	\$ -	\$0		\$0	\$ -	\$0
2035	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2036	1,187,500	1,187,500	-	\$-	\$0	\$ 1.5857	\$0	\$ -	\$0
2037	1,187,500	1,187,500	- 1	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2038	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2039	1,187,500	1,187,500	-	š -	\$0		\$0	\$ -	\$0
2000	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2041	1,187,500	1,187,500	_	š -	\$0	\$ 1.5857	\$0	\$ -	\$0
2042	1,187,500	1,187,500	-	š -	\$0	\$ 1.5857	\$0	\$ -	\$0
2043	1,187,500	1,187,500	_	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2044	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2045	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2046	1,187,500	1,187,500	_	<b>Š</b> -	\$0	\$ 1.5857	\$0	\$ -	\$0
2047	1,187,500	1,187,500	-	Š -	\$0	\$ 1.5857	\$0	š -	\$0
2048	1,187,500	1,187,500		\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2049	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	\$ -	\$0
2050	1,187,500	1,187,500	_	\$ -		\$ 1.5857	\$0	\$ -	\$0
2051	1,187,500	1,187,500	-	\$ -	\$0	\$ 1.5857	\$0	s -	\$0
2052	1,187,500	1,187,500		\$ -	\$0	\$ 1,5857	\$0	Š -	\$0
				J -	20	D 1.065/	20	3 -	

# Projected Cost Recovery Associated with Sales of Company B Project Excess Capacity

<sup>1/</sup> Proposed Company B delivery capacity in initial years (2012 through 2021) set as consistent with the proposal from Company B. In all years thereafter, capacity set as equal to FPL projected incremental demand.

<sup>2/2</sup> Unit release values based upon the average cost paid by FPL for interruptible transportation capacity into Florida (\$0.4614/MMBtu) during 2008. As conservative assumption, this value is assumed constant through 2014 and escalated at a rate of 2.5% per year thereafter.

<sup>9</sup> Unit release values based upon FGT Phase VIII Projected Maximum Tariff Recourse Rate as per Exhibit N of FGT's FERC Certificate Filing.

#### ATTACHMENT VI A:

### Estimated Benefit of Economic Dispatch with Proposed Pipeline System in Service (Cases A and B - Assumes Unsubscribed Capacity Released into Market)

												<u>.</u>	Francis Birnsteh Cardina un Cardranded ECT Paraira			
		Upstro	am Pipeline Proj	ect / Florida Energ	ySecure Line Proj			Variab	le Costs of FP	L's Current Co	ntracted FG1	Service	Economic Dispatch Savings vs. Contracted FGT Service			
	Unsubscribed Capacity Not Released in Secondary Market	FPL Natural Gas Demand Served	Average Load Factor for New Capacity (%) 1/	Average Unutilized Subscribed Capacity (MMBtu/yr)	Total Capacity Available for Economic Dispatch (MMBtu/yr)	Projected Unit Price of Gas into Upstream Pipeline/FPL Pipeline (\$/MMBtu)	Variable Cost on Upstream Pipeline / FPL Project (\$/MMBtu)	FGT Fuel Retention Rate {%)	Projected Henry Hub Cost of Gas (\$/MMBtu) 2/	Projected Basis to FGT Zone 3 (\$/MMBtu) 3/	Projected Unit Cost of Gas into FGT (\$/MMBtu)	Variable (fuel) Cost on FGT Pipeline System (\$/MMBtu)	Variable Service Cost Savings with New Pipeline System (\$/MMBtu)	Gas Cost Savings with New Pipeline System (\$/MMBtu)	Total Economic Dispatch Savings Available (\$/MMBtu)	Economic Dispatch Savings Available (\$/Year)
Year	(MMBtu/day)	(MMBtu/day) 2	3	(MMD(U/yr)	(MMB(@y1)	6	7	8	9	10	11	12	13	14	15	16
Column	1	2	3	4	3	····· • -		FGT Phase			••	[Col 177(1-				
		FPL Base Case		Col 2 * days in	(Col 1 * days in	Attachment IV,	Attachment	VIII Filing -	See	See Footnote	Col 9 + Col	Col 8)] - Col		Col 11 -	Col 13 +	
Source	Attachment V	Resource Plan	See Footnote 1/	year * (1 - Col 3)	year) + Coi 4	Col 12	IV, Col 17	Exhibit N	Footnote 2/	3/	10	11	Col 12 - Col 7	Col 6	Col 14	Col 5 * Col 15
2014	-	400,000	59%	60,577,700	60,577,700	\$ 8.7449	\$ 0.2443	3.26%	\$ 8.692		\$ 8.789	\$ 0.2962	\$0.0519	\$ 0.0443	0.0962	\$ 5,828,278
2015	-	400,000	72%	41,242,200	41,242,200	\$ 9.2445	\$ 0.2571	3.26%	\$ 9.192		\$ 9.289	\$ 0.3130	\$0.0559	\$ 0.0443	0.1002	\$ 4,133,139 \$ 2,676,767
2016	•	400,000	76%	35,286,000	35,286,000	\$ 9.7440	\$ 0.2700	3.26%	\$ 9.692		\$ 9.788	\$ 0.3299	\$0.0599	\$ 0.0443 \$ 0.0443	0.1042 0.1091	\$ 3,676,767 \$ 3,492,079
2017	-	400,000	78%	31,997,700	31,997,700	\$ 10.3435	\$ 0.2852	3.26%	\$ 10.291	\$ 0.0968	\$ 10.388	\$ 0.3501	\$0.0648		0.1091	\$ 3,539,604
2018	-	400,000	79%	30,513,700	30,513,700	\$ 11.1428	\$ 0.3053	3.26%	\$ 11.090	\$ 0.0968 \$ 0.0968	<b>\$</b> 11.187 <b>\$</b> 12.186	\$ 0.3770 \$ 0.4107	\$0.0717 \$0.0805	\$ 0.0443 \$ 0.0443	0.1160	\$ 3,941,567
2019		400,000	/8%	31,584,600	31,584,600	\$ 12.1420 • 10.7040	\$ 0.3302 \$ 0.3468	3.26% 3.26%	\$ 12.089 \$ 12.742	\$ 0.0968	\$ 12.839	\$ 0.4326	\$0.0859	\$ 0.0443	0.1302	\$ 4,533,935
2020	-	400,000	76%	34,829,500	34,829,500	\$ 12.7942 \$ 13.0490	\$ 0.3468	3.26%	\$ 12.997	\$ 0.0968	\$ 13.093	\$ 0.4412	\$0.0873	\$ 0.0443		\$ 5,856,337
2021	-	487,500	75%	44,484,375	44,484,375	\$ 13.3089	\$ 0.3611	3.26%	\$ 13.256	\$ 0.0968	\$ 13.353	\$ 0.4500	\$0.0888	\$ 0.0443	0.1331	\$ 6,986,102
2022	-	575,000	75%	52,468,750 68,437,500	52,468,750 68,437,500	\$ 13.5740	\$ 0.3011	3.26%	\$ 13.522	\$ 0.0968	\$ 13.618	\$ 0.4589	\$0.0373	\$ 0.0443	0.0816	\$ 5,583,921
2023 2024	-	750,000 837,500	75% 75%	76.631.250	76,631,250	\$ 13.8444	\$ 0.4210	3.26%	\$ 13.792	\$ 0.0968	\$ 13.889	\$ 0.4680		\$ 0.0443	0.0629	\$ 4,820,803
2024	-	1.012.500	75%	92,390,625	92,390,625	\$ 14.1202	\$ 0.5478	3.26%	\$ 14.068	\$ 0.0968	\$ 14.165	\$ 0.4773		\$ 0.0443	-	S -
2025	-	1,187,500	75%	108,359,375	108.359.375	\$ 14.4015	\$ 0.5589	3.26%	\$ 14.349	\$ 0.0968	\$ 14,446	\$ 0.4868		\$ 0.0443	-	\$ -
2020		1.187,500	75%	108,359,375	108,359,375	\$ 14.6885	\$ 0.5703	3.26%	\$ 14.636	\$ 0.0968	\$ 14.733	\$ 0.4965	(\$0.0738)	\$ 0.0443	-	\$ -
2027		1,187,500	75%	108,656,250	108,656,250	\$ 14.9812	\$ 0.5819	3.26%	\$ 14.929	\$ 0.0968	\$ 15.025	\$ 0.5063	(\$0.0755)		-	\$ -
2029		1,187,500	75%	108,359,375	108,359,375	\$ 15.2797	\$ 0.5937	3.26%	\$ 15.227	\$ 0.0968	\$ 15.324	\$ 0.5164	(\$0.0773)	\$ 0.0443	-	s -
2023		1,187,500	75%	108,359,375	108.359.375	\$ 15.5842	\$ 0.6058	3.26%	\$ 15.532	\$ 0.0968	\$ 15.629	\$ 0.5267	(\$0.0792)	\$ 0.0443	-	\$-
2031	-	1,187,500	75%	108,359,375	108,359,375	\$ 15.8948	\$ 0.6182	3.26%	\$ 15.842	\$ 0.0968	\$ 15.939	\$ 0.5371		\$ 0.0443	-	\$-
2032	-	1,187,500	75%	108,656,250	108,656,250	\$ 16.2116	\$ 0.6307	3.26%	\$ 16.159	\$ 0.0968	\$ 16.256	\$ 0.5478		\$ 0.0443	-	\$ -
2033	-	1,187,500	75%	108,359,375	108,359,375	\$ 16.5348	\$ 0.6436	3.26%	\$ 16.482	\$ 0.0968	\$ 16.579	\$ 0.5587		\$ 0.0443	-	\$ -
2034	-	1,187,500	75%	108,359,375	108,359,375	\$ 16.8644	\$ 0.6567	3.26%	\$ 16.812	\$ 0.0968	\$ 16.909	\$ 0.5698		\$ 0.0443	-	\$ -
2035	-	1,187,500	75%	108,359,375	108,359,375	\$ 17.2006	\$ 0.6701	3.26%	\$ 17.148	\$ 0.0968	\$ 17.245	\$ 0.5811		\$ 0.0443	-	\$ -
2036	-	1,187,500	75%	108,656,250	108,656,250	\$ 17.5435	\$ 0.6837	3.26%	\$ 17.491	\$ 0.0968	\$ 17.588	\$ 0.5927	(\$0.0911)		-	\$ -
2037	-	1,187,500	75%	108,359,375	108,359,375	\$ 17.8933	\$ 0.6977	3.26%	\$ 17.841	\$ 0.0968	\$ 17.938	\$ 0.6045		\$ 0.0443	-	\$ -
2038	-	1,187,500	75%	108,359,375	108,359,375	\$ 18.2501	\$ 0.7119	3.26%	\$ 18.198	\$ 0.0968	\$ 18.294	\$ 0.6165		\$ 0.0443	-	5 - 6
2039		1,187,500	75%	108,359,375	108,359,375	\$ 18.6140	\$ 0.7264	3.26%	\$ 18.561	\$ 0.0968	\$ 18.658	\$ 0.6288		\$ 0.0443	-	р - с
2040	-	1,187,500	75%	108,656,250	108,656,250	\$ 18.9852	\$ 0.7412	3.26%	\$ 18.933	\$ 0.0968	\$ 19.029	\$ 0.6413 \$ 0.6540		\$ 0.0443 \$ 0.0443	-	÷ -
2041	-	1,187,500	75%	108,359,375	108,359,375	\$ 19.3638	\$ 0.7564	3.26% 3.26%	\$ 19.311 \$ 19.697	\$ 0.0968 \$ 0.0968	\$ 19.408 \$ 19.794	\$ 0.6670		\$ 0.0443	-	\$
2042	-	1,187,500	75%	108,359,375	108,359,375	\$ 19.7500 \$ 20.1439	\$ 0.7718 \$ 0.7875	3.26%	\$ 19.697 \$ 20.091	\$ 0.0968	\$ 19.794 \$ 20.188	\$ 0.6803		\$ 0.0443	-	š .
2043	-	1,187,500	75%	108,359,375	108,359,375		\$ 0.8036	3.26%	\$ 20.091	\$ 0.0968	\$ 20.188	\$ 0.6939		\$ 0.0443		\$
2044		1,187,500	75%	108,656,250	108,656,250 108,359,375	\$ 20.5457 \$ 20.9555	\$ 0.8036	3.26%	\$ 20.493 \$ 20.903	\$ 0.0968	\$ 20.000	\$ 0.7077		\$ 0.0443	-	\$ -
2045 2046	-	1,187,500 1,187,500	75% 75%	108,359,375 108,359,375	108,359,375	\$ 20.9555 \$ 21.3735	\$ 0.8367	3.26%	\$ 21.321	\$ 0.0968	\$ 21.418	\$ 0.7217	(\$0.1150)		-	\$ -
2046		1,187,500	75%	108,359,375	108,359,375	\$ 21.7999	\$ 0.8538	3.26%	\$ 21.747	\$ 0.0968	\$ 21.844	\$ 0.7361		\$ 0.0443	-	\$ -
2047		1,187,500	75%	108,656,250	108,656,250	\$ 22.2348	\$ 0.8713	3.26%	\$ 22.182	\$ 0.0968	\$ 22.279	\$ 0.7508		\$ 0.0443	-	\$-
2048		1,187,500	75%	108,359,375	108,359,375	\$ 22.6784	\$ 0.8890	3.26%	\$ 22.626	\$ 0.0968	\$ 22.723	\$ 0.7657	(\$0.1233)	\$ 0.0443	-	\$-
2049		1,187,500	75%	108,359,375	108,359,375	\$ 23.1308	\$ 0.9072	3.26%	\$ 23.078	\$ 0.0968	\$ 23.175	\$ 0.7810	(\$0.1262)	\$ 0.0443	-	\$-
2050		1,187,500	75%	108,359,375	108,359,375	\$ 23.5923	\$ 0.9257	3.26%	\$ 23,540	\$ 0.0968	\$ 23.637	\$ 0.7965		\$ 0.0443	-	\$-
2052		1,187,500	75%	108,656,250	108,656,250	\$ 24.0631	\$ 0.9446	3.26%	\$ 24.011	\$ 0.0968	\$ 24.107	\$ 0.8124	(\$0.1323)		-	\$-
2053		1,187,500	75%	108,359,375	108,359,375	\$ 24.5432	\$ 0.9639	3.26%	\$ 24.491	\$ 0.0968	\$ 24.588	\$ 0.8286	(\$0.1354)	\$ 0.0443	-	\$ -

1/ Capacity usage for the years 2014 through 2020 as per FPL annual gas consumption projections for RBEC and CCEC facilities. Capacity usage for the years 2021 and beyond based upon assumed 75% capacity usage load factor.

2/ Henry Hub Cost of Gas equal to price included in FPL fuel price forecast developed November 2008.

3/ Basis differential between Henry Hub and FGT Zone 3 equal to value included within FPL fuel price forecast developed November 2008.

4/ FPL has large quantities of firm transportation capacity under contract with both FGT and Gulfstream. As there is a higher marginal cost associated with the use of FGT capacity than Gulfstream capacity, it is assumed that any economic dispatch activity would serve to displace this higher cost FGT capacity than Gulfstream capacity. Thus, economic dispatch value is represented by the difference in cost between the use of the proposed project capacity and the FGT capacity under contract.

## Estimated Benefit of Economic Dispatch with Proposed Pipeline System in Service (Case C - Assumes No Release of Unsubscribed Capacity into Market)

				te of ( E) and a France		last		Variab	a Costs of EP	L's Current Co	stracted EGI	Service 4	Economic Dispatch Savings vs. Contracted FGT Service			
	Average	Upstream	Pipeline Pro	oject / Florida Ener	gySecure Line Pro	Projected		Valiavi	COSIS OF T			Dervice	Economic Dispatch Octangs to: Contractor For Octane			
	Unsubscribed		Average		Total	Unit Price	Variable					Variable	Variable	Gas Cost	Total	
	Capacity	FPL	Load	Average	Capacity	of Gas into	Cost on	FGT		Projected	Projected	(fuel) Cost on	Service Cost	Savings	Economic	Economic
	Not Released	Natural Gas	Factor for	Unutilized	Available for	Upstream	Upstream	Fuel	Projected	Basis to	Unit Cost	FGT	Savings with	with New	Dispatch	Dispatch
	in Secondary	Demand	for new	Subscribed	Economic	Pipeline/FPL	Pipeline /	Retention	Henry Hub	FGT	of Gas into	Pipeline	New Pipeline	Pipeline	Savings	Savings
	Market	Served	capacity	Capacity	Dispatch	Pipeline	FPL Project	Rate	Cost of Gas	Zone 3	FGT	System	System	System	Available	Available
Year	(MMBtu/day)	(MMBtu/day)	(%) 1/	(MMBtu/yr) 1/	(MMBtu/yr)	(\$/MMBtu)	(\$/MMBtu)	(%)	(\$/MMBtu) 2/	(\$/MMBtu) 3/	(\$/MMBtu)	(\$/MMBtu)	(\$/MMBtu)	(\$/MMBtu)	(\$/MMBtu)	(\$/Year)
Column	(mmbta/day)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Column	·							FGT Phase								
		FPL Base Case	See	Col 2 * days in	(Coi 1 * days in	Attachment	Attachment	VIII Filing -		See Footnote				Col 11 -	Col 13 +	
Source	Attachment VA	<b>Resource Plan</b>	Footnote 1/	year * (1 - Col 3)	year) + Col 4	IV, Col 12	IV, Col 17	Exhibit N	2/	3/	10		Col 12 - Col 7	Col 6	Col 14	Col 5 * Col 15
2014	262,006	400,000	59%	60,577,700	156,209,789	\$ 8.7449	\$ 0.2443	3.26%	\$ 8.692			\$ 0.2962		\$ 0.0443		\$ 15,029,194
2015	196,718	400,000	72%	41,242,200	113,044,289	\$ 9.2445	\$ 0.2571	3.26%	• • • • • • •	\$ 0.0968		\$ 0.3130		\$ 0.0443		\$ 11,328,875
2016	196,718	400,000	76%	35,286,000	107,284,807	\$ 9.7440	\$ 0.2700	3.26%	\$ 9.692			\$ 0.3299		\$ 0.0443		\$ 11,178,973
2017	196,718	400,000	78%	31,997,700	103,799,789	\$ 10.3435	\$ 0.2852	3.26%		\$ 0.0968		\$ 0.3501		\$ 0.0443		\$ 11,328,223
2018	196,718	400,000	79%	30,513,700	102,315,789	\$ 11.1428	\$ 0.3053	3.26%		\$ 0.0968		\$ 0.3770		\$ 0.0443		\$ 11,868,681 \$ 12,002,024
2019	196,718	400,000	78%	31,584,600	103,386,689	\$ 12.1420	\$ 0.3302	3.26%	\$ 12.089					\$ 0.0443 \$ 0.0443		\$ 12,902,034 \$ 13,906,389
2020	196,718	400,000	76%	34,829,500	106,828,307	\$ 12.7942	\$ 0.3468	3.26%	\$ 12.742 \$ 12.997	\$ 0.0968 \$ 0.0968		\$ 0.4326 \$ 0.4412		\$ 0.0443 \$ 0.0443		\$ 11,104,481
2021	109,218	487,500	75%	44,484,375	84,348,964	\$ 13.0490	\$ 0.3539	3.26%	\$ 13.256	1	\$ 13.353		\$0.0873		0.1310	
2022	21,718	575,000	75%	52,468,750	60,395,839	\$ 13.3089	\$ 0.3611	3.26%		\$ 0.0968 \$ 0.0968				\$ 0.0443	0.0816	\$ 7,072,966
2023	50,000	750,000	75%	68,437,500	86,687,500	\$ 13.5740	\$ 0.4216	3.26% 3.26%	<b>\$</b> 13.522 <b>\$</b> 13.792					\$ 0.0443	0.0629	\$ 8,562,322
2024	162,500	837,500	75%	76,631,250	136,106,250	\$ 13.8444	\$ 0.4494 \$ 0.5478	3.26%		\$ 0.0968	\$ 14.165			\$ 0.0443	0.0023	\$ 0,002,022
2025	237,500	1,012,500	75%	92,390,625	179,078,125	\$ 14.1202 \$ 14.4015	\$ 0.5589	3.26%	\$ 14.000					\$ 0.0443	-	\$ -
2026	62,500	1,187,500	75%	108,359,375 108,359,375	131,171,875 131,171,875	\$ 14.6885	\$ 0.5503	3.26%	\$ 14.636		\$ 14.733		<b>(</b> , , , , , , , , , , , , , , , , , , ,	\$ 0.0443	-	\$ -
2027	62,500	1,187,500	75% 75%	108,656,250	131,531,250	\$ 14.9812	\$ 0.5819	3.26%		\$ 0.0968				\$ 0.0443	-	\$ -
2028	62,500	1,187,500 1,187,500	75% 75%	108,359,375	131,171,875	\$ 15.2797	\$ 0.5937	3.26%		\$ 0.0968		\$ 0.5164		\$ 0.0443	-	\$ -
2029 2030	62,500 62,500	1,187,500	75%	108,359,375	131,171,875	\$ 15.5842	\$ 0.6058	3.26%	\$ 15.532			\$ 0.5267		\$ 0.0443	-	\$ -
2030	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 15.8948	\$ 0.6182	3.26%	\$ 15.842			\$ 0.5371		\$ 0.0443	-	\$ -
2031	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 16.2116	\$ 0.6307	3.26%	\$ 16.159		\$ 16.256	\$ 0.5478	(\$0.0829)	\$ 0.0443	-	\$ -
2032	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 16.5348	\$ 0.6436	3.26%	\$ 16.482		\$ 16.579	\$ 0.5587	(\$0.0849)	\$ 0.0443	-	\$-
2033	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 16,8644	\$ 0.6567	3.26%	\$ 16.812		\$ 16.909	\$ 0.5698	(\$0.0869)	\$ 0.0443	-	\$ -
2035	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 17.2006	\$ 0.6701	3.26%	\$ 17.148	\$ 0.0968	\$ 17.245	\$ 0.5811	(\$0.0890)	\$ 0.0443	-	\$-
2036	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 17.5435	\$ 0.6837	3.26%	\$ 17.491	\$ 0.0968	\$ 17.588	\$ 0.5927	(\$0.0911)	\$ 0.0443	-	\$-
2037	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 17.8933	\$ 0.6977	3.26%	\$ 17.841	\$ 0.0968	\$ 17.938	\$ 0.6045	(\$0.0932)	\$ 0.0443	-	\$-
2038	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 18.2501	\$ 0.7119	3.26%	\$ 18.198			\$ 0.6165	, , ,	\$ 0.0443	-	\$ -
2039	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 18.6140	\$ 0.7264	3.26%		\$ 0.0968		\$ 0.6288		\$ 0.0443	-	\$-
2040	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 18.9852	\$ 0.7412	3.26%		\$ 0.0968		\$ 0.6413		\$ 0.0443	-	<b>\$</b> -
2041	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 19.3638	\$ 0.7564	3.26%		\$ 0.0968		\$ 0.6540		\$ 0.0443	-	\$ -
2042	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 19.7500	\$ 0.7718	3.26%		\$ 0.0968		\$ 0.6670		\$ 0.0443	-	\$-
2043	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 20.1439	\$ 0.7875	3.26%	+	\$ 0.0968		\$ 0.6803		\$ 0.0443	-	\$ -
2044	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 20.5457	\$ 0.8036	3.26%	\$ 20.493			\$ 0.6939	· · · · · · · · · · · · · · · · · · ·	\$ 0.0443	-	\$ -
2045	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 20.9555	\$ 0.8200	3.26%	\$ 20.903			\$ 0.7077		\$ 0.0443	-	\$- ¢
2046	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 21.3735	\$ 0.8367	3.26%	\$ 21.321					\$ 0.0443	-	\$- \$-
2047	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 21.7999	\$ 0.8538	3.26%	\$ 21.747			\$ 0.7361		\$ 0.0443	-	\$ - \$ -
2048	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 22.2348	\$ 0.8713	3.26%	\$ 22.182		+	\$ 0.7508 \$ 0.7657		\$ 0.0443 \$ 0.0443	-	\$ - \$ -
2049	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 22.6784	\$ 0.8890	3.26%	\$ 22.626			• • • • • • •		\$ 0.0443	-	\$ -
2050	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 23.1308	\$ 0.9072 \$ 0.00F7	3.26%	\$ 23.078 \$ 23.540		\$ 23.175 \$ 23.637	\$ 0.7810 \$ 0.7965		\$ 0.0443	_	s -
2051	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 23.5923	\$ 0.9257	3.26%				\$ 0.7965 \$ 0.8124	(\$0.1323)		-	\$ - \$
2052	62,500	1,187,500	75%	108,656,250	131,531,250	\$ 24.0631	\$ 0.9446 \$ 0.9639	3.26% 3.26%	\$ 24.011 \$ 24.491	\$ 0.0968 \$ 0.0968		\$ 0.8286		\$ 0.0443		\$ - \$ -
2053	62,500	1,187,500	75%	108,359,375	131,171,875	\$ 24.5432	p 0.9039	3.20%	J 24.491	1 U.U908	φ 24.000	.o∠00	(\$0.1334)	Ψ V.0443	-	Ψ -

1/ Capacity usage for the years 2014 through 2020 as per FPL annual gas consumption projections for RBEC and CCEC facilities. Capacity usage for the years 2021 and beyond based upon assumed 75% capacity usage load factor.

2/ Henry Hub Cost of Gas equal to price included in FPL fuel price forecast published November 2008.

3/ Basis differential between Henry Hub and FGT Zone 3 equal to value included within FPL fuel price forecast published November 2008.

4/ FPL has large quantities of firm transportation capacity under contract with both FGT and Gulfstream. As there is a higher marginal cost associated with the use of FGT capacity than Gulfstream capacity, it is assumed that any economic dispatch activity would serve to displace this higher cost FGT capacity. Thus, economic dispatch value is represented by the difference in cost between the use of the proposed project capacity and the FGT capacity under contract.