BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

DOCKET NO. 090172-EI
FLORIDA POWER & LIGHT COMPANY

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

PETITION
APPENDIX "F"

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F.A.C. 25-22.091(1): Identification of existing natural gas transmission pipelines including a general description and map of all existing, all Florida Public Service Commission (FPSC) or Federal Energy Regulatory Commission (FERC) approved but not yet in service and all proposed natural gas transmission pipelines, including laterals, within any Florida county in which the proposed project will be located.	Testimony of FPL witness Timothy C. Sexton	Pages 6 - 7	"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 (SNG) 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 Jacksonville area and Gulf South provides direct deliveries only to markets in the Pensacola area. FGT and Gulfstream, on the other hand operate pipeline systems that extend into various markets within the state of Florida and provide approximately 90% of the gas transportation capacity available into the state."
	Testimony of FPL witness Timothy C. Sexton	Page 7	"FGT has the capacity to transport approximately 2.21 Bcf/day into Florida and Gulfstream, with the recent installation of its Phases III and IV projects, now has the capacity to transport about 1.25 Bcf/day into Florida. Consequently, the total transportation capacity into Florida via these two pipelines is about 3.5 Bcf/day. In addition, FGT has recently made a Certificate Filing with FERC to initiate its Phase VIII expansion project which would serve to expand its capacity into Florida markets by an incremental 820,000 MMBtu/day (approximately 820 MMcf/day) with a proposed in-service date of April 1, 2011. Thus, after installation of FGT's Phase VIII expansion project, total pipeline capacity into the state from these two pipelines will be approximately 4.3 Bcf/day."
	Testimony of FPL witness Robert G. Sharra	Page 6	"The FGT pipeline, which extends from southern Texas to Florida, is designed to transport natural gas supplies received in Texas, Louisiana, Mississippi and Alabama for delivery to markets within Florida. While FPL's pipeline capacity rights on the FGT system vary slightly by season, FPL currently has firm transportation agreements in place with FGT for a total of 874 MMcf/d during the peak summer season."
	Testimony of FPL witness Robert G. Sharra	Page 7	"The Gulfstream pipeline, which is designed to transport natural gas from various receipt points in the Mobile Bay area, extends from Alabama, across the Gulf of Mexico, to its terminus at FPL's West County Energy Center (WCEC) in Palm Beach County, Florida. FPL currently holds 535 MMcf/d of firm transportation capacity on Gulfstream. Further, per contractual agreements, this quantity will rise to 695 MMcf/d beginning June 1, 2009, when Gulfstream's Phase III expansion is completed, which will represent approximately 56% of Gulfstream's design capacity."
	FPL Need Determination Petition	Appendix A	Map of Florida EnergySecure Line Proposed Corridor and Florida's Current and Proposed Natural Gas Infrastructure

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F.A.C. 25-22.091(2): Description of proposed natural gas transmission pipeline, ownership and financial information including:	Testimony of FPL witness Sam Forrest	Page 9	"The Florida EnergySecure Line is an approximately 300-mile natural gas pipeline connecting at a receipt point near Florida Gas Transmission, LLC's (FGT) Compressor Station 16 (FGT Station 16), located near Starke, Florida in Bradford County, to a termination point at FPL's Martin Plant located near Indiantown in Martin County. There are additional delivery points at FPL's modernized CCEC and RBEC facilities. The 30-inch diameter Florida EnergySecure Line will have an initial capacity of 600 MMcf/d, with a delivery capability of 200 MMcf/d to the CCEC and 200 MMcf/d to the RBEC. The remaining 200 MMcf/d will be delivered to FPL's Martin Plant for reliability purposes, but will also be offered to other entities within Florida. The 200 MMcf/d delivered to the Martin Plant can displace deliveries from FGT or Gulfstream to that site, which can then be redirected to other FPL facilities or to other entities within the state."
	Testimony of FPL witness Robert G. Sharra	Page 9	"The Florida EnergySecure Line will be an intrastate pipeline located entirely within Florida. The initial facility, which will support commercial operation of FPL's Modernization Projects, will consist of approximately 280 miles of 30-inch mainline pipe, approximately 23 miles of 20 to 24-inch laterals, and two compressor stations."
F.A.C. 25-22.091(2)(a): Project name and ownership, including all company officers, their addresses and phone numbers, and all corporate affiliations.	Testimony of FPL witness Sam Forrest	Page 3	"FPL is seeking an affirmative determination of need to develop, construct and operate the Florida EnergySecure Line (or the "Project"), a new Florida intrastate natural gas pipeline."
	Testimony of FPL witness Robert G. Sharra	Page 9	"The proposed intrastate pipeline [Florida EnergySecure Line] will be owned by FPL [Florida Power & Light Company]."
	FPL Need Determination Petition	Appendix B	Appendix B to FPL's Petition contains a list of all company officers, their addresses and phone numbers, as well as all corporate affiliations.
F.A.C. 25-22.091(2)(b): Copies of the annual reports to shareholders and 10K Reports to the Securities and Exchange Commission (SEC) for the last three years for each of the principal companies involved in the project. If annual reports for any of the companies are not prepared, audited financial statements for those entities for the last three years shall be provided.	FPL Need Determination Petition	Appendix C	Appendix C contains FPL Group, Inc.'s Annual Reports to Shareholders for the last three years.
	FPL Need Determination Petition	Appendix D	Appendix D to FPL's Petition contains copies of 10K Reports to the Securities and Exchange Commission (SEC) for the last three years for FPL Group, Inc.
F.A.C. 25-22.091(2)(c): Copies of all rating agency and security analyst reports for the last two years for each of the principal companies involved in the project to, or prepared for, banks and other lenders, security analysts, and ratings agencies for the last two years.	FPL Need Determination Petition	Appendix E	Appendix E to FPL's Petition contains copies of all rating agency and security analyst reports for the last two available years.

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F.A.C. 25-22.091(2)(e)(Part A): A description of the project, including all main or trunk pipelines and all laterals from origination to terminus of each mainline or lateral. The description shall include starting and ending points of each line, initial design capacity and operating pressures, estimated total cost and projected in-service date or dates of the project.	Testimony of FPL witness Robert G. Sharra	Page 12	"The mainline of the Florida EnergySecure Line will be located entirely within Florida, commencing at a point near FGT Station 16 in Bradford County, Florida."
	Testimony of FPL witness Robert G. Sharra	Page 13	"From the vicinity of FGT Station 16, the mainline will extend southeast to FPL's Martin Plant where, with FERC approval, it could be interconnected with the existing Gulfstream and FGT pipelines to create a southern Florida natural gas pipeline hub."
	Testimony of FPL witness Clinton M. Collins	Page 6	"The Florida EnergySecure Line will serve the CCEC via a 24-inch coated-steel lateral pipeline. This line will extend from the mainline approximately 17 miles to the northeast and will terminate within the boundaries of the CCEC."
	Testimony of FPL witness Clinton M. Collins	Page 6	"FPL's Martin Plant will be served directly by the Florida EnergySecure Line's 30-inch mainline, which will terminate within the boundaries of the Martin Plant."
	Testimony of FPL witness Clinton M. Collins	Page 6	"The RBEC will be served by the Project via the utilization of FPL's existing 18-inch oil/natural gas pipeline that currently connects the Martin Plant with FPL's 45th Street Terminal in Palm Beach County, and a new approximately 3-mile section of 20-inch pipe. By employing the existing 18-inch oil/natural gas pipeline, FPL will avoid having to construct approximately 36-miles of new pipeline through environmentally sensitive areas in western Palm Beach County."
	Testimony of FPL witness Clinton M. Collins	Page 7	"The Project also includes a new approximately 3-mile segment of 20-inch pipeline lateral that will replace an existing FPL 6-inch pipeline, which traverses northwest from FPL's 45th Street Terminal to an existing receipt point from FGT. This 3-mile segment will be utilized to provide reliable secondary service to the RBEC in those instances when fuel oil is being transported from the 45th Street Terminal to the Martin Plant via the existing 18-inch oil/natural gas pipeline."
	Testimony of FPL witness Clinton M. Collins	Page 6	"The designed maximum allowable operating pressure (MAOP) for the Mainline will be 1480 pounds per square inch (PSIG), although it will operate at somewhat lower pressures throughout the system depending on flow dynamics."
	Testimony of FPL witness Clinton M. Collins	Pages 27 - 28	"The current expected installed cost for the Florida EnergySecure Line is $1.588 billion. As shown in Exhibit CMC-3, this figure includes all costs for land acquisition, pipe materials, valving, metering stations, current compressor stations, development, construction labor and equipment, project management, start-up and AFUDC for the Project. The costs include $1.05 billion in direct material and installation costs, $325 million in indirect costs associated with development and start-up of the Project, $100 million in anticipated land costs, and $113 million for AFUDC."
	Testimony of FPL witness Robert G. Sharra	Page 10	"The in-service date for the Florida EnergySecure Line is currently projected to be January 2014. As the Florida EnergySecure Pipeline will be placed in service approximately six months after the CCEC's projected in-service date, FPL will install natural gas boost compression at CCEC to ensure reliable gas supply via FGT's existing pipeline system during the interim period."

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F.A.C. 25-22.091(2)(e) (Part B): The description shall also include the diameter of all pipelines in the proposed project, projected initial operating pressures for all pipelines, and the type and horsepower of all compressor stations.	Testimony of FPL witness Clinton M. Collins	Page 6	"The Florida EnergySecure Line will serve the CCEC via a 24-inch coated-steel lateral pipeline. This line will extend from the mainline approximately 17 miles to the northeast and will terminate within the boundaries of the CCEC."
	Testimony of FPL witness Clinton M. Collins	Page 6	"The RBEC will be served by the Project via the utilization of FPL's existing 18-inch oil/natural gas pipeline that currently connects the Martin Plant with FPL's 45th Street Terminal in Palm Beach County, and a new approximately 3-mile section of 20-inch pipe."
	Testimony of FPL witness Clinton M. Collins	Page 7	"The Project also includes a new approximately 3-mile segment of 20-inch pipeline lateral that will replace an existing FPL 8-inch pipeline, which traverses northwest from FPL's 45th Street Terminal to an existing receipt point from FGT. This 3-mile segment will be utilized to provide reliable secondary service to the RBEC in those instances when fuel oil is being transported from the 45th Street Terminal to the Martin Plant via the existing 18-inch oil/natural gas pipeline."
	Testimony of FPL witness Clinton M. Collins	Page 7	"The Project also includes two compressor stations. The Bradford Compressor Station will be located near the origination of the Mainline in Bradford County, near the point referred to as FGT Station 16. This compressor station is needed to insure adequate pressure of the gas at the key delivery points along the route."
	Testimony of FPL witness Clinton M. Collins	Pages 9 - 10	"The Bradford Compressor Station is currently planned to consist of approximately 20,000 horsepower (HP) utilizing two turbines. Delivery pressures from the upstream gas supply line will determine the actual number and size of units that will be required to insure adequate downstream pressures at the designated receiving locations."
	Testimony of FPL witness Clinton M. Collins	Page 10	"The 45th Street Terminal compressor station is currently planned to consist of approximately 4,700 HP utilizing two reciprocating units designed to provide backup compression only when the existing 18-inch lateral between the Martin Plant and the 45th Street Terminal is needed to transport fuel oil supplies from the Port of Palm Beach/45th Street Terminal to FPL's Martin Plant. The 45th Street Terminal compressor station will be used solely to boost receiving line pressures during these short periods of product movement."

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F.A.C. 25-22.091(2)(e) (Part C): If the pipeline includes phased implementation such that extensions or expansions are to be installed at times later than the time of the initial installation's operational date, similar but separate detailed descriptions as provided for the initial installation shall be provided.	Testimony of FPL witness Robert G. Sharra	Page 17	"A 30-inch pipeline can transport approximately 600 MMcf/d with approximately 20,000 horsepower (HP) of compression. Pipeline transportation capacity can be increased in nominal increments of 200 MMcf/d through the addition of approximately 18,000 HP of compression for each expansion, to a maximum capacity of 1.25 Bcf/d."
	Testimony of FPL witness Sam Forrest	Page 11	"As FPL's load growth increases and creates the need for additional generation on its system, the Florida EnergySecure Line will be capable of expanding to as much as 1.25 billion cubic feet per day (Bcf/d). These future expansions will come at a greatly reduced price to our customers as there will be minimal infrastructure required to add the additional capacity. FPL will likewise have access to additional capacity on the Upstream Pipeline to supply the Florida EnergySecure Line's expanded capacity."
	Testimony of FPL witness Robert G. Sharra	Pages 17 - 18	"The initial Florida EnergySecure Line cost of $1.588 billion includes all required facilities to interconnect and deliver 600 MMcf/d of natural gas. Each incremental expansion requires only the compression necessary to flow an additional 200 MMcf/d, plus interconnection costs at a new location. Contingent on the specifics of the additional compression, including year of installation and related costs, the location and other remaining details of the installation, we currently estimate costs varying between $125 million to approximately $200 million for each upgrade. Thus, an initial 200 MMcf/d expansion at a cost of $125 million would represent a 33% increase in capacity (600 MMcf/d to 800 MMcf/d) for an increased investment of slightly less than 8%."
F.A.C. 25-22.091(2)(f): Maps on the scale of 1 inch equals 50 miles of the preferred route and any planned alternate routes, planned locations of compressor stations and other affiliated facilities. Detailed maps of all laterals up to and including individual terminus points shall be provided.	FPL Need Determination Petition	Appendix A	Map of Florida EnergySecure Line Proposed Corridor and Florida's Current and Proposed Natural Gas Infrastructure
	Testimony of FPL witness Robert G. Sharra	Page 15	"There are no proposed alternate corridors at this time. However, as part of the NGPSA process FPL will solicit input on the proposed corridor and will evaluate this input as part of a comprehensive analysis of alternative corridors. Through the NGPSA stakeholder engagement and outreach process, including open houses, FPL is seeking input from regulatory agencies and the public on the results of our preliminary recommendation. From the results of this process, FPL will identify a preferred corridor and any alternate corridors in our NGPSA application."
F.A.C. 25-22.091(3): Evidence of the safety and integrity of the proposed project which shall include a statement that the engineering, construction and operation of the project will comply with all provisions of Section 368.01 and 368.061, Florida Statutes, The Gas Safety Law of 1967, Chapter 25-12, F.A.C. and 49 CFR, Parts 190 through 199, Pipeline Safety Regulations of the United States Department of Transportation, and codes and standards incorporated therein.	Testimony of FPL witness Clinton M. Collins	Page 23 - 24	See the Discussion on Chapter 368, Florida Statutes, Chapter 25-12, Florida Administrative Code, the Federal Rules and Regulations in 40 C.F.R. Parts 190 through 199.
	Testimony of FPL witness Clinton M. Collins	Page 20 - 21	"FPL is very focused on safety in all aspects of our business, whether it is building a new power generating plant, new electrical transmission line, or pipeline, the safety practices, procedures and protocols are very similar. Workers are trained in all aspects of safe working procedures, as they apply to their particular responsibility before ever undertaking a project. The Florida EnergySecure Line will be designed, constructed, tested, operated and maintained in accordance with the requirements of federal pipeline safety regulations, and will meet or exceed stringent industry standards."

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F.A.C. 25-22.091(4): Evidence of need for natural gas transmission capacity in the market area including:	Testimony of FPL witness Sam Forrest	Page 6	"On September 12, 2008, the Florida Public Service Commission ("FPSC" or "Commission") approved the need for modernizations at FPL's Cape Canaveral and Riviera Plants. The Modernization Projects will result in new natural gas combined cycle facilities that require approximately 400 million cubic feet of natural gas per day (MMcf/d). FPL does not currently have enough firm gas transportation capacity under contract to meet this increased need for natural gas in addition to its already substantial gas transportation requirements."
	Testimony of FPL witness Timothy C. Sexton	Page 10	"Despite the introduction of incremental capacity via Gulfstream's recent Phases III and IV expansion projects as well as the introduction of incremental capacity via the construction of the Cypress Project (Phase I was placed in service in May 2007 and Phase II was placed in service in May 2008), interstate transportation capacity in Florida is still effectively sold out and therefore constrained on a firm contractual basis."
	Testimony of FPL witness Timothy C. Sexton	Page 12	"[T]he existing infrastructure is fully subscribed on a long-term firm contractual basis and there is currently no existing pipeline capacity available in the state to be contracted on a long-term firm basis. Further, per FGT's Phase VIII expansion filing, FGT has executed precedent agreements with shippers accounting for fully 731,000 MMBtu/day of the 820,000 MMBtu/day of Phase VIII expansion capacity. Thus, only 89,000 MMBtu/day (approximately 89 MMcf/day) of this Phase VIII expansion capacity is unsubscribed and available. To summarize, absent the introduction of incremental pipeline capacity, the existing natural gas pipeline infrastructure cannot support incremental firm natural gas demand and if FGT's Phase VIII project is considered, only 89,000 MMBtu/day of capacity will be available after installation of Phase VIII facilities to support incremental firm natural gas demand."
F.A.C. 25-22.091(4)(a): A statement of the specific situations, conditions, contingencies, or other factors that indicate that need exists for the proposed natural gas transmission pipeline or pipelines, including the approximate time when the additional natural gas transmission capacity will be needed.	Testimony of FPL witness Robert G. Sharra	Page 10	"The in-service date for the Florida EnergySecure Line is currently projected to be January 2014. "
	Testimony of FPL witness Sam Forrest	Page 10	"The CCEC and RBEC are currently expected to be in service by June 2013 and June 2014, respectively. The Florida EnergySecure Line is currently scheduled to be in operation in January 2014. While not a permanent solution, FPL has developed appropriate plans that will allow the gas needs of the CCEC to be met utilizing existing delivery rights during the interim period until the Florida EnergySecure Line is operational."
	Testimony of FPL witness Sam Forrest	Page 9	"The 30-inch diameter Florida EnergySecure Line will have an initial capacity of 600 MMcf/d, with a delivery capability of 200 MMcf/d to the CCEC and 200 MMcf/d to the RBEC. The remaining 200 MMcf/d will be delivered to FPL's Martin Plant for reliability purposes, but will also be offered to other entities within Florida. The 200 MMcf/d delivered to the Martin Plant can displace deliveries from FGT or Gulfstream to that site, which can then be redirected to other FPL facilities or to other entities within the state."
	Testimony of FPL witness Heather C. Stubblefield	Page 8	"It was clear from our discussions with the respondents that a minimum quantity of 600 MMcf/d would be necessary for a pipeline company to commit to build new pipeline infrastructure into Florida. We made every attempt to work with the parties to determine if a smaller quantity would be feasible, but all the smaller scale projects resulted in significantly higher transportation costs."

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F.A.C. 25-22.091(4)(b): Evidence of need for natural gas delivery capability up to initial design capacity including supporting contracts, precedent agreements, binding letters of intent, or other forms of evidence the applicant believes sufficient to meet its burden of proof that need exists.	Testimony of FPL witness Robert G. Sharra	Page 10	"Initially, the Florida EnergySecure Line will serve primarily the natural gas transportation needs of FPL's Modernization Projects, with these facilities requiring approximately 400 MMcf/d in total, or nearly two-thirds of the pipeline's initial capacity. The remaining 200 MMcf/d will be delivered to FPL's Martin Plant for reliability purposes, but will also be offered to other entities within the state. The 200 MMcf/d delivered to FPL's Martin Plant can displace deliveries from FGT or Gulfstream to that site, which can then be redirected to other FPL facilities or to other entities within the state."
	Testimony of FPL witness Timothy C. Sexton	Page 37	"in its first year of operation in 2014, FPL will require 400 MMcf/day of the initial 600 MMcf/day of Florida EnergySecure Line capacity to meet the fuel requirements of its CCEC and RBEC Modernization Projects. Subsequently, as depicted in the Base Case Resource Plan in FPL witness Enjamio's testimony, FPL will require the entire potential expanded 1.25 Bcf/day of capacity for system operations by the year 2025."
F.A.C. 25-22.091(4)(c): Evidence of need for natural gas delivery capability beyond initial design capacity if future expansion capability is built into the pipeline through use of larger diameter pipeline than needed for planned initial throughput. The petitioner shall provide market area load forecasts by customer type, region of state, expected dates of added load, and other information necessary to support projected future load growth, including region specific natural gas load forecasting supporting each phase of the proposed pipeline installation, taking into account existing FPSC or FERC approved regional pipeline capacity. Detailed cost information to permit analysis of the cost-effectiveness of using such larger diameter pipeline shall also be provided.	Testimony of FPL witness Juan E. Enjamio	Page 16	"Under the Base Case, from 2013 FPL's gas need would grow to 1.6 billion cubic feet per day (Bcf/d) by 2030 and 2.8 Bcf/d by 2040."
	Testimony of FPL witness Juan E. Enjamio	Page 16	"Under the RPS Scenario, from 2013 FPL's gas need would grow to over 1.6 Bcf/d by 2030 and to 2.7 Bcf/d by 2040."
	Testimony of FPL witness Juan E. Enjamio	Page 16	"Under this [the Nuclear Delay Scenario], FPL's gas need will grow to 800 MMcf/d in the 2013-2020 period to 1.7 Bcf/d by 2030 and to 2.7 Bcf/d by 2040."
	Testimony of FPL witness Sam Forrest	Page 11	"As FPL's load growth increases and creates the need for additional generation on its system, the Florida EnergySecure Line will be capable of expanding to as much as 1.25 billion cubic feet per day (Bcf/d). These future expansions will come at a greatly reduced price to our customers as there will be minimal infrastructure required to add the additional capacity. FPL will likewise have access to additional capacity on the Upstream Pipeline to supply the Florida EnergySecure Line's expanded capacity."
	Testimony of FPL witness Heather C. Stubblefield	Page 8	"It was clear from our discussions with the respondents that a minimum quantity of 600 MMcf/d would be necessary for a pipeline company to commit to build new pipeline infrastructure into Florida. We made every attempt to work with the parties to determine if a smaller quantity would be feasible, but all the smaller scale projects resulted in significantly higher transportation costs."
	Testimony of FPL witness Juan E. Enjamio	Pages 21 - 22	"Under the Base Case resource plan, the economic analysis shows that the Florida EnergySecure Line / Company E Upstream Pipeline Project is the most economically beneficial with an advantage of $208 million CPVRR. About $89 million of the total economic advantage is based on the comparison of gas transportation costs, with fuel and other variable cost savings contributing another $119 million."

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F.A.C. 25-22.091(5): Evidence of access to gas supplies and adequacy of upstream natural gas transmission pipeline capacity to the supply areas including the following:	Testimony of FPL witness Robert G. Sharra	Page 19	"The Upstream Pipeline will be the primary link in the upstream transportation of the Florida EnergySecure Line's gas and will transport nearly all of the volumes reaching the Project. In addition, by potentially creating a northern Florida interconnection, it will be possible to access gas supply from FGT or Cypress as market conditions and physical delivery capabilities warrant."
	Testimony of FPL witness Timothy C. Sexton	Pages 20 - 25	FPL witness Timothy C. Sexton details upstream gas supplies near Transco Station 85 via the Southeast Supply Header (SESH), the Boardwalk Pipeline Partners' Gulf Crossing Pipeline, East Texas to Mississippi Expansion Project, Southeast Expansion Project, and Kinder Morgan's Midcontinent Express Pipeline, which provide access to the Barnett, Fayetteville, Haynesville and Woodford/Caney shale gas supplies.
	Testimony of FPL witness Timothy C. Sexton	Pages 25 - 26	"[i]t is projected that new third party capacity to Transco near its Station 85 will total about 4.7 Bcf/day (1.0 Bcf/day via SESH, 1.9 Bcf/day via Boardwalk Southeast Expansion and 1.8 Bcf/day via MidContinent Express). This capacity coupled with Transco's traditional capacity upstream of its Station 85 of approximately 4.7 Bcf/day can provide a total of about 9.4 Bcf/day to the Transco Station 85 area. This total capacity will be sufficient to meet the demands of all of Transco's customers as well as the demand on the proposed Florida EnergySecure Line. With respect to commodity gas supplies accessible via this capacity, as mentioned, the new pipeline projects are being constructed to transport the growing unconventional supply sources to southeast markets. As discussed in detail above, these unconventional supply sources are projected to continue to grow in the next several years and as such, will be sufficient to meet the needs of FPL via the Florida EnergySecure Line."
F.A.C. 25-22.091(5)(b)(Part A): As evidence of reliability of natural gas transmission pipeline capacity to the point of origination of the proposed project: detailed information on currently available firm or interruptible capacity on upstream pipelines and identification of all additions required to enable upstream pipelines to supply gas in volumes sufficient to meet throughput design capacity of the project.	Testimony of FPL witness Robert G. Sharra	Pages 19 - 20	"[T]he Upstream Pipeline will be interconnected with the facilities of other interstate pipeline companies at Transco Station 85, including Transco, Boardwalk Pipeline Partners, L.P., Gulf Crossing Pipeline, and Kinder Morgan's Midcontinent Express Pipeline. FPL identified Transco Station 85 as the best location to provide access to new gas supplies for a number of reasons. By interconnecting with the other pipelines via the Upstream Pipeline at Transco Station 85, the Florida EnergySecure Line will have direct access to natural gas volumes originating outside of the Gulf region, including the Barnett Shale and Bossier Sands in northeastern Texas, the Caney/Woodford Shale in southeastern Oklahoma, the Fayetteville Shale in southern Arkansas and the Haynesville Shale in northern Louisiana. This additional access to Mid-Continent gas reserves will increase the diversity and reliability of Florida's natural gas supplies."
F.A.C. 25-22.091(5)(b) (Part B) The petitioner shall also provide all available contracts, precedent agreements or binding letters of intent as evidence of adequate capacity on upstream pipelines.	Testimony of FPL witness Heather C. Stubblefield	Confidential Exhibit HCS-3	Letter of Intent (LOI) between FPL and Upstream Pipeline Project ("Company E")

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F.A.C. 25-22.091(5)(c): As additional evidence of reliability of natural gas transmission pipeline capacity to the point of origination of the project: information on any federal requirements that must be met by any upstream pipeline before it can provide natural gas transmission service to supply the project. Information on timing of any necessary expansions of upstream pipeline, including proposed federal filing dates and projected in-service dates of additions shall also be provided.	Testimony of FPL witness Robert G. Sharra	Page 19	"The Upstream Pipeline will require federal certification by FERC pursuant to the provisions of the Natural Gas Act (NGA). Company E currently plans to file its application for a certificate of public convenience and necessity with FERC in the fall of 2011 on schedule to meet the required January 2014 in-service date."
F.A.C. 25-22.091(6): Specific reasons for the proposed natural gas transmission pipeline including whether the proposed pipeline will:	Testimony of FPL witness Sam Forrest	Page 17	"Construction of the Florida EnergySecure Line will provide the following benefits for FPL's customers and the state of Florida: • Increased reliability of natural gas transmission within Florida; • Increased deliverability of natural gas within Florida with the addition of 600 MMcf/d of new gas supply; • Enhanced reliability and options in the event of any interruption on either of the existing Gulfstream or FGT pipelines; • Additional diversification of the gas supplies available to Florida; • Provision of the most cost-effective solution to meet the needs of the modernizations, as well as other natural gas delivery needs of the state; • Creation of efficiencies of pipeline to pipeline and gas to gas competition; and • The Florida EnergySecure Line will provide growth in state and local economies, new construction jobs, as well as substantial local purchases.."

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F.A.C. 25-22.091(6)(a): Improve or maintain deliverability, reliability, safety, and integrity of natural gas transmission within Florida;	Testimony of FPL witness Timothy C. Sexton	Pages 27 - 28	"With the state of Florida generally and FPL specifically reliant to a large degree on Gulf Coast supplies, I believe that the introduction of access to and expanded natural gas supply mix including unconventional shale gas supplies via the proposed Florida EnergySecure Line will provide supply diversity and will correspondingly increase supply reliability. As discussed previously, Gulf Coast production is projected to decline whereas shale gas production is projected to grow in the future. In addition, Gulf Coast production remains subject to disruption due to hurricane activity during the peak summer demand period. Diversification of the supply mix will mitigate the impact of such disruptions on the overall natural gas supply portfolio."
	Testimony of FPL witness Sam Forrest	Page 19	"By facilitating the introduction of a third major interstate pipeline into Florida and offering a uniquely routed pipeline that has the potential to be connected at multiple points with the existing infrastructure of the state, the Florida EnergySecure Line will increase the reliability of the natural gas infrastructure of Florida and reduce Florida's overall capacity concentration on the FGT and Gulfstream pipelines. The resulting integrated pipeline system will enhance reliability of pipeline operations and provide additional options in the event of any interruption on either of the existing Gulfstream or FGT pipelines, as well as make gas available when and where it is needed within the state."
	Testimony of FPL witness Sam Forrest	Pages 19 - 20	"The interconnection of the Florida EnergySecure Line with the Upstream Pipeline and FGT in the northern part of the state, and the opportunity to interconnect with FGT and Gulfstream at the Martin Plant in the southern part of the state, will provide significant operational flexibility. As planned and unplanned outages occur on any of the pipelines, the ability to receive gas through existing delivery rights within the state will ensure reliable delivery of service. Additionally, as greater than 50% of FPL's gas supply comes from the Gulf of Mexico, having a unique physical pipeline route receiving gas from on-shore sources will reduce the dependence on the Gulf of Mexico and will provide further protection against weather-related supply disruptions to which the Gulf supply is extremely susceptible."
	Testimony of FPL witness Sam Forrest	Page 20	"The proposed pipeline into Florida would be largely supplied from unconventional shale gas production discoveries in Texas, Arkansas, Oklahoma and Louisiana. The addition of the Upstream Pipeline as a major supply source into Florida will give FPL, as well as other natural gas users in Florida, access to unconventional shale gas in the Mid-Continent, liquefied natural gas (LNG), and traditional Gulf Coast supply through a large existing pipeline infrastructure. The Upstream Pipeline also provides access to newly developing and existing LNG regasification facilities. Having access to several supply basins, which the Upstream Pipeline offers, protects against declining production in a given supply basin."

APPENDIX F: NEED STUDY INDEX
FLORIDA ENERGYSECURE LINE

Florida Administrative Code (F.A.C.) Rule and Description	Petition / Testimony Location	Page Reference	Florida EnergySecure Line Details
F.A.C. 25-22.091(6)(b): Accommodate load growth;	Testimony of FPL witness Rosemary Morley	Page 4	"Between 2008 and 2018, FPL is projecting a 2.2% annual increase in the summer peak, or a cumulative increase of 5,083 MW. Over the longer term, the absolute increase [in load growth] will be even more substantial. Between 2008 and 2025, FPL is projecting a 2.3% annual increase in the summer peak, or a cumulative increase of 9,913 MW. By 2030, the summer peak is projected to reach 33,931 MW or a cumulative increase of 12,871 MW over the 2008 summer peak."
	Testimony of FPL witness Juan E. Enjamio	Page 3	"FPL projects that it will need as much as 19,661 MW of new capacity between 2013 and 2040. Of this capacity, 17,357 MW is expected to be incremental gas-fired capacity. This need already accounts for the addition of 1,121 MW of new demand side management (DSM) programs projected to be added between 2009 and 2018."
	Testimony of FPL witness Juan E. Enjamio	Page 4	"In 2008, approximately 53% of all energy produced by FPL came from gas-fired generating units. This percentage is projected to increase to 68% by 2030 and 84% by 2040. Between 2013 and 2040, FPL will need to add about 2,700 million cubic feet of gas transportation capacity per day (MMcf/d)."

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Florida Administrative Code (F.A.C.) Rule and Description	Petition / Testimony Location	Page Reference	Florida EnergySecure Line Details
F.A.C. 25-22.091(6)(c): Improve the economics of natural gas transmission within Florida to assure the economic well-being of the public;	Testimony of FPL witness Timothy C. Sexton	Page 44	"The new pipeline will introduce competition to the connected FPL markets of Riviera and Cape Canaveral where today there is no competition for transportation services. In addition, the majority of Peninsular Florida markets are currently accessed only by FGT. The construction of a new large diameter pipeline through Peninsular Florida will provide FPL as well as other Florida customers with access to a competitive large diameter pipeline alternative in this portion of the state. To the benefit of all consumers in these areas, the project will provide pipe-on-pipe competition for interstate pipeline services and will provide consumers with options as to pipeline services in the future. While the option value associated with this type of project is difficult to quantify, a project that permanently alters the competitive environment for services such as the Florida EnergySecure Line project has the potential to reap unforeseen benefits for the participant, as well as other consumers in the vicinity of the pipeline."
	Testimony of FPL witness Robert G. Sharra	Pages 8 - 9	"The Florida EnergySecure Line should increase competition within the region. Projects similar to the Florida EnergySecure Line have created market dynamics that have significantly impacted the economics of the overall portfolio. As an example, FPL entered into a transportation agreement with the Southeast Supply Header (SESH) pipeline project, which began delivering natural gas (sourced from on-shore production fields in Texas and Louisiana) into FGT and Gulfstream beginning in September 2008. Once these deliveries began, FGT and Gulfstream customers who purchased natural gas in the Mobile Bay area experienced over a 50% drop in the overall basis premium (current premium for Mobile Bay supplies above NYMEX Henry Hub). FPL projects that this differential could result in customer savings in excess of $50 million in 2009 alone, essentially paying the annual fee for the SESH pipeline. This is in addition to the many reliability and diversity benefits the SESH pipeline brings to FPL's portfolio."
	Testimony of FPL witness Sam Forrest		"[T]he Florida EnergySecure Line is the most cost-effective, economically beneficial solution to meet FPL's future gas requirements for FPL's customers, even before taking into account the potential for offsetting revenues from sales of capacity to third parties and its other reliability and diversity benefits. Using the conventional measure of the cumulative net present value of revenue requirements (CPVRR), FPL witness Enjamio projects that the Florida EnergySecure Line will reduce costs for FPL's customers by between $204 million and $513 million, compared to the next-best gas transportation alternative. This range of values was independently corroborated by FPL witness Sexton using a different valuation methodology than the CPVRR method."

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Florida Administrative Code (F.A.C.) Rule and Description	Petition / Testimony Location	Page Reference	Florida EnergySecure Line Details
F.A.C. 25-22.091(6)(c): Improve the economics of natural gas transmission within Florida to assure the economic well-being of the public;	Testimony of FPL witness Sam Forrest	Pages 20 - 21	"[T]here will be an opportunity to market the initial 200 MMcf/d of excess transportation to other entities within the state. FPL witness Sexton will describe different scenarios for capturing value through this marketing effort, showing a potential range of $220 million to $660 million of additional value. This range of values would be in addition to the overall economics described by FPL witness Enjamio and would be returned to FPL's retail customers through the Fuel Cost Recovery Clause. While it is not possible to predict the extent of any such opportunities, it is important to emphasize that this range of possible benefits would be in addition to the Florida EnergySecure Line's overall economic benefit to customers that is described by FPL witness Enjamio."
	Testimony of FPL witness Sam Forrest	Page 22	"[P]rojects such as the Florida EnergySecure Line and the Southeast Supply Header (SESH) can create market dynamics that have a significant positive impact on the economics of the overall portfolio. While other alternatives FPL has considered also offer the diversity that comes from accessing supplies at Transco Station 85, the Florida EnergySecure Line also is unique among the alternatives in establishing a new natural gas receipt point in northern Florida through a potential interconnection with FGT Station 16."
F.A.C. 25-22.091(6)(d): Conserve or displace oil;	Testimony of FPL witness Sam Forrest	Page 23	"Florida will also benefit from the environmental benefits that the Florida EnergySecure Line will facilitate. The gas that it supplies to the CCEC and RBEC will allow them both to displace the burning of fuel oil and to burn natural gas more efficiently, thereby supporting FPL's and Florida's long term plan to reduce greenhouse gas emissions. Additionally, to minimize environmental and other impacts, the proposed corridor of the Florida EnergySecure Line would locate much of the Project along an existing Commission-approved FPL transmission corridor."
F.A.C. 25-22.091(6)(e): Serve any other useful purpose.	Testimony of FPL witness Sam Forrest	Page 22 - 23	"Construction and operation of the Florida EnergySecure Line will provide a much-needed boost to state and local economies in the form of new construction jobs and substantial local purchases of materials and supplies. At a time when Floridians are feeling the effects of the current economic slowdown, this Project will have significant positive impacts. As discussed in FPL witness Sharra's testimony, there will be over 3,500 direct construction jobs created in Florida from the Florida EnergySecure Line and the state and local economic impact of construction and non-construction could reach $1.2 billion. Additionally, this Project will generate over $400 million in life-cycle tax benefits to local governments, while generating approximately $20 million in Florida Sales and Use tax revenues."

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Florida Administrative Code (F.A.C.) Rule and Description	Petition / Testimony Location	Page Reference	Florida EnergySecure Line Details
F.A.C. 25-22.091(7): A statement of adverse consequences to the public that will result if the project is delayed or if the Commission denies the application. The petitioner shall specifically address any adverse consequences to the economic well-being of the public due to delay or denial of approval of the project.	Testimony of FPL witness Sam Forrest	Page 25	"Any significant delay in the construction and in-service dates of the Florida EnergySecure Line could jeopardize FPL's ability to supply natural gas to the Modernization Projects in sufficient quantity and at the required gas pressure when those projects go into service."
	Testimony of FPL witness Sam Forrest	Page 26	"The important thing to appreciate in this case is there is no viable "do nothing" alternative. Currently, the Cape Canaveral and Riviera Plants are connected to the east leg of FGT's pipeline system. Current contractual requirements only require a delivery pressure of 50 pounds per square inch. FGT's pipeline infrastructure must be upgraded to ensure delivery of 400 MMcf/d of natural gas to the modernized CCEC and RBEC facilities, at a much higher delivery pressure than is currently guaranteed by FGT. If a determination of need is not granted in this case, FPL will most likely contract with Company B for an expansion of their system with an increase in delivery capability of 400 MMcf/d and with substantial infrastructure increases needed to ensure proper operation of the Modernization Projects. While this would meet the gas needs of the CCEC and RBEC, it would do so at a higher life-cycle cost and would forfeit the numerous benefits of the Florida EnergySecure Line that I described above."
	Testimony of FPL witness Robert G. Sharra	Page 21	"If this Project is not approved or is significantly delayed, alternative means of natural gas delivery system upgrades will be required to provide the additional natural gas deliveries at the upgraded pressures required to serve FPL's Modernization Projects and future gas transportation needs."
	Testimony of FPL witness Robert G. Sharra	Page 23	"[T]he Florida EnergySecure Line is a $1.588 billion project, the construction of which will provide a significant immediate and on-going boost to Florida's economy. As discussed above, this large infrastructure investment also will provide significant tax benefits to state and local governments. The loss of revenues into the state of Florida realized by cancelling the Project's proposed expenditures on labor and materials would be substantial. Failing to approve the Project would deprive the state of various economic benefits at a time when both the state and country most need new economic boosts and job creating opportunities."