

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

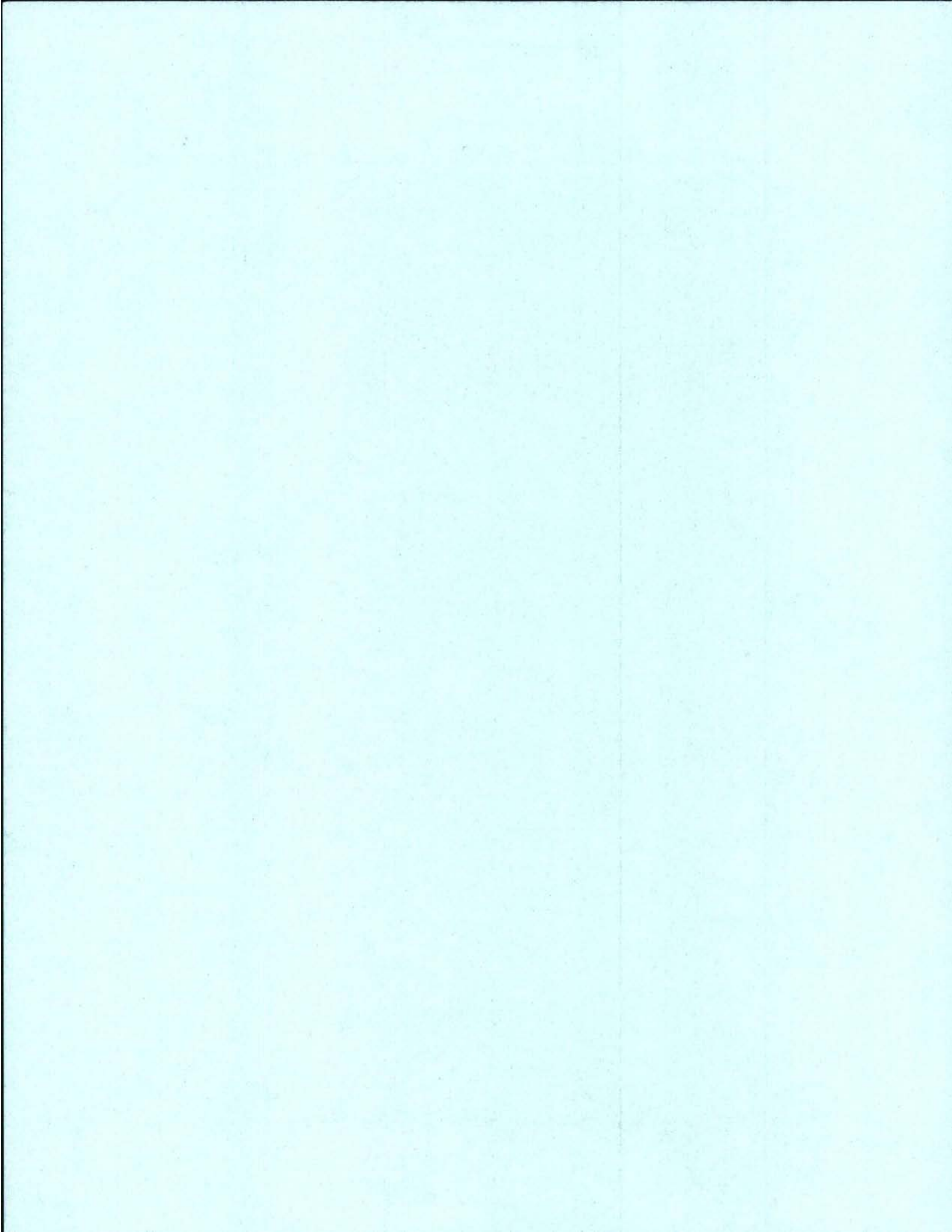
13 JUL 26 PM 1:28
RECEIVED-FPSC
COMMISSION
CLERK

**DOCKET NO. 13 0198 -EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: PETITION FOR PRUDENCE
DETERMINATION REGARDING NEW PIPELINE
SYSTEM**

COM 6 **DIRECT TESTIMONY & EXHIBITS OF:**
AFD _____
APA _____
ECO _____
ENG 1 _____
GCL _____
DM _____
TEL _____
CLK _____

SAM FORREST



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
PETITION FOR PRUDENCE DETERMINATION
REGARDING NEW PIPELINE SYSTEM
DIRECT TESTIMONY OF SAM FORREST
DOCKET NO. 13 _____-EI
JULY 26, 2013

TABLE OF CONTENTS

1

2 I. INTRODUCTION3

3 II. SUMMARY OF FPL’S REQUEST8

4 III. NEED FOR ADDITIONAL GAS INFRASTRUCTURE10

5 IV. BENEFITS OF THE NEW PIPELINE SYSTEM.....19

6 V. OVERVIEW OF RFP PROCESS AND RESULTS.....25

7 VI. CONCLUSION.....35

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

1 I. INTRODUCTION

2

3 Q. Please state your name and business address.

4 A. My name is Sam Forrest. My business address is Florida Power & Light
5 Company, 700 Universe Boulevard, Juno Beach, Florida 33408.

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

7 A. I am employed by Florida Power & Light Company ("FPL" or the
8 "Company") as Vice President of the Energy Marketing and Trading ("EMT")
9 Business Unit.

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

12 A. I hold a Bachelor of Science in Electrical Engineering from Texas A&M
13 University and a Masters of Business Administration from the University of
14 Houston. Prior to being named Vice President of EMT for FPL in 2007, I was
15 employed by Constellation Energy Commodities Group as Vice President,
16 Origination. In this capacity, I was responsible for managing a team of power
17 originators marketing structured electric power products in Texas, the Western
18 United States, and Canada. Prior to my responsibilities in the West, I was
19 responsible for Constellation's business development activities in the
20 Southeast U.S.

21

22 Before joining Constellation, from 2001 to 2004, I held a variety of energy
23 marketing and trading management positions at Duke Energy North America

1 (“DENA”). Prior to DENA, I was employed by Entergy Power Marketing
2 Corp. (“EPMC”) in several positions of increasing responsibility, including
3 Vice President – Power Marketing following EMPC’s entry into a joint
4 venture with Koch Energy Trading.

5
6 Prior to my entry into the energy sector, I was involved with a successful
7 start-up organization in the automotive industry from 1996 to 1998. From
8 1987 to 1996, I worked for AlliedSignal Aerospace at the Johnson Space
9 Center in Houston, Texas, in increasing roles of responsibility.

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

11 A. I am responsible for the overall direction and management of the EMT
12 Business Unit, which handles FPL’s short-term and long-term fuel
13 management and operations. These fuels include natural gas, residual and
14 distillate fuel oils, and coal. Additionally, EMT is responsible for FPL’s fuel
15 hedging program, long-term fuel transportation and storage contracts, power
16 origination activities and short-term power trading and operations. EMT is an
17 active participant in the short-term and long-term natural gas markets
18 throughout the Southeastern United States.

19
20 **Q. Are you sponsoring any exhibits in this case?**

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

- 23
- SF-1 Florida Interstate Pipeline Map

- 1 • SF-2 Comparison of Natural Gas Infrastructure among Top Gas
- 2 Using States
- 3 • SF-3 Map of the Proposed Pipeline System
- 4 • SF-4 Map of the Central Florida Hub
- 5 • SF-5 Results of Fishkind & Associates Economic Studies
- 6 • SF-6 NextEra Energy, Inc. Organizational Structure

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

8 A. FPL is seeking a determination that entering into definitive agreements with
9 two projects selected as a result of a Request for Proposals (“RFP”) for
10 incremental natural gas transportation capacity is prudent and that the charges
11 FPL will pay for gas transportation on those projects can be recovered through
12 the Fuel and Purchased Power Cost Recovery Clause (“Fuel Clause”). This
13 RFP was conducted to determine the best combination of options for
14 supplying incremental gas transportation capacity to serve FPL’s growing gas
15 needs in the 2017 timeframe and beyond. These incremental needs are driven
16 by the gas demands of FPL’s Cape Canaveral Next Generation Clean Energy
17 Center, Riviera Beach Next Generation Clean Energy Center, and Port
18 Everglades Next Generation Clean Energy Center (respectively, “CCEC,”
19 “RBEC” and “PEEC”; collectively, the “Modernization Projects”), as well as
20 the future gas transportation needs of FPL and the state of Florida. Generally,
21 my testimony describes: (1) FPL’s request in this proceeding; (2) the need for
22 additional gas infrastructure into and within the state of Florida; (3) the
23 important benefits that FPL, its customers, and the entire state of Florida will

1 enjoy as a result of meeting the state’s gas infrastructure need with a third,
2 independent pipeline system; (4) an overview of the RFP and associated
3 evaluation process; and (5) the projects that FPL has selected through the
4 evaluation process.

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

6 A. In 2009, FPL petitioned the Florida Public Service Commission (“FPSC” or
7 “Commission”) seeking a determination of need to develop, construct, and
8 operate the Florida EnergySecure Line, a new Florida intrastate natural gas
9 pipeline, which was to serve the needs of the new Modernization Projects, as
10 well as other current and future gas transportation needs of FPL and the state
11 of Florida. The FPSC noted that “[w]ith regard to the need for new gas
12 infrastructure, we agree with the parties that increased gas transportation
13 infrastructure is needed to meet future electricity needs,” but ultimately denied
14 the determination of need. The FPSC instructed FPL to conduct a new RFP
15 which “shall contain a specific, detailed request for proposals for a new
16 pipeline, and specifications of the long-term natural gas needs of FPL.” Order
17 No. PSC-09-0715-FOF-EI, at page 6. FPL has conducted that RFP and in this
18 proceeding is requesting the FPSC to determine that its selection of the best
19 projects (together, the “Pipeline System” or the “Projects”) is prudent and that
20 the gas transportation charges FPL will pay for those Projects are eligible for
21 recovery through the Commission’s Fuel Clause. The Pipeline System will
22 provide significant benefits to the state of Florida and to FPL and its
23 customers specifically, in both the near and long term. My testimony will

1 describe those benefits, as well as provide a description of the Projects and
2 why they were selected.

3 **Q. Please identify FPL's witnesses in this proceeding and the areas they**
4 **cover.**

5 A. The following is a listing of FPL's witnesses and the areas they cover:

- 6 • Dr. Rosemary Morley, Director, Load Forecasting and Analysis, FPL
7 – FPL's load forecast;
- 8 • Juan E. Enjamio, Supervisor, Integrated Analysis, Resource
9 Assessment and Planning, FPL – Need for additional natural gas
10 transmission capacity for FPL under FPL's long term resource plan;
11 results of the economic evaluation of the proposals received in
12 response to FPL's RFP;
- 13 • Heather C. Stubblefield, Manager, Project Development, FPL –
14 Explains the RFP issued by FPL to meet its future gas requirements;
15 the process FPL used to evaluate the proposals submitted in response
16 to the RFP; and the proposals that were selected from that evaluation
17 process as best meeting FPL's natural gas transportation requirements;
- 18 • Timothy C. Sexton, President, Gas Supply Consulting, Inc. – Reviews
19 the need for incremental natural gas pipeline capacity to serve future
20 needs of FPL; evaluates the RFP process undertaken by FPL;
21 compares the benefits provided by each of the proposals received in
22 response to FPL's RFP; and evaluates FPL's conclusions on the best

1 means of providing the new transportation capacity required to meet
2 forecasted natural gas fired generation requirements.

3

4

II. SUMMARY OF FPL'S REQUEST

5

6 **Q. What is FPL asking the Commission to determine in this proceeding?**

7 A. FPL's petition asks the Commission to find that FPL has a need for the gas
8 transportation capacity that the RFP solicits; that FPL has reasonably selected
9 the Projects through the RFP process to meet that need; and that FPL should
10 recover through the Fuel Clause the charges that it pays pursuant to the terms
11 of the precedent agreements for the Projects.

12 **Q. Why does FPL need the Commission to make a prudence determination
13 with respect to the Projects?**

14 A. As an anchor shipper, FPL will be undertaking substantial long-term financial
15 commitments for the Projects over a minimum term of 25 years. For the
16 reasons shown in my testimony and the testimony of FPL's other witnesses,
17 FPL and its customers have an urgent need for the gas transportation capacity
18 that the Projects will provide, and the Projects will meet that need on the most
19 favorable terms for our customers. FPL cannot justify undertaking such large
20 financial commitments, however, without assurance that the Commission
21 concurs. And without FPL's commitment, the Projects cannot be constructed.

22

1 The precedent agreement for each Project allows FPL to terminate the
2 agreement without financial penalty if the Commission does not make a
3 prudence determination satisfactory to FPL, but FPL has only a limited period
4 of time in which it could exercise those termination rights.

5 **Q. Has the FPSC made similar prudence determinations in the past**
6 **regarding large and long term contractual commitments?**

7 A. Yes. The Commission made prudence determinations in 2004 (Docket No.
8 040001-EI) with respect to power purchase agreements that FPL entered into
9 with Southern Company to replace its then-existing UPS Agreement and in
10 2006 (Docket No. 060001-EI) with respect to FPL’s agreement for gas
11 transportation capacity on the Southeast Supply Header (“SESH”).

12 **Q. Is FPL’s request to recover the gas transportation charges for the**
13 **Projects through the Fuel Clause consistent with Commission precedent?**

14 A. Yes. As a matter of Commission policy and practice, costs incurred to
15 transport and deliver fuel into FPL’s system are recoverable through the Fuel
16 Clause. This is expressly recognized in Order No. 14546, Docket No.
17 850001-EI-B, issued on July 8, 1985 which provides that “the following
18 charges are properly considered in the computation of ... fuel expense in the
19 utilities’ fuel cost recovery clauses: ... 4. Transportation costs to the utility
20 system, including detention or demurrage.” Consistent with Order No. 14546,
21 FPL currently recovers through the Fuel Clause all of its charges paid for gas
22 transportation.

23

1 **III. NEED FOR ADDITIONAL GAS INFRASTRUCTURE**

2

3 **Q. Please describe how gas currently is transported into the state of Florida.**

4 A. As described in more detail in FPL witness Sexton’s testimony, there are
5 currently four interstate pipeline systems that provide natural gas into at least
6 some portion of the state of Florida. The Gulf South Pipeline Company, LP
7 (“Gulf South”) and Southern Natural Gas Company, LLC (“SNG”) pipelines
8 both deliver small volumes of gas into the state, but do not have delivery
9 capability into Central and Southern Florida.

10

11 More specific to Central and Southern Florida and FPL’s service territory,
12 Florida Gas Transmission Company, LLC (“FGT”) is the largest pipeline into
13 the state with approximately 3.1 billion cubic feet per day (“Bcf/d”) of
14 deliverability. FGT currently has only about 184 MMcf/d, or less than 6
15 percent of its peak design capacity, of unsubscribed capacity available on its
16 system in the 2017 timeframe. 184 MMcf/d is only enough pipeline capacity
17 to serve one 1,200 MW natural gas combined cycle facility – about the same
18 size as one of FPL’s Modernizations or one of the two undesignated combined
19 cycle units that is reflected in Duke Energy Florida’s 2013 Ten Year Site Plan
20 for 2018 and 2020. The Gulfstream Natural Gas System, LLC (“Gulfstream”)
21 is the second largest pipeline system into the state with 1.3 Bcf/d of
22 deliverability into Central Florida. The Gulfstream system is 100 percent

1 subscribed. The Gulf South, SNG, FGT, and Gulfstream pipelines are shown
2 in Exhibit SF-1.

3 **Q. Please describe FPL's firm natural gas transportation contracts into**
4 **Florida.**

5 A. By 2017, FPL will hold firm transportation contracts with FGT totaling 1.274
6 Bcf/d, representing 41 percent of the peak design capacity of the FGT system.
7 This transportation represents approximately 65 percent of FPL's delivered
8 firm transportation capacity supporting daily peak gas supply requirements.
9 Additionally, FPL will hold 695 million cubic feet per day ("MMcf/d") of
10 firm transportation contracts on Gulfstream, representing more than 53
11 percent of the peak design capacity on the Gulfstream pipeline. This capacity
12 represents the remaining 35 percent of FPL's peak gas supply. Together, this
13 is almost 2 Bcf/d, which translates to approximately three million, or
14 approximately two thirds of, FPL customers being served by natural gas fired
15 generation on a peak day, all relying on two interstate pipelines whose
16 available natural gas transportation capacity is almost fully subscribed.

17 **Q. How dependent is Florida on natural gas to fuel electric generation?**

18 A. According to the U.S. Department of Energy's Energy Information
19 Administration ("EIA"), Florida consumed over 1.15 trillion cubic feet
20 ("Tcf") of natural gas in 2012 to generate electricity, second only to Texas.
21 California was a distant third by comparison at approximately 914 Bcf. Yet,
22 both Texas and California have significantly more natural gas resources and
23 infrastructure within their states than does Florida, as I will discuss later in my

1 testimony. In 2012, natural gas made up almost 68 percent of all electric
2 generation in Florida, one of the largest percentages in the entire country.

3 **Q. Does FPL rely heavily on natural gas to fuel electric generation?**

4 A. Yes. In fact, FPL is even more reliant than the rest of the state for natural gas
5 to fuel electric generation. As described in more detail in FPL witness
6 Enjamio's testimony, FPL generated 72.6 percent of its total energy from gas
7 in 2012. This number is expected to be in the 65-67 percent range for the
8 coming years with the difference being met primarily by increased nuclear
9 production through the recently completed uprate projects. In 2012, FPL
10 burned more than 600 Bcf of natural gas, substantially more than any other
11 electric utility in the country, according to the EIA.

12 **Q. Can you describe the benefits of natural gas for Florida in general and
13 specifically for FPL?**

14 A. Yes. According to numerous sources, including the EIA, the United States
15 has more than a 100-year supply of natural gas. Natural gas is a clean,
16 domestic, fuel source that is abundantly available in the United States,
17 including along the Gulf Coast, making access readily available for Florida.
18 Using this domestic source of natural gas instead of importing foreign oil
19 keeps money here in the U.S. and provides employment for nearly 3 million
20 American workers.

21

22 In addition, using imported oil to generate electricity is roughly four times
23 more expensive than using natural gas. Over the past decade, FPL has wisely

1 and prudently moved toward an increased use of natural gas and cut its use of
2 foreign oil to generate power by more than 98 percent, from over 40 million
3 barrels a year to less than 1 million in 2012. Since 2001, FPL's efficient
4 natural gas power plants have saved customers approximately \$6 billion in
5 costs by significantly reducing the amount of fuel we use to generate power.
6 In the years ahead, our fuel-efficient plants are expected to continue saving
7 customers billions more. FPL's new natural gas power plants are 33 percent
8 more efficient and 90 percent cleaner than the oil-fired facilities they replace.
9 The Company's modernizations of CCEC, RBEC, and PEEC are a key part of
10 this strategy, and FPL projects that its continued use of natural gas for these
11 and other future projects will require a substantial investment in infrastructure
12 to prevent any supply interruptions and ensure customers the advantages that
13 our increased use of natural gas provides. The proposed Pipeline System
14 provides for this and will benefit FPL's customers, as well as the other gas
15 users in the state of Florida.

16 **Q. How does Florida compare to other states with respect to natural gas**
17 **infrastructure?**

18 A. The contrast between Florida and other states that are major users of natural
19 gas to generate electricity is stark. Texas is the largest user of natural gas for
20 electricity generation and California is third. Texas has more than 812 Bcf of
21 natural gas storage and is the epicenter of natural gas production with
22 estimates from the EIA of well over 7.1 Tcf of natural gas marketed annually.
23 In fact, it is estimated that Texas markets 30 percent of the nation's natural

1 gas production. California also has a vast amount of storage with more than
2 570 Bcf and has significant natural gas production with 250 Bcf marketed
3 annually. Florida, at the other end of the spectrum, has no natural gas storage
4 and de minimis natural gas production, with only about 15 Bcf marketed
5 annually. From a pipeline perspective, Texas has approximately 64,700 miles
6 of both interstate and intrastate pipelines, while California has pipeline
7 mileage that tops 11,800. By contrast, Florida has only about 4,600 miles of
8 pipelines, the majority of which comprise long runs necessary to bring gas
9 deep into peninsular Florida. Moreover, the pipelines serving Florida today
10 are largely subscribed. Exhibit SF-2 shows a comparison of Florida's natural
11 gas infrastructure to both Texas and California.

12 **Q. Is there currently enough available gas transportation to serve FPL's**
13 **needs?**

14 A. No. As FPL witness Enjamio will describe in greater detail in his testimony,
15 FPL projects it will need an additional 575 MMcf/d of gas transportation
16 capacity by 2020. The existing pipeline infrastructure is largely subscribed
17 and there is nowhere near enough capacity to meet even the 2017 need of 405
18 MMcf/d, let alone the growing demand beyond 2017.

19
20 Although FGT could expand its system through additional compression and
21 pipeline looping, this would further exacerbate the concentration of pipeline
22 capacity on that system. And while to date FGT has been a reliable operator,
23 this concentration exposes FPL's customers to significant outages in the event

1 of a disruption. Further, there is no guarantee the existing FGT capacity
2 described earlier in my testimony will be available in the 2017 timeframe. As
3 described by FPL witness Sexton, significant growth in the power needs of the
4 state is expected over the coming years and this FGT capacity may well be
5 acquired for the needs of another load serving entity. This would cause the
6 existing pipeline system to become even more constrained than it already is.

7 **Q. FPL witness Enjamio's assessment of FPL's natural gas transportation**
8 **needs relies on a risk-adjusted load forecast. Why is this approach**
9 **appropriate?**

10 A. As I note above, FPL is in a unique position in terms of natural gas reliance.
11 It uses significantly more natural gas for generation than any other utility in
12 the country. Its forecast percentage of natural gas generation will remain at 65
13 percent or above for the foreseeable future. FPL sits at the end of a peninsula
14 and is served by only two natural gas pipeline systems. These circumstances
15 make natural gas transportation reliability a matter of special concern for FPL.
16 Part of FPL's strategy to enhance natural gas transportation reliability is to
17 secure another pipeline system serving FPL and the state of Florida. The
18 other part of FPL's strategy to enhance natural gas transportation reliability is
19 to have its natural gas supply planning include a measure of conservatism, or
20 protection against contingencies, similar to the reserve margin that FPL and
21 other electric utilities use for generation planning or the contingency analyses
22 used by FPL and other utilities in planning transmission. As further described
23 in FPL witness Sexton's testimony, contingencies can and do occur and there

1 should be some reliability margin against such occurrences. This is the reason
2 that FPL witness Enjamio relies on the risk-adjusted load forecast in his
3 assessment of FPL's gas transportation requirements.

4
5 FPL's base case load forecast provides no margin for contingencies, in that it
6 is just as likely that the load FPL actually has to serve will be higher or lower
7 than the forecast. Given the importance of an adequate supply of gas into
8 FPL's system, the risk-adjusted load forecast provides a reasonable measure
9 of conservatism, in that it is three times as likely that the actual load will be
10 lower than the forecast, rather than higher. Of course, this still leaves a one-
11 in-four chance that the load will be higher than forecast, so the risk-adjusted
12 load forecast employed for evaluation purposes is by no means unduly
13 conservative. Effectively, there can be no single correct margin to employ as
14 an assumption for the load forecast. It has to be a matter of judgment. For
15 example, FPL considered using a higher probability load forecast, such as 90
16 percent, meaning that it is nine times as likely for actual load to be lower,
17 rather than higher than the forecast. This would certainly provide added
18 protection, but FPL concluded that using 75 percent risk-adjusted load
19 forecast is an appropriate compromise that provides a reasonable reserve
20 against the contingency of higher-than-planned usage.

21
22 Other approaches to address contingencies could be used, such as directly
23 applying a 20 percent reserve margin as used in generation planning or some

1 sort of multiple contingency analyses as is used for transmission, but we are
2 comfortable with our approach as it is directly tied to the single largest factor
3 that threatens natural gas transportation reliability: actual load exceeding
4 forecast.

5 **Q. Are the requested volumes in the RFP appropriate for planning**
6 **purposes?**

7 A. Yes. Again, as noted earlier, FPL has a significant concentration of natural-
8 gas-fired generation and this is not expected to change over the evaluation
9 period. It is imperative that enough transportation capacity is acquired to
10 serve future needs. To properly assess the need and to ensure there is
11 adequate capacity to serve its future demand, FPL evaluated the resource need
12 based on the risk-adjusted forecasted load that creates a built-in reserve
13 margin. This risk-adjusted load forecast establishes a reserve margin of gas
14 transportation that will help to ensure FPL has the gas it needs to serve its
15 most efficient natural gas plants when the need arises. The base case load
16 forecast based on a 50/50 proposition creates little margin for error and clearly
17 exposes FPL's customers to significant fuel cost increases from having to
18 burn more expensive fuels.

19 **Q. Can you give an example of how the gas requirements are best met using**
20 **the risk-adjusted load forecast planning criterion?**

21 A. Yes. FPL's projections of load, as will be described in greater detail by FPL
22 witness Morley, are based on normalized weather. In addition, for planning
23 purposes, FPL uses an outage projection that derates each of its units

1 throughout the year as a proxy for actual unit outages. Operational electric
2 transmission constraints and gas pipeline constraints are not taken into
3 consideration during planning. These oversimplifying assumptions are
4 appropriate for long-term system planning, but they do not reflect the realities
5 of unanticipated growth, forecast error, unexpected constraints or generation
6 outages. In reality, FPL deals with constant changes in weather patterns,
7 system constraints that can create bottlenecks that force generating units
8 online that would otherwise be dispatched out of merit, and generation
9 outages - including nuclear outages that drive up the use of other fuels such as
10 natural gas. These operational issues cannot be easily modeled or predicted
11 and are the basis for the 20 percent generation reserve margin FPL and the
12 other Florida investor owned utilities employ. These same operational issues
13 will cause actual gas usage to increase relative to the modeled usage level
14 over the course of a season or year.

15
16 In 2012, for example, FPL was forecasted to use 540 Bcf of gas based on
17 these simplified planning assumptions. In fact, FPL used more than 600 Bcf
18 of natural gas. The peak day usage in 2012 was projected to be 1.85 Bcf, but
19 the actual peak day usage was 2.2 Bcf, well above FPL's firm transportation
20 contracted capacity. In fact, over the period June through September of 2012,
21 FPL had a 96 percent utilization rate on its firm transportation contracts and
22 had to rely on interruptible transportation, primarily on FGT, to exceed its

1 firm rights 33 percent of the time. As was mentioned earlier in my testimony,
2 we cannot rely on this interruptible capacity being available going forward.

3

4 **IV. BENEFITS OF THE NEW PIPELINE SYSTEM**

5

6 **Q. How would the new Pipeline System benefit Florida?**

7 A. The Pipeline System will provide numerous benefits to Florida, including:

- 8 • Significant reliability and deliverability enhancements to the existing
9 pipeline system serving Florida through the numerous interconnections
10 along the path, including the Central Florida Hub (“CFH”). See
11 Exhibit SF-3 for a map of the proposed Pipeline System.
- 12 • Increased competition for current and future gas transportation needs;
- 13 • Continued diversification of the gas supplies available to Florida; and
- 14 • Significant growth in local economies within Florida through job
15 creation during and after construction, as well as increased tax
16 revenues along the route.

17 **Q. Please describe how the Pipeline System will improve the reliability and**
18 **deliverability of natural gas transmission within the state of Florida.**

19 A. FPL, as well as the rest of Florida, already is heavily dependent on both the
20 FGT and Gulfstream systems. As mentioned earlier, FPL has significant
21 capacity on both these pipelines. By facilitating the introduction of a third
22 major interstate pipeline system into Central and Southern Florida and
23 offering a uniquely routed pipeline that will be connected at multiple points

1 with the existing infrastructure of the state, the Pipeline System will increase
2 the reliability of the natural gas infrastructure of Florida and reduce Florida's
3 overall capacity concentration on the FGT and Gulfstream pipelines. The
4 resulting integrated pipeline system will enhance the reliability of pipeline
5 operations and provide additional options in the event of any interruption on
6 either of the existing Gulfstream or FGT pipelines, as well as make gas
7 available when and where it is needed within the state.

8
9 By introducing an incremental 600 MMcf/d of capacity on the new Pipeline
10 System into its portfolio, FPL's concentration on FGT will fall to less than 50
11 percent and the concentration on Gulfstream will fall to approximately 27
12 percent. This represents a significant enhancement in the diversity of
13 deliveries compared to our current transportation portfolio which ultimately
14 benefits our customers.

15
16 The interconnection of the Pipeline System with FGT in Suwannee County,
17 Florida, the interconnections afforded by the Central Florida Hub, and the
18 connection at the Martin plant in the southern part of the state will provide
19 significant operational flexibility. As planned and unplanned outages occur
20 on any of the pipelines, the ability to receive gas through existing delivery
21 rights within the state will ensure reliable delivery of service. Additionally,
22 having a geographically separate on-shore pipeline receiving gas from
23 multiple supply sources will continue to reduce Florida's dependence on

1 natural gas sources in the Gulf of Mexico and will provide further protection
2 against weather-related supply disruptions to which the Gulf supply is
3 extremely susceptible. Geographic diversity of the new pipeline will also
4 ensure that a disruption of one pipeline system serving Central and Southern
5 Florida will not impact service on another pipeline, providing for continued
6 supply of natural gas, even if in a diminished capacity.

7 **Q. Will the CFH also provide reliability and deliverability benefits to the**
8 **users of natural gas within the state of Florida?**

9 A. Yes. The CFH mentioned earlier will create substantial operational benefits.
10 Currently, the FGT and Gulfstream systems are interconnected in both Hardee
11 and Osceola Counties with 300 MMcf/d of operational capacity in Hardee
12 County and 200 MMcf/d of operational capacity in Osceola County. The
13 flows at these interconnects are from Gulfstream into FGT - there is no ability
14 to move gas from FGT into Gulfstream. Neither interconnection is considered
15 a trading point, and the volumes moving through each point are fairly small on
16 a daily basis. By contrast, the CFH would create bi-directional
17 interconnections of the new Pipeline System with Gulfstream and FGT in
18 Osceola County, which would create the capability of delivering the
19 contracted capacities interchangeably into any of four pipelines in the Central
20 part of the state. The CFH will allow for the flow of gas between the
21 pipelines and will provide for enhanced delivery in the event of a disruption of
22 any of the pipelines. In the event of a disruption, FPL will still be able to
23 deliver gas to the most efficient plants on its system. Other utilities within the

1 state will also be able to flow volumes among the pipelines and may be able to
2 backhaul on the existing FGT and Gulfstream systems to serve their current
3 and future needs. See Exhibit SF-4 for a map of the Central Florida Hub.

4 **Q. Please describe how the Projects will increase competition for current
5 and future gas transportation needs.**

6 A. Currently, there is little room for competition if a utility is looking to purchase
7 a small volume of additional gas transportation. FPL, as well as the rest of the
8 utilities within the peninsula, is in a price-taker position because only FGT has
9 any existing capacity available for deliveries within Central and Southern
10 Florida. In fact, as was mentioned earlier in my testimony, even FGT only
11 has a minimal amount of capacity available from the Phase VIII expansion
12 completed in 2011.

13

14 Matters are even worse for larger volumes of gas transportation. Gulfstream's
15 system is at capacity and any expansion would either require the expensive
16 addition of off-shore compression facilities or pipeline looping in the Gulf of
17 Mexico. Similarly, expanding FGT's system beyond Phase VIII would
18 require significant additions of both new pipe and compression facilities. In
19 contrast, the initial expansions of the Pipeline System beyond FPL's
20 contracted requirements would be extremely cost effective and have the
21 potential to be among the least expensive transportation contracts in FPL's
22 supply portfolio.

23

1 In addition, projects such as the proposed Pipeline System can create market
2 dynamics that have a significant positive impact on the economics of the
3 overall supply portfolio. As an example, the addition of the SESH created
4 downward pressure on the FGT Zone 3 basis, resulting in lower prices for gas
5 supplies in Mobile Bay, which had significant benefits for all Florida
6 customers. While other alternatives FPL has considered also offer the
7 diversity that comes from accessing supplies at Transco Station 85, the new
8 Pipeline System is unique among the alternatives in establishing a new natural
9 gas trading point in Central Florida through the Central Florida Hub.

10 **Q. Please describe how the addition of these Projects will improve the**
11 **diversification of supply within the state of Florida.**

12 A. Fuel reliability and operational flexibility would be enhanced by the new Pipeline
13 System through diversification of FPL's sources of natural gas supply. The
14 proposed pipeline system into Florida would be largely supplied from shale
15 gas production discoveries in Texas, Arkansas, Oklahoma and Louisiana. The
16 addition of the Pipeline System as a major supply source into Florida will give
17 FPL, as well as other natural gas users in Florida, access to shale gas in the
18 Mid-Continent, liquefied natural gas ("LNG"), and traditional Gulf Coast
19 supply through a large existing pipeline infrastructure. In addition, the
20 potential to utilize Marcellus and Utica shale gas supplies out of the Midwest
21 and Northeastern U.S. is growing by the day. Producers are contracting for
22 backhaul capacity on traditional long-haul pipelines to the Northeastern U.S.
23 to deliver supply to the Southeastern U.S. The Pipeline System also provides

1 access to LNG regasification facilities that may become a major source of
2 supply in the future. Having access to several supply basins protects
3 against declining production in a given supply basin.

4 Q. **Has FPL evaluated the potential economic impacts of the Pipeline
5 System?**

6 A. Yes. Studies conducted by Fishkind & Associates, Inc. (“Fishkind”), a noted
7 economic and financial consulting firm, estimate the potential economic and
8 tax benefits resulting from construction of the Pipeline System. Construction
9 and operation of the Projects will provide a much-needed boost to state and
10 local economies in the form of new construction jobs and substantial local
11 purchases of materials and supplies. At a time when Floridians are feeling the
12 continued effects of the ongoing economic slowdown, the Projects will have
13 significant positive impacts. There will be an estimated 6,600 direct
14 construction jobs created in Florida, along with 3,000 indirect and induced
15 jobs, leading to additional wages of over \$420 million during construction.
16 Hundreds of permanent jobs will result from the Projects, as well.
17 Additionally, the Projects will generate over \$1.1 billion in life-cycle tax
18 benefits to as many as 17 rural counties and local governments. See Exhibit
19 SF-5.

20

21

22

23

1 CFH, the portion south of the CFH, or both. Thus, the RFP divided the
2 pipeline system into two distinct projects to encourage participation and
3 provide Respondents more flexibility in meeting FPL's, as well as the rest of
4 Florida's gas transportation requirements. These projects are identified in the
5 RFP as the Upstream Pipeline Project and the Downstream Pipeline Project,
6 which FPL has subsequently designated as the Northern Pipeline Project and
7 Southern Pipeline Project to further clarify the distinction between the two
8 pipeline projects. There were no limitations on the Respondents' ability to
9 choose which project(s) to bid or the number of proposals they could submit.
10 The RFP showed a strong preference for new, onshore, greenfield pipeline
11 infrastructure, although this was not a firm requirement of the RFP.

12
13 FPL provided a website for Respondents to register and download the RFP.
14 The website also allowed the Respondents to ask questions of FPL regarding
15 the RFP. FPL posted responses to questions for all Respondents to see, giving
16 all the opportunity to share in the full information available. An RFP
17 workshop was held on January 16, 2013 to provide an overview of the RFP to
18 potential Respondents and to allow them to ask questions regarding the RFP
19 and the RFP process. Responses to the RFP were due on April 3, 2013, giving
20 Respondents approximately 15 weeks to respond to the RFP. FPL witness
21 Stubblefield will discuss the RFP process in more detail and will provide
22 statistics on workshop attendees and questions posed through the website.

1 **Q. Did FPL review the RFP with Staff prior to issuing it, as directed in the**
2 **final order on the Florida EnergySecure Line?**

3 A. Yes. FPL provided a copy of the proposed RFP to Staff in November, 2012.
4 The RFP was then reviewed at a publicly noticed meeting in Tallahassee later
5 that month. Attendees were provided the opportunity to ask questions and
6 provide feedback to FPL on the RFP. At the end of this meeting, Staff
7 informed FPL that it had no objection to FPL releasing the RFP.

8 **Q. Please provide an overview of the Northern and Southern Pipeline**
9 **Projects for which the pipeline RFP has sought proposals.**

10 A. The Northern Pipeline Project originates at Station 85 of the Transcontinental
11 Gas Pipe Line (“Transco”) in Choctaw County, Alabama (located in western
12 Alabama) and terminates at the CFH described earlier in my testimony. The
13 CFH is to be constructed and operated by the developer of the Northern
14 Pipeline Project and will provide for the contracted capacities to be delivered
15 into each pipeline to allow for maximum flexibility and reliability. As
16 described in greater detail in FPL witness Sexton’s testimony, Station 85 was
17 chosen as the origination point for the Northern Pipeline Project because of its
18 ability to access significant throughput on the Transco system, as well as the
19 deliverability of the Midcontinent Express Pipeline, LLP (“MEP”) and the
20 Gulf South Southeast Expansion systems that all terminate into Station 85.

21

22 The Southern Pipeline Project will connect to the Northern Pipeline Project
23 within the CFH, providing FPL access to new gas supply sources, as well as

1 the market liquidity created by the proposed CFH. The Southern Pipeline
2 Project will terminate at FPL's Martin plant within the existing gas yard. By
3 connecting with the existing infrastructure within the Martin gas yard, the
4 Southern Pipeline Project will have direct connectivity with the generating
5 units at Martin and with the RBEC via the Martin-to-RBEC plant lateral. The
6 Northern Pipeline Project and Southern Pipeline Project are described in more
7 detail in the testimony of FPL witness Stubblefield. See Exhibit SF-3 for a
8 map of the Northern Pipeline and Southern Pipeline Projects.

9 **Q. Will delivery of the Pipeline System's full contracted capacity at the**
10 **Martin gas yard allow FPL to deliver gas to all of the Modernizations?**

11 A. Yes. The Martin gas yard provides the ideal terminus for the Pipeline System,
12 as both FGT and Gulfstream deliver into the Martin plant. The addition of a
13 new pipeline into Martin will create a natural gas "hub" at the plant,
14 increasing the flexibility and options that FPL has for moving gas to its
15 generating facilities. By having the ability to deliver significant volumes into
16 Martin from each pipeline, FPL will have the ability to use displacement on
17 one or more of the three pipelines to ensure delivery at each of its generating
18 facilities, including the Modernizations.

19 **Q. Please provide an overview of the RFP selection process.**

20 A. As described in much greater detail in FPL witness Stubblefield's testimony,
21 FPL received five proposals for the Northern Pipeline Project and one
22 proposal for the Southern Pipeline Project. In addition, FPL submitted three
23 self-build alternatives for the Southern Pipeline Project. FPL's evaluation of

1 the proposals and the FPL self-build alternatives included an economic
2 evaluation and a non-economic evaluation. The economic evaluation was
3 performed on every potential combination of projects by taking each Northern
4 Pipeline Project proposal and matching it with each Southern Pipeline Project
5 proposal. The non-economic evaluation was based on a comparative analysis
6 of each individual project with respect to a number of attributes which could
7 not be measured in the economic evaluation, such as how well each project
8 met the objectives of the RFP - including providing new greenfield
9 development, future expansion capabilities, etc.

10
11 Based on the economic and non-economic evaluation process, FPL selected
12 Spectra Energy Corp's ("Spectra") Sabal Trail Transmission, LLC ("Sabal
13 Trail") project for the Northern Pipeline Project. An FPL self-build
14 alternative was selected for the Southern Pipeline Project. That project is
15 identified as the Florida Southeast Connection, LLC ("FSC").

16
17 As discussed by FPL witness Enjamio, the cost to FPL customers of the
18 combination of Sabal Trail and FSC projects is almost \$600 million less
19 expensive on a CPVRR basis when compared to a combination of the FSC
20 project with the next best Northern Pipeline Project. FPL witness Sexton
21 describes his independent economic evaluation of the proposals, which
22 confirms the large cost savings that the Sabal Trail-FSC combination will
23 deliver and also confirms that the cost per mile to FPL and its customers is

1 approximately the same for the FSC and Sabal Trail projects. Mr. Sexton
2 concludes that, because Sabal Trail emerged as clearly the lowest-cost
3 proposal for the Northern Pipeline Project, this provides additional assurance
4 that the FSC rates are reasonable.

5 **Q. Will an affiliate of FPL have financial involvement in Sabal Trail?**

6 A. Yes. FPL's RFP indicated a willingness on the part of FPL's parent NextEra
7 Energy, Inc. ("NextEra Energy") to invest in projects submitted in response to
8 the RFP. Most Respondents to the RFP, including Spectra, expressed an
9 interest to discuss financial involvement by NextEra Energy. After FPL had
10 completed its evaluation of the Northern Pipeline Project proposals and
11 concluded that Sabal Trail was clearly the most favorable for FPL and its
12 customers, Spectra and NextEra Energy agreed to operate Sabal Trail as a
13 joint venture between a subsidiary of Spectra and a newly formed entity called
14 US Southeastern Gas Infrastructure, LLC ("USSGI"), which is an indirect
15 subsidiary of NextEra Energy Capital Holdings, Inc. and an affiliate of
16 FPL. The affiliate relationship between FPL and USSGI is shown on my
17 Exhibit SF-6. FPL's RFP evaluation team had no involvement in USSGI's
18 transaction with Spectra. Likewise, the Sabal Trail Precedent Agreement was
19 negotiated solely with Spectra, separately and independently from all
20 negotiations concerning USSGI's equity investment in the joint venture. The
21 Precedent Agreement between FPL and Sabal Trail is included as a
22 confidential exhibit to FPL witness Stubblefield's testimony.

23

1 **Q. Is it common for affiliates of pipeline shippers to have equity interests in**
2 **new greenfield interstate pipelines on which the shippers have contracted**
3 **for transportation capacity?**

4 A. Yes. Affiliates of shippers often take equity interests in new greenfield pipelines
5 that they will be using. For example, in April 2013 Constitution Pipeline
6 Company, LLC (“Constitution”) filed a certificate application with FERC to
7 construct a new greenfield 120-mile pipeline from Pennsylvania to New York.
8 Williams Partners, LP is the developer and a 41 percent owner, while a
9 subsidiary of Cabot Oil and Gas Corporation (“Cabot”) is a 25 percent owner.
10 Cabot has subscribed to 500 MMcf/d of the total 650 MMcf/d of the initial
11 Constitution capacity. Other recent examples of new greenfield pipelines
12 where equity owners were also affiliates of large shippers include Rockies
13 Express Pipeline, LLC (Sempra Energy, ConocoPhillips), Guardian Pipeline,
14 LLC (Wisconsin Gas), and Portland Natural Gas Pipeline System (Bay State
15 Gas Company, Northern Utilities).

16 **Q. Will FPL’s customers benefit from USSGI’s financial involvement in**
17 **Sabal Trail?**

18 A. Yes. Participation by NextEra Energy aligns all interests to ensure timely
19 completion of the Project and provides the foundation for a collaborative
20 project approach that will be critical in achieving both budget and scheduling
21 goals. It also brings added financial security to the project, further ensuring
22 the financial backing needed to bring a project of this magnitude into service
23 on time

- 1 **Q. Will an affiliate of FPL build and operate the FSC project?**
- 2 A. Yes. FSC will be solely responsible for the management, operations and
3 maintenance, and all costs of its project. As shown on my Exhibit SF-6, FPL
4 and FSC are both subsidiaries of NextEra Energy.
- 5 **Q. Did FSC or any FPL personnel who were involved in developing the self-
6 build alternative proposal play a role in the RFP selection process?**
- 7 A. No. Other than informational exchanges of the same nature as occurred with
8 the third-party bidders, there was no interaction between the members of the
9 EMT business unit that conducted the RFP evaluation and the commercial
10 team for the self-build alternative that became the FSC project.
- 11 **Q. On what basis will FPL compensate FSC for gas transportation capacity
12 on the FSC pipeline?**
- 13 A. FPL will pay FSC the gas transportation charges set forth in the terms of the
14 proposal that was evaluated in the RFP selection process. Those terms are
15 memorialized in the FSC Precedent Agreement attached to FPL witness
16 Stubblefield's testimony as a confidential exhibit. FPL has no other
17 obligations to compensate FSC for costs incurred in building or operating the
18 FSC project. This is the same arrangement that FPL will have with Sabal
19 Trail and that FPL has under its existing firm gas transportation agreements
20 with FGT and Gulfstream.
- 21 **Q. Will the FSC project be subject to FERC regulation?**
- 22 A. Yes. The FSC project will be a FERC-regulated interstate pipeline, the same
23 as the Sabal Trail project and the four existing interstate pipelines that provide

1 gas transportation into Florida. FERC will have authority over the siting and
2 rates of the FSC project. In addition, FPL and FSC will be subject to the
3 FERC Standards of Conduct. These are the same rules that today apply to
4 FPL's wholesale electric transmission function. The rules require that FPL's
5 marketing function employees (i.e., those employees involved in the sale of
6 wholesale natural gas in interstate commerce – employees of the EMT
7 business unit) must function independently of FSC transmission function
8 employees (i.e., those employees who operate the pipeline), and such
9 employees cannot be shared. FSC is not permitted to share other shipper's
10 operational or commercial information with FPL's marketing function
11 employees, absent a shipper's voluntary consent.

12 **Q. Will FERC require that the FSC project be an open access pipeline?**

13 A. Yes. Any capacity excess to the amount contracted by FPL and any other
14 FSC firm shippers will be available for other qualified shippers to contract for
15 on a firm or interruptible basis. FSC also will have provisions in its FERC
16 tariff that permit it to expand its facilities to create new capacity to serve any
17 additional shippers upon mutually agreeing on the terms governing such
18 service and obtaining the necessary regulatory approvals.

19
20 Conversely, to the extent that FPL is not using its full contracted amount of
21 capacity, FSC's FERC tariff will permit FPL to release the excess capacity to
22 any replacement shipper qualified under FSC's tariff. Payments received by
23 FPL for capacity releases will be returned to FPL's customers as an offset to

1 the costs that FPL recovers through the Fuel Clause. This is the same
2 arrangement that FPL uses for capacity releases on FGT and Gulfstream
3 today.

4 **Q. How was the Precedent Agreement prepared and executed for the FSC**
5 **project?**

6 A. As explained by FPL witness Stubblefield, EMT included in the RFP a form
7 of Precedent Agreement and asked respondents either to accept the form or
8 indicate how they would propose to modify it. Once FPL had selected Sabal
9 Trail as the Northern Pipeline Project, FPL negotiated the details of the
10 Precedent Agreement with Spectra, ultimately agreeing on terms that
11 preserved all essential elements of the form Precedent Agreement that FPL
12 had included in the RFP. Because it reflects terms that are acceptable to FPL,
13 the Sabal Trail Precedent Agreement was then used as the basis for the
14 Precedent Agreement with FSC.

15 **Q. Please compare the proposed purchase of gas transportation capacity**
16 **from FSC with the FPL ownership arrangement proposed for the Florida**
17 **EnergySecure Line (“FESL”).**

18 A. For the FESL, FPL proposed to treat the costs of FESL as electric plant in
19 service and include prudently incurred costs for the project in FPL’s rate base.
20 FPL believed that ratemaking treatment was appropriate because the
21 predominant purpose of the FESL was to serve the natural gas transportation
22 needs of FPL’s electric generating units; however, a number of objections to
23 that approach were raised. In contrast, the FSC proposal places ownership

1 and operation of the pipeline in a separate entity that will be a FERC interstate
2 pipeline. Among other advantages, such separation will facilitate sales of
3 pipeline capacity to third parties. It also will provide for the payment of
4 transportation capacity on a fixed and known basis, just as FPL pays for
5 transportation costs from other interstate pipeline companies. FPL's recovery
6 of the charges for both the Sabal Trail and the FSC pipelines through the Fuel
7 Clause would be identical to how FPL currently recovers charges for gas
8 transportation on FGT, Gulfstream, and SESH.

9
10 **VI. CONCLUSION**

11
12 **Q. Please summarize your request in this testimony.**

13 A. FPL, as well as the rest of Florida, has grown extremely dependent on the
14 existing natural gas pipelines serving peninsular Florida. FPL's dependence
15 on natural gas has grown over the last decade to a point where no other utility
16 burns as much gas to generate electricity as FPL, and this trend is expected to
17 continue into the future. This combination of facts makes it imperative that a
18 third natural gas pipeline system is developed into and within the state of
19 Florida. FPL has conducted a thorough and fair RFP, which has resulted in
20 selecting the Sabal Trail and FSC projects as clearly the best choices available
21 for the Pipeline System. The Commission should determine that FPL's
22 selection of the Sabal Trail and FSC projects is prudent and authorize FPL to
23 recover the costs associated with these Projects through the Fuel Clause.

1 **Q. Does this conclude your direct testimony?**

2 **A. Yes.**

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

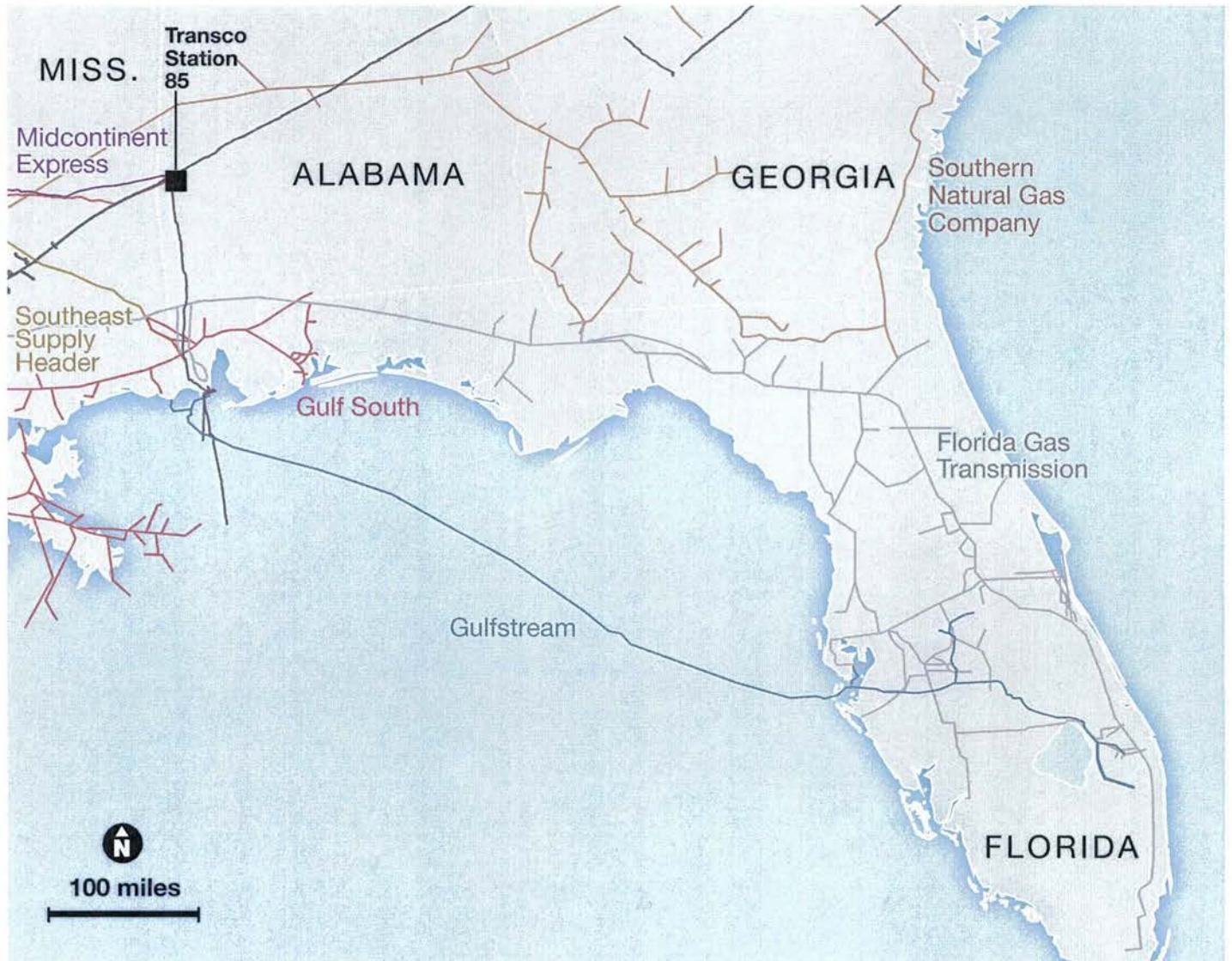
20

21

22

23

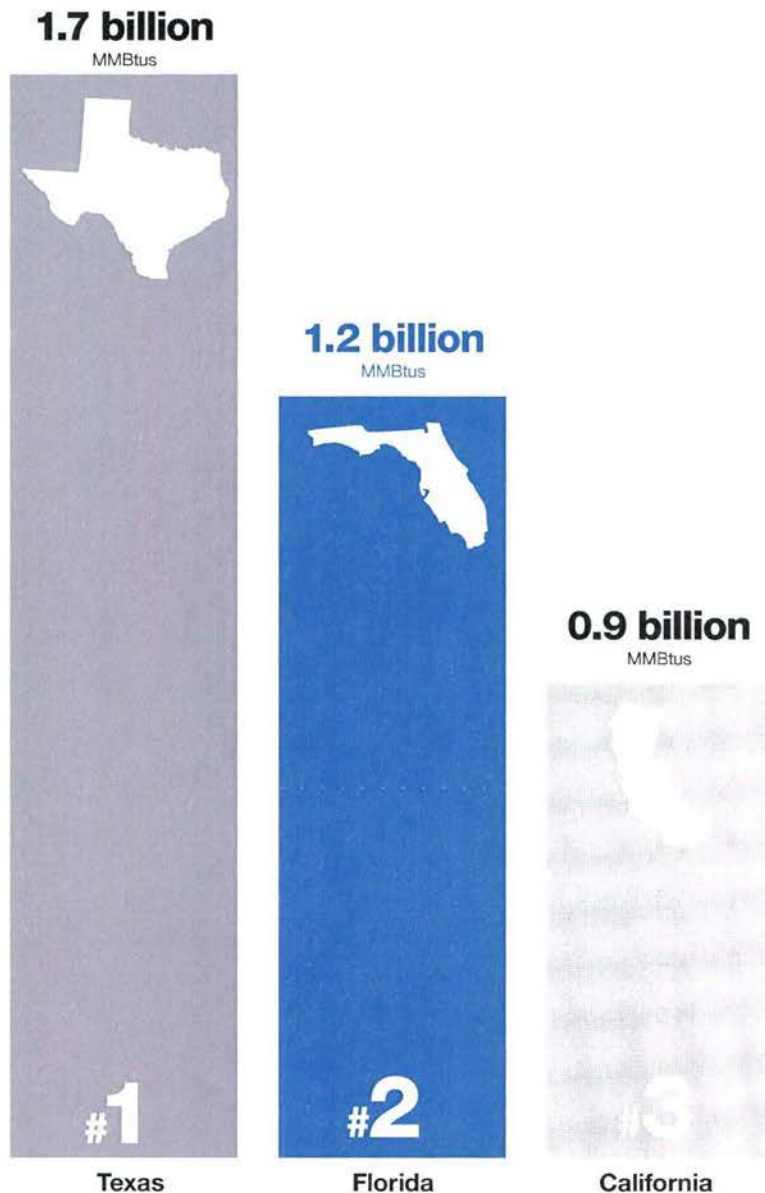
Florida Interstate Pipeline Map





Natural Gas State Data

Natural Gas Consumption for Electric Generation*



Natural Gas Transmission Pipeline Mileage***



Underground Natural Gas Storage Capacity**



Natural Gas Marketed Production**



* 2012 December EA-923 Monthly Time Series File. Sources: EA-923 and EIA-860

** All data 2011 except 2010 reserve. Source: <http://www.eia.gov/naturalgas/data.cfm>

*** 2011 data. Source: <http://pims.phmsa.dit.gov/comm/states.htm?nocache=1369> LDC and gathering system mileage is excluded.

Map of the Proposed Pipeline System



Map of the Central Florida Hub



The Fiscal & Economic Benefits of the Proposed Sabal Trail Natural Gas Pipeline

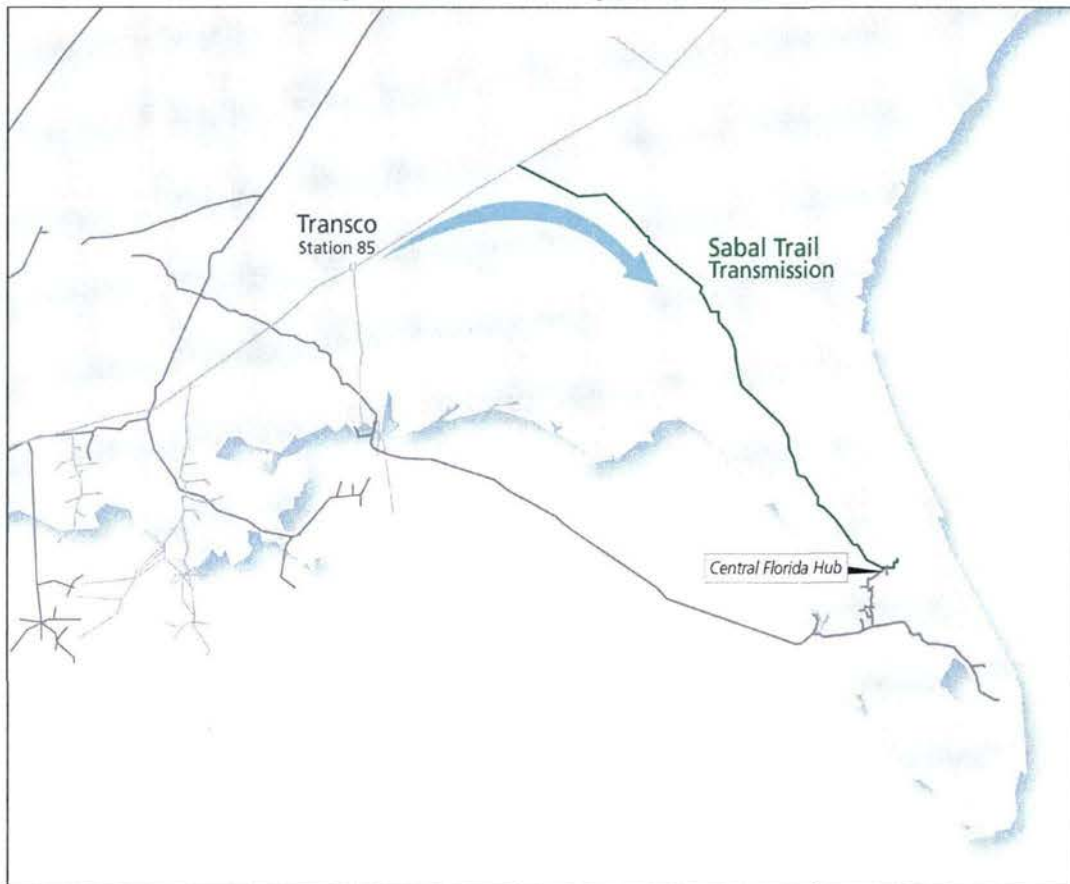
July 22, 2013

Prepared By:

***Fishkind & Associates, Inc.
12051 Corporate Blvd.
Orlando, Florida 32817
407-382-3256
<http://www.fishkind.com>***

Sabal Trail Transmission, LLC (“Client”) is planning to develop a natural gas pipeline in the southeastern United States. The proposed Sabal Trail pipeline will start in Alabama and continue through Georgia and Florida with the terminus of the pipeline in Central Florida. The proposed construction timeframe is 10-months starting in June of 2016 and finishing in May of 2017. The capital investment required for a pipeline of this magnitude is estimated at \$3.2 billion across the three states. This report documents the fiscal & economic impacts of the pipeline to the State of Florida.

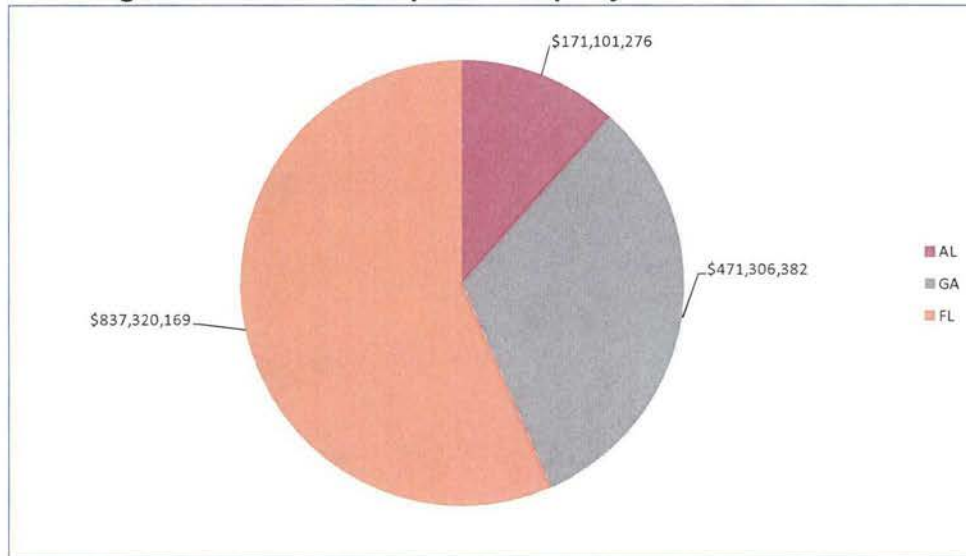
Map 1. Sabal Trail Pipeline Route



Source: Spectra Energy

The Sabal Trail pipeline generates \$837.3 million in property taxes over its 60-year useful life for taxing authorities in Florida and \$1.5 billion across three states. These taxes go to a wide variety of government entities.

Figure 1 Sabal Trail Pipeline Property Tax Revenue



Source: Spectra Energy

The economic impacts of the proposed Sabal Trail pipeline are substantial. Economic impacts are characterized by two types: construction impacts, which are temporary and accrue only during the construction period; and permanent impacts, which are ongoing and accrue annually reflecting the impacts of operations, maintenance and taxes paid to local governments.

The Sabal Trail pipeline will generate an estimated \$1.5 billion in 1-year construction impacts, employing 15,200 persons during the course of constructing the 465 mile pipeline. Permanent economic impacts will result in 635 permanent jobs, \$22 million in annual wages and more than \$81 million in total economic output, as shown in Table 1. Florida alone receives \$880 in economic impacts from construction, supporting 7,900 jobs and \$279 million in wages. Ongoing permanent benefits in Florida will reach \$46 million annually supporting 328 jobs and \$12 million in annual wages. Tables 2 and 3 show the detailed economic impacts by impact type, in all states, for construction and ongoing operations.

**Table 1. Economic Impacts of Sabal Trail Pipeline by State –
 For Construction and Permanent Activity**

| Construction | | | | | |
|------------------------|---------------------|---------------|----------------------|----------------------|------------------------|
| State | Impact Type | Employment | Labor Income | Total Value Added | Output |
| Alabama | Total Effect | 2,244 | \$69,227,024 | \$89,568,379 | \$206,610,480 |
| Georgia | Total Effect | 5,047 | \$150,754,075 | \$194,545,687 | \$457,133,963 |
| Florida | Total Effect | 7,938 | \$279,233,174 | \$371,378,030 | \$879,564,279 |
| Total | Total Effect | 15,229 | \$499,214,273 | \$655,492,097 | \$1,543,308,722 |
| Operations (Permanent) | | | | | |
| State | Impact Type | Employment | Labor Income | Total Value Added | Output |
| Alabama | Total Effect | 76 | 2,215,293 | 4,076,752 | 9,057,121 |
| Georgia | Total Effect | 232 | 7,332,445 | 11,622,068 | 26,807,984 |
| Florida | Total Effect | 328 | 12,075,944 | 21,336,421 | 45,553,778 |
| Total | Total Effect | 635 | 21,623,681 | 37,035,241 | 81,418,882 |

Source: IMPLAN and Fishkind and Associates, Inc.

**Table 2. Economic Impacts of Sabal Trail Pipeline
 For Construction Activity by Activity Type in AL, FL, GA**

| | | | | | |
|---------------------|---------------------|-------------------|----------------------|--------------------------|------------------------|
| Alabama | ImpactType | Employment | Labor Income | Total Value Added | Output |
| | Direct Effect | 1,762 | \$53,147,741 | \$60,099,946 | \$154,324,736 |
| | Indirect Effect | 212 | \$7,486,725 | \$12,152,962 | \$23,002,255 |
| | Induced Effect | 270 | \$8,592,558 | \$17,315,472 | \$29,283,489 |
| | Total Effect | 2,244 | \$69,227,024 | \$89,568,379 | \$206,610,480 |
| Florida | ImpactType | Employment | Labor Income | Total Value Added | Output |
| | Direct Effect | 5,858 | \$215,405,335 | \$245,854,112 | \$650,142,423 |
| | Indirect Effect | 1,024 | \$31,036,875 | \$54,690,407 | \$110,604,887 |
| | Induced Effect | 1,055 | \$32,790,964 | \$70,833,512 | \$118,816,969 |
| | Total Effect | 7,938 | \$279,233,174 | \$371,378,030 | \$879,564,279 |
| Georgia | ImpactType | Employment | Labor Income | Total Value Added | Output |
| | Direct Effect | 4,089 | \$122,739,833 | \$137,558,626 | \$356,207,269 |
| | Indirect Effect | 498 | \$15,003,547 | \$25,374,482 | \$48,173,483 |
| | Induced Effect | 459 | \$13,010,694 | \$31,612,579 | \$52,753,210 |
| | Total Effect | 5,047 | \$150,754,075 | \$194,545,687 | \$457,133,963 |
| Multi-State Summary | ImpactType | Employment | Labor Income | Total Value Added | Output |
| | Direct Effect | 11,710 | \$391,292,909 | \$443,512,684 | \$1,160,674,429 |
| | Indirect Effect | 1,734 | \$53,527,148 | \$92,217,851 | \$181,780,626 |
| | Induced Effect | 1,785 | \$54,394,216 | \$119,761,562 | \$200,853,668 |
| | Total Effect | 15,229 | \$499,214,273 | \$655,492,097 | \$1,543,308,722 |

Source: IMPLAN and Fishkind and Associates, Inc.

**Table 3. Economic Impacts of Sabal Trail Pipeline
 For Permanent Activity by Activity Type in AL, FL, GA**

| | | | | | |
|----------------------------|--------------------------|--------------------------|----------------------------|---------------------------------|----------------------|
| Alabama | <u>ImpactType</u> | <u>Employment</u> | <u>Labor Income</u> | <u>Total Value Added</u> | <u>Output</u> |
| | Direct Effect | 50 | \$1,407,317 | \$2,667,475 | \$6,459,196 |
| | Indirect Effect | 18 | \$543,422 | \$869,565 | \$1,680,694 |
| | Induced Effect | 9 | \$264,554 | \$539,712 | \$917,231 |
| | Total Effect | 76 | \$2,215,293 | \$4,076,752 | \$9,057,121 |
| Florida | <u>ImpactType</u> | <u>Employment</u> | <u>Labor Income</u> | <u>Total Value Added</u> | <u>Output</u> |
| | Direct Effect | 210 | 8,517,806 | 14,572,034 | 33,139,568 |
| | Indirect Effect | 74 | 2,228,404 | 3,854,000 | 7,524,611 |
| | Induced Effect | 44 | 1,329,734 | 2,910,387 | 4,889,598 |
| | Total Effect | 328 | 12,075,944 | 21,336,421 | 45,553,778 |
| Georgia | <u>ImpactType</u> | <u>Employment</u> | <u>Labor Income</u> | <u>Total Value Added</u> | <u>Output</u> |
| | Direct Effect | 162 | \$5,402,368 | \$7,691,088 | \$19,700,397 |
| | Indirect Effect | 47 | \$1,309,131 | \$2,412,346 | \$4,575,041 |
| | Induced Effect | 22 | \$620,945 | \$1,518,634 | \$2,532,545 |
| | Total Effect | 232 | \$7,332,445 | \$11,622,068 | \$26,807,984 |
| Multi-State Summary | | | | | |
| | <u>ImpactType</u> | <u>Employment</u> | <u>Labor Income</u> | <u>Total Value Added</u> | <u>Output</u> |
| | Direct Effect | 422 | \$15,327,490 | \$24,930,597 | \$59,299,161 |
| | Indirect Effect | 139 | \$4,080,958 | \$7,135,910 | \$13,780,346 |
| | Induced Effect | 74 | \$2,215,233 | \$4,968,734 | \$8,339,375 |
| | Total Effect | 635 | \$21,623,681 | \$37,035,241 | \$81,418,882 |

Source: IMPLAN and Fishkind and Associates, Inc.

The Fiscal & Economic Benefits of the Proposed Florida Southeast Connection Natural Gas Pipeline



June 22, 2013

Prepared By:

Fishkind & Associates, Inc.

12051 Corporate Blvd.

Orlando, Florida 32817

407-382-3256

<http://www.fishkind.com>

brianm@fishkind.com

The Fiscal & Economic Benefits of Florida Southeast Connection's Proposed Natural Gas Pipeline

Florida Southeast Connection, LLC, is developing a natural gas pipeline that will involve a capital investment of \$554.5 million across five Florida counties: Polk, Osceola, Okeechobee, St. Lucie and Martin. Fishkind & Associates, Inc. was asked to calculate this investment's fiscal and economic benefits.

The pipeline will generate significant tax revenue for state and local taxing authorities over its 60-year useful life. Chart S-1 breaks projected property tax revenue down by county. This revenue goes to a variety of entities including county governments and local school districts (Chart S-2). The total tax revenue in all Florida jurisdictions is projected at \$327.3 million over 60 years.

Chart S-1. Property Taxes Generated in Each County (\$Millions)

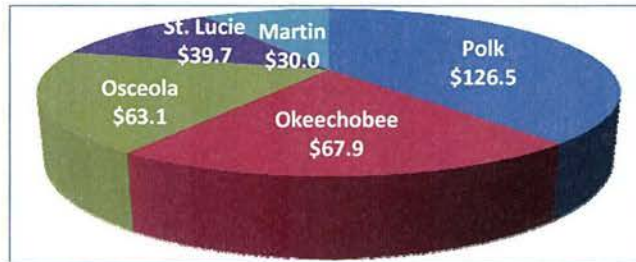
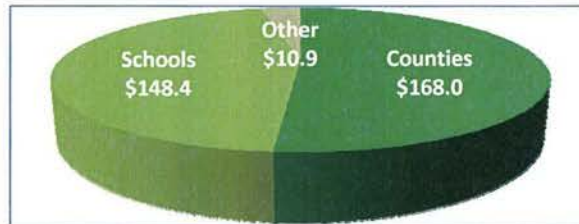


Chart S-2. Tax Revenue Generated By Authority (\$Millions)



In addition, construction of the pipeline will generate sizeable economic benefits (Table S-3).

Table S-3. Total Economic Impact of Pipeline's Construction – Florida

| | |
|--|----------------------|
| Direct & Indirect Employees | 1,721 |
| Direct Employees | 800 |
| Indirect Employees | 921 |
| Direct & Indirect Output | \$610,614,960 |
| Direct Output | \$273,144,692 |
| Indirect Output | \$337,470,268 |
| Direct & Indirect Wages | \$148,519,044 |
| Direct Wages | \$75,394,204 |
| Indirect Wages | \$73,124,840 |

