

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for Determination) DOCKET NO. 991462-EU
of Need for an Electrical Power)
Plant in Okeechobee County) FILED: Oct. 25, 1999
by Okeechobee Generating)
Company, L.L.C.)
_____)

DIRECT TESTIMONY

OF

NORMAN D. KARLOFF

ON BEHALF OF

OKEECHOBEE GENERATING COMPANY, L.L.C.

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: PETITION FOR DETERMINATION OF NEED FOR THE
OKEECHOBEE GENERATING PROJECT, FPSC DOCKET NO. 991492-EU

DIRECT TESTIMONY OF NORMAN D. KARLOFF

1 Q: Please state your name and business address.

2 A: My name is Norman D. Karloff. My business address is One
3 Bowdoin Square, Boston, Massachusetts 02114.
4

5 Q: By whom are you employed and in what position?

6 A: I am employed by PG&E Generating. My title is Manager of
7 Fuel Procurement in the Marketing and Development
8 division.
9

10 Q: Please describe your duties with PG&E Generating.

11 A: My role on a daily basis is to provide fuel supply
12 expertise to support the electric development group of
13 PG&E Generating. This includes developing fuel supply
14 strategies, sourcing fuel supplies and transportation
15 services and negotiating the terms and conditions of
16 these services in the United States and Canada.
17

18 Q: What are your responsibilities with respect to the
19 Okeechobee Generating Project?

20 A: I am primarily responsible for developing the fuel supply
21 strategy and negotiating fuel supply and transportation
22 contracts for the Okeechobee Generating Project. In

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1 addition I provide the Project fuel supply support as
2 needed in the regulatory process.

3
4 **QUALIFICATIONS AND EXPERIENCE**

5 **Q: Please summarize your educational background and**
6 **experience.**

7 **A:** In 1979, I graduated from business school at the
8 University of Massachusetts in Amherst with a B.A. in
9 Marketing. I have twenty years of energy industry
10 experience. Over the last ten years I have been
11 responsible for developing fuel supply strategies and
12 negotiating fuel supply and transportation arrangements
13 for existing and planned electric generation facilities
14 of PG&E Generating and J. Makowski Associates. My resume
15 is attached to this testimony and identified as Exhibit
16 _____ (NDK-1).

17
18 **Q: Please summarize your employment history and work**
19 **experience.**

20 **A:** My employment history and work experience includes ten
21 years as a Manager of Fuel Procurement for major electric
22 generation development companies, including J. Makowski
23 Associates, US Generating Company and PG&E Generating.
24 In addition, I have testified regarding the relative fuel
25 procurement and transportation arrangement for several
26 electric generation projects at the necessary state

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1 regulatory agencies. I also worked ten years as a Senior
2 Rate Analyst and Market Analyst for Algonquin Gas
3 Transmission Company.
4

5 Q: What is your experience with regard to natural gas supply
6 arrangements, fuel plans and regulatory support?

7 A: Over the last four years, I have arranged for over
8 400,000 MMBtu per day of gas supply and transportation
9 for electric generation facilities. I am responsible for
10 the natural gas fuel supply strategies and fuel plans for
11 an additional 600,000 MMBtu per day of natural gas fuel
12 supply for merchant electric generation facilities that
13 are currently in advanced stages of development. I have
14 testified at state regulatory commissions regarding four
15 electric generation projects, three of which are merchant
16 projects. More detail regarding my experience is
17 provided in Exhibit ____ (NDK-1).
18

19 Q: Have you previously testified before regulatory
20 authorities or courts?

21 A: Yes, I have testified before various regulatory
22 authorities regarding fuel supply arrangements for
23 merchant power plants. Specifically, I testified before
24 the New York Public Service Commission on behalf of PG&E
25 Generating's 1080 MW Athens Generating Project in Athens
26 N.Y. I testified before the Connecticut Siting Council

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1 on behalf of PG&E Generating's 800 MW Lake Road
2 Generating Project in Killingly, CT. I testified before
3 the Massachusetts Siting Board on behalf of PG&E
4 Generating's 360 MW Millennium Power Project in Charlton,
5 Massachusetts. I also testified before the Massachusetts
6 Siting Board on behalf of the 125 MW West Lynn
7 Cogeneration Project sponsored by J. Makowski Associates.
8 All of these projects have received the necessary
9 approvals from corresponding regulatory bodies.

10
11 SUMMARY AND PURPOSE OF TESTIMONY

12 Q: Please summarize your testimony.

13 A: My testimony describes the fuel supply arrangements of
14 the Okeechobee Generating Project. The objective of the
15 fuel supply arrangements is to provide the Okeechobee
16 Generating Project with a low cost, reliable and flexible
17 fuel supply that closely matches the operational demands
18 of a successful merchant electric generation facility.

19
20 Q: Are you sponsoring any exhibits to your testimony?

21 A: Yes. I am sponsoring the following exhibits:

- 22 1. Exhibit _____ (NDK-1): Resume' of Norman D. Karloff;
23 2. Exhibit _____ (NDK-2): Precedent Agreement;
24 3. Exhibit _____ (NDK-3): Gulfstream report on status of
25 permitting; and
26 4. Exhibit _____ (NDK-4): Gulfstream Pipeline Maps.

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1 In addition, I am sponsoring the portion regarding fuel
2 usage of Table 1 of the Exhibits accompanying OGC's
3 petition for determination of need and Figures 11 and 12
4 of the Exhibits, as well as the textual description of
5 the Project's fuel supply and transportation arrangements
6 contained in pages 4-5 and 34-35 of those Exhibits.

7
8 **PIPELINE FACILITIES TO SERVE THE OKEECHOBEE GENERATING PROJECT**

9 **Q: Please describe the proposed Gulfstream Natural Gas**
10 **System and its permitting status.**

11 **A: Please see Exhibit _____ (NDK-3) provided by the**
12 **Gulfstream Natural Gas Pipeline System that describes the**
13 **proposed gas transmission system and its permitting**
14 **status. In addition, maps of the Gulfstream pipeline as**
15 **it traverses the Okeechobee Generating Project site are**
16 **included as Exhibit _____ (NDK-4). For convenience, I**
17 **will use the term "Gulfstream System" to refer to the**
18 **physical pipeline systems, and the term "Gulfstream" to**
19 **refer to the corporate entity proposing this system.**

20
21 **Q: Please describe the gas pipeline facilities by which the**
22 **Okeechobee Generating Project's gas supply will be**
23 **delivered.**

24 **A: Gulfstream's main pipeline facility will directly serve**
25 **the Okeechobee Generating Project by a direct**
26 **interconnection to the main pipeline on OGC's property.**

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1 The diameter of the Gulfstream pipeline directly
2 servicing the plant is 30" inches. The pipeline pressure
3 at the Okeechobee Generating site is guaranteed by
4 Gulfstream Pipeline to be 725 psig.

5
6 **GAS SUPPLY ARRANGEMENTS FOR THE OKEECHOBEE GENERATING PROJECT**

7 **Q: Please summarize the gas supply and transportation**
8 **arrangements for the Okeechobee Generating Project.**

9 **A: Supply Arrangements:**

10 The Okeechobee Generating Project will purchase natural
11 gas from gas producers and gas marketing companies which
12 have access to those gas treatment plants, processing
13 plants and interstate natural gas transmission systems
14 with supply located in the vicinity of Mobile Bay,
15 Alabama and Pascagoula, Mississippi. Natural gas fuel
16 supply for the Project will be provided to Gulfstream
17 receipt points by natural gas marketing companies or
18 producers through an optimized combination of short-term
19 contract purchases, long-term contract purchases, and
20 spot market purchases. In its application to the Federal
21 Energy Regulatory Commission ("FERC"), Gulfstream
22 proposes interconnections with Mobile Bay Pipeline
23 (Koch), the Destin plant, the Dauphin Island Gathering
24 System plant, the Williams plant and the Mobil Mary Ann
25 Plant. Capacity of the proposed Gulfstream facilities
26 will be over 1 billion cubic feet per day. The natural

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1 gas suppliers will be responsible for delivery into the
2 Gulfstream System. The supply will satisfy the full fuel
3 requirements of the plant and will provide the necessary
4 terms and conditions so that the Okeechobee Generating
5 Project will be a reliable and low cost electric
6 generator in the Peninsular Florida market.

7
8 Transportation Arrangements:

9 Pursuant to the Precedent Agreement, Exhibit ____ (NDK-2),
10 the Okeechobee Generating Project will enter into a long-
11 term, 20 year firm gas transportation agreement with the
12 Gulfstream Natural Gas Pipeline System. This firm
13 transportation service will provide natural gas
14 transportation capacity for the maximum daily fuel supply
15 of 90,000 MMBtu per day as required by the Project. Fuel
16 supply will be transported from the Mobile Bay, Alabama
17 and Pascagoula, Mississippi area to the Project site at
18 the required pressure (725 psig) on a firm basis for 365
19 days per year, for the 20 year term of the contract. The
20 cost of capacity on the Gulfstream Pipeline System is
21 very economical and allows OGC to provide reliable low
22 cost electricity to the state of Florida.

23
24 **Q: Please describe the basic provisions of the gas**
25 **transportation contract between the Gulfstream Natural**

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1 **Gas Pipeline System and the Okeechobee Generating**
2 **Company?**

3 A: The basic provisions of the natural gas transportation
4 agreement between the Gulfstream Natural Gas Pipeline
5 System and the Okeechobee Generating Company are as
6 follows:

- 7 • Nature of Service: Firm natural gas transportation
8 service on the Gulfstream System from the vicinity
9 of Mobile Bay, Alabama and Pascagoula, Mississippi
10 to the Okeechobee Generating Project.
- 11 • Service will commence at the time the plant is in
12 service, which is projected to be in April 2003.
- 13 • Term of firm service: 20 years from plant in-service
14 date
- 15 • Rate: confidential
- 16 • Maximum Daily Quantity: 90,000 MMBtu per day
- 17 • Minimum Delivery Pressure: 725 psig

18 I should note that the version of the Precedent
19 Agreement filed with this testimony has been redacted to
20 protect confidential, proprietary terms and conditions of
21 the Agreement from public disclosure.

22
23 Q: **What is the character of the firm gas transportation**
24 **service to be provided by Gulfstream?**

25 A: The Precedent Agreement calls for Gulfstream to provide
26 long-term firm transportation service for 365 days per

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1 year for the full fuel requirements of the plant from the
2 supply zone to the Project site, at a delivery pressure
3 of 725 psig.
4

5 Q: What would happen if, for some reason, the Project's gas
6 suppliers should fail to procure sufficient gas to meet
7 the requirements of the Okeechobee Generating Project?

8 A: Okeechobee Generating may purchase gas supply from any
9 other party if gas supply is temporarily unavailable, or
10 the Project may burn its distillate fuel oil backup fuel
11 supply.
12

13 Q: What would happen in the event of an outage on the
14 Gulfstream System?

15 A: If a malfunction on the Gulfstream pipeline caused
16 interruption of the natural gas fuel supply, the plant
17 would burn its backup fuel. The Project will have onsite
18 fuel oil storage capacity to provide the maximum daily
19 fuel quantity required by the plant with all turbines
20 generating for a continuous 24-hour period at full
21 output, without refilling on-site storage. In order to
22 provide additional reliability during a prolonged
23 pipeline outage, at the same time the plant starts
24 drawing down the fuel oil in storage, arrangements will
25 have been made to refill the oil storage tanks via
26 continuous deliveries of fuel oil from local oil

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1 terminals, via road tank wagon (or possibly by rail). By
2 re-filling oil storage as it is being drawn down, the
3 Project will have increased reliability and should, under
4 realistic scenarios, be able to continue operating
5 normally while Gulfstream corrects the malfunction.

6
7 **Q: What would happen to the Project if the Gulfstream**
8 **Natural Gas Pipeline System is delayed or is not**
9 **constructed?**

10 **A:** PG&E Generating is confident that the Gulfstream System
11 will be constructed. The Okeechobee Generating Project
12 provides a primary impetus for the second natural gas
13 pipeline, in that it will be a major and significant
14 customer. Having a second natural gas pipeline will help
15 avoid a serious power disruption if the state's existing
16 gas transportation system is interrupted, such as
17 occurred when a lightning strike at the FGT compressor
18 station near Perry, Florida caused gas supply problems in
19 August, 1998.

20 While PG&E is fully confident of the Gulfstream
21 Project's success, it could obtain gas transportation
22 from an alternative source if necessary.

23 **BACKUP FUEL ARRANGEMENTS FOR THE OKEECHOBEE GENERATING PROJECT**

24 **Q: Please describe the backup fuel arrangements for the**
25 **Okeechobee Generating Project in more detail.**
26

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1 A: As previously mentioned, the Project will have on-site
2 backup fuel supply capability. The Project will provide
3 enough on-site fuel oil storage capacity to allow the
4 plant to generate electricity at the maximum daily output
5 for a continuous 24-hour period. If the plant were
6 generating electricity for only 12 peak hours per day,
7 the fuel oil in storage would last for 2 days of peak
8 electric generation without refilling storage. As stated
9 above, as soon as fuel oil storage starts to be drawn
10 down, the Project would begin refilling the on-site
11 storage tank to keep the storage tank at or near full
12 capacity at all times.

13
14 Q: Please describe the backup fuel arrangements for the
15 Okeechobee Generating Project with regards to the size of
16 the on-site storage and the number of trucks needed to
17 fill the onsite storage facility.

18 A: The on-site oil storage facility will be designed to hold
19 approximately 650,000 gallons of fuel oil. This amount
20 of fuel oil is equivalent to 90,000 MMBtu of natural gas,
21 which is the maximum daily quantity of natural gas
22 required for the Project. In order to fill the storage
23 tank using road tank wagons it would take approximately
24 68 deliveries. The initial storage fill would be done
25 over a period of time prior to the Project's on-line

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1 date. During a pipeline malfunction less than 3 trucks
2 per hour would be required to provide a continuous fuel
3 oil supply to the plant site while generating at full
4 electric output, with all the turbines running 24 hours
5 per day. Advance arrangements will be made with local
6 fuel oil suppliers to meet this need, should it arise.

7 **Q: Does this conclude your direct testimony?**

8 **A: Yes.**

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of Need for an Electrical Power)
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by Okeechobee Generating)
Company, L.L.C.)

EXHIBITS

OF

NORMAN D. KARLOFF

ON BEHALF OF

OKEECHOBEE GENERATING COMPANY, L.L.C.

Norman D. Karloff

322 Simpson Road
Marlboro, MA 01752

Residence: (508) 229-8028
Business: (617) 788-3691

Experience:

1989 to Present **PG & E Generating
Manager, Fuel Procurement/Development
Boston, Massachusetts**

As a Manager of Fuel Services in the Electric Development division, a great majority of time is spent supporting the Electric Development Group with proposed electric generation facilities as solicited by utilities and for merchant generation facilities throughout the United States and Canada.

Responsible for providing the fuel strategies and negotiating L.O.I.'s and contracts for fuel supply and transportation services as needed.

Testify at regulatory agencies regarding fuel supply and transportation.

**Specific
Accomplishments:**

Athens 1,080 MW Merchant Electric Generation Facility. Testified relative to the fuel procurement and transportation aspects of the Project at the New York Public Service Commission.

Lake Road 800 MW Merchant Electric Generation Facility. Testified relative to the fuel procurement and transportation aspects of the Project at the Connecticut Siting Council.

Millennium 360 MW Merchant Electric Generation Facility. Testified relative to the fuel procurement and transportation aspects of the Project at the Massachusetts Siting Board.

West Lynn 125MW Generation Facility. Testified relative to the fuel procurement and transportation aspects of the contract at the Massachusetts Siting Board. Renegotiated and successfully contracted for the first long-term, fixed escalating contract with Boston Gas for the BECO RFP. The contract was for 27,000 MMBtu per day of natural gas supply for a 20-year period.

Selkirk MW Cogen Facility. Negotiated a contract with Phibro Energy for the purchase of a two-year backup delivered gas supply contract for 55,00 MMBtu per day to support this cogeneration project.

To 1989 **Algonquin Gas Transmission Company**
Senior Rate Analyst

Initially recruited into Algonquin as a Junior Market Analyst. Served in this position for three years. Involved in developing the marketing data supporting precedent agreement and all certificate/rate filings. Responsible for updating contracts negotiated on behalf of the company.

In 1984 moved to the Rate departments as an Analyst. From then until 1987 was responsible for maintaining the purchased gas adjustment filings, cost of service filings rate case preparation. Served as the liaison between the FERC and the Company on all audits. In 1987, became a Senior Rate Analyst. Responsibilities expanded including the development, support and preparation of all exhibits for new transportation service filings. Responsible for all open seasons filing studies. Automated all rate exhibits for certificate filing.

1979 to **DuPont Corporation-Merck Division**
1980 **Market Representative**
Boston, Massachusetts

Worked for DuPont while going to college. Performed the testing of radioactive drugs for the Merck division. Once graduated, was recruited full-time by the pharmaceutical division and served as a Marketing Representative in the Boston area. Sold radiopharmaceuticals to physicians and research laboratories.

Education: BA Marketing
University of Massachusetts, 1979
Amherst, Massachusetts

Personal: 42 years old
Married, two children (15 and 11)
Excellent health



July 2, 1999

Mr. Douglas Egan
PG&E Generating
7500 Old Georgetown Road Suite 1300
Bethesda, MD 20814-6161

Dear Doug:

Attached is an original copy of the executed Precedent Agreement between PG&E Generating and Gulfstream Natural Gas System, L.L.C. We greatly appreciate the rapid response in executing this document and look forward to continuing the great business relationship in Florida.

If you have any questions, please advise.

Attachment

Sincerely,

A handwritten signature in cursive script that reads "Todd F. Persells".

Todd F. Persells
Asst. Vice President

PRECEDENT AGREEMENT

This Precedent Agreement ("Agreement"), is made and entered into as of this 1st day of July, 1999, by and between Okeechobee Generating Company L.L.C., a Delaware limited liability company ("Shipper"), and Gulfstream Natural Gas System, L.L.C., a limited liability company formed under the laws of the State of Delaware ("Gulfstream") (hereinafter Shipper and Gulfstream are sometimes referred to individually as a "Party" or collectively as the "Parties").

WITNESSETH:

WHEREAS, Gulfstream intends to design, construct, own and operate a natural gas pipeline that will extend from interconnections with the facilities of various natural gas treatment plants, processing plants and interstate natural gas transmission systems in the vicinity of Mobile, Alabama to various delivery points in peninsular Florida ("Gulfstream Project"); and

WHEREAS, Shipper intends to design, construct, own and operate a natural gas fired electric generating plant in Okeechobee County, Florida ("Plant") which Shipper plans (but does not commit) to have in-service sometime during the summer of 2003, and Shipper desires to receive firm transportation service(s) from Gulfstream on the Gulfstream Project for the natural gas supply required for the Plant; and

WHEREAS, subject to the terms and conditions set forth in this Agreement, Gulfstream is willing to proceed with its efforts to develop the Gulfstream Project for the provision of the firm transportation service(s) hereinafter described, and Shipper is willing to subscribe for such transportation services.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and intending to be bound, Shipper and Gulfstream agree as follows:

1. Notice of Intent to Proceed. This Agreement is subject to (i) the outcome of an open season for the Gulfstream Project, and (ii) the determination by Gulfstream, in the exercise of its sole discretion, whether or not to proceed with the filing and prosecution of application(s) for the governmental and regulatory authorization(s) described in Paragraph 2 below. Gulfstream will give Shipper written notice under this Paragraph 1 no later than July 16, 1999 or such later date as the Parties may agree, as to whether Gulfstream will (i) proceed with the filing and prosecution of such application(s) with respect to the Gulfstream Project or (ii) terminate this Agreement. If Gulfstream does not give Shipper such written notice by July 16, 1999, Shipper shall have the right to terminate this Agreement without regard to subsequent notice provided by Gulfstream. To facilitate Gulfstream's ability to develop the Gulfstream Project, Shipper will refrain from negotiating for or committing to obtain any transportation service(s) from other person(s) which service(s) would be in lieu of the transportation services provided for herein.

2. Regulatory Authorizations To Be Sought By Gulfstream. If Gulfstream gives Shipper the written notice of intent to proceed provided for in Paragraph 1 hereof, and subject to the other terms and conditions of this Agreement, Gulfstream will proceed with due diligence to apply for and attempt to obtain all governmental and regulatory authorizations, including without limitation authorizations from the Federal Energy Regulatory Commission ("FERC"), which Gulfstream determines are necessary

for Gulfstream to (i) construct, own and operate (or cause to be constructed and operated) the Gulfstream Project, (ii) render the transportation service(s) contemplated in this Agreement and all of the precedent agreements with other shippers for transportation service(s) to be provided utilizing the Gulfstream Project and (iii) perform its obligations as contemplated in this Agreement. Gulfstream will request that the FERC issue a preliminary determination on the non-environmental aspects of the Gulfstream Project. Gulfstream reserves the right to file and prosecute any and all applications for such authorizations (and any supplements and amendments thereto) and, if necessary, institute any court review with respect thereto, in such manner as it deems to be in its best interest. Shipper agrees not to oppose the efforts of Gulfstream to obtain all authorizations which Gulfstream determines are necessary for Gulfstream to construct, own and operate the Gulfstream Project and render the transportation service(s) contemplated in this Agreement, including the creditworthiness requirements attached hereto as Attachment II; provided, however, that Shipper may oppose any Gulfstream action that is inconsistent with the terms of this Agreement or the Service Agreement or any action that is inconsistent with such attached creditworthiness requirements. If the FERC determines that information related to Shipper's markets, gas supply or upstream or downstream transportation arrangements is required from Gulfstream, Shipper agrees to provide Gulfstream with such reasonable information in a timely manner to enable Gulfstream to respond within the time required by FERC; provided, however, that Shipper shall not be required to provide such information that Shipper identifies as confidential unless Gulfstream has

obtained a protective order from the FERC for such information identified as confidential by Shipper.

3. Shipper's Regulatory Authorizations.

If Gulfstream gives Shipper the written notice of intent to proceed provided for in Paragraph 1 hereof, and subject to the other terms and conditions of this Agreement, Shipper shall have the right but not the obligation, in its sole discretion, to proceed with due diligence to apply for and attempt to obtain from all governmental and regulatory authorities having jurisdiction all authorizations necessary for Shipper to (i) construct, own and operate (or cause to be constructed and operated) the Plant and all other facilities necessary to enable Shipper to utilize the transportation service(s) contemplated in this Agreement for the transportation of the natural gas supply required for the Plant and (ii) perform its obligations as contemplated in this Agreement. Shipper reserves the right to file and prosecute applications for such authorizations (and any supplements and amendments thereto) and, if necessary, institute any court review with respect thereto, in such manner as it deems to be in its best interest. Gulfstream agrees to support and cooperate in the efforts of Shipper to obtain all authorizations necessary for Shipper to utilize the transportation service(s) contemplated herein; provided, however, that Gulfstream may oppose any Shipper action that is inconsistent with the terms of this Agreement or the Service Agreement. Subject to its receipt of all such necessary authorizations, Shipper shall have the right but not the obligation to proceed with due diligence to construct, or cause to be constructed, the Plant and all other facilities necessary for Shipper to utilize the

transportation service(s) contemplated herein for the transportation of the natural gas supply required for the Plant.

4. Service Agreement.

(a) Service Agreement. Shipper and Gulfstream agree to execute, within ten (10) business days after the date each Party gives the other Party written notice that each of the conditions precedent imposed on the behalf of such Party in Paragraph 6 hereof has been satisfied or waived by such Party, the Firm Transportation Service Agreement attached hereto as Attachment 1, as such Agreement may be amended from time to time to conform to changes approved by the FERC to Gulfstream's FERC Gas Tariff ("Service Agreement"). Service under the Service Agreement will commence as set forth in Paragraph 4(b) below.

(b) Commencement and Term of Service. Shipper will give Gulfstream written notice of the date Shipper plans to place the Plant in-service no less than eighteen (18) months prior to such date (the "Plant In-Service Date"); and further provided that Shipper shall give Gulfstream timely written notice of any change(s) to the Plant In-Service Date. Transportation service(s) under the Service Agreement will commence on the date specified by Gulfstream in the written notice to be provided to Shipper pursuant to Paragraph 4(c) below, which date will be the Plant In-Service Date. Gulfstream will complete its portion of the facilities necessary to interconnect the Gulfstream Project with the Plant on the later to occur of: (i) the date that is three (3) months prior to the Plant In-Service Date; or (ii) such earlier date that Gulfstream completes the construction of all facilities necessary to provide interruptible

transportation service(s) to Shipper for test gas for the Plant under Gulfstream's standard form of ITS Agreement and such facilities are available for the provision of such interruptible service(s). After transportation service(s) commences under the Service Agreement, such service(s) will continue for the primary term set forth therein and year to year thereafter subject to termination in accordance with the provisions of the Service Agreement.

(c) Notice of Commencement of Transportation Service(s). No less than thirty (30) days prior to the date Gulfstream is ready to commence transportation service(s) under the Service Agreement, Gulfstream will notify Shipper in writing that such transportation service(s) will commence on a date certain, which date will not be prior to the later to occur of (1) June 1, 2002 or (2) the Plant In-Service Date. As of such commencement date, Gulfstream will stand ready to provide firm transportation service(s) to Shipper pursuant to the provisions of the Service Agreement, and Shipper will pay to Gulfstream all applicable charges provided for in the Service Agreement commencing on the date provided for therein. Gulfstream will also notify Shipper in writing no less than thirty (30) days prior to the date Gulfstream is ready to commence interruptible transportation service(s) for the test gas required for the Plant.

5. Construction of Facilities.

(a) Design and Construction. Subsequent to giving the notice of intent to proceed provided for in Paragraph 1 above, if such notice is given, Gulfstream will undertake the preliminary design of the facilities for the Gulfstream Project and any other preparatory actions required for Gulfstream to complete and file application(s)

with the FERC and other governmental or regulatory agencies having jurisdiction for the authorizations which Gulfstream determines are necessary for Gulfstream to (i) construct, own and operate (or cause to be constructed and operated) the Gulfstream Project, (ii) render the transportation service(s) contemplated in this Agreement and all of the precedent agreements with other shippers for transportation service(s) to be provided utilizing the Gulfstream Project and (iii) perform its obligations as contemplated in this Agreement. Upon satisfaction of each of the conditions precedent set forth in Paragraph 6 below, or written waiver of the same by the Party on whose behalf such condition is imposed, Gulfstream will proceed with due diligence to construct the pipeline and other facilities (as authorized by the FERC and other governmental or regulatory agencies having jurisdiction) which are necessary for the provision of the firm transportation service(s) contemplated in this Agreement. Gulfstream shall at least once per month provide a report to Shipper summarizing the progress of such construction in the prior month. Notwithstanding Gulfstream's due diligence, if Gulfstream is unable to commence the transportation service(s) for Shipper as contemplated herein by the Plant In-Service Date, Gulfstream will continue to proceed with due diligence to complete construction of such necessary pipeline and other facilities, and commence transportation service(s) for Shipper at the earliest practicable date thereafter; provided, however, that if Gulfstream is unable to commence transportation service(s) for Shipper within one hundred and eighty (180) days after the Plant In-Service Date, Shipper may elect in its sole discretion to terminate this Agreement and the Service Agreement.

(b) Limitation of Liability. Except as otherwise provided in Subparagraph 4(c) and Subparagraph 5(a), neither Party will be liable to the other Party nor will this Agreement or the Service Agreement be subject to cancellation if, in the case of Gulfstream, Gulfstream is unable to complete the construction of such pipeline and other facilities and commence the firm transportation service(s) contemplated herein by the Plant In-Service Date or if, in the case of Shipper, Shipper is unable to complete the construction of the Plant and commence utilizing the firm transportation service(s) contemplated herein by such date; provided, however, in the case of Gulfstream, Gulfstream will continue to proceed with due diligence to complete construction of such pipeline and other facilities, and commence such transportation service(s) for Shipper at the earliest practicable date thereafter; and further provided, in the case of Shipper, Shipper will continue to proceed with due diligence to complete construction of the Plant.

6. Conditions Precedent.

The commencement of transportation service(s) under the Service Agreement, and Gulfstream's and Shipper's respective rights and obligations hereunder and under the Service Agreement, are expressly made subject to the satisfaction of each of the following conditions precedent; provided, however, that each such condition may be waived in writing by the Party on whose behalf the condition is imposed:

(a) **Conditions Precedent Imposed On Behalf Of Gulfstream:**

(b) Conditions Precedent Imposed On Behalf Of Shipper:

7. Rates and Rate Design Methodology. The rates to be charged pursuant to the Service Agreement will reflect the following principles:

(a) Shippers electing recourse rates will agree to pay such rates, subject to changes determined by FERC from time to time. Recourse rates will be the rates filed with and approved by the FERC, pursuant to the Natural Gas Act or successor legislation. Nothing contained herein shall be construed to deny Shipper any rights it may have under Section 5 of the Service Agreement.

(b) Shippers electing negotiated rates will agree to pay such rates without regard to any action or determination of the FERC with respect to the proposed

recourse rates.

8. Representations and Warranties.

(a) Gulfstream. Gulfstream represents and warrants that (i) it is duly organized and validly existing under the laws of the State of Delaware and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions hereof; (ii) this Agreement constitutes the valid, legal and binding obligation of Gulfstream, enforceable in accordance with the terms hereof, (iii) there are no actions, suits or proceedings pending or, to Gulfstream's knowledge, threatened against or affecting Gulfstream before any Court or administrative body that might materially adversely affect the ability of Gulfstream to meet and carry out its obligations hereunder; and (iv) the execution and delivery by Gulfstream of this Agreement has been duly authorized by all requisite limited liability company action.

(b) Shipper. Shipper represents and warrants that (i) it is duly organized and validly existing under the laws of the State of Delaware and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions hereof; (ii) this Agreement constitutes the valid, legal and binding obligation of Shipper, enforceable in accordance with the terms hereof, (iii) there are no actions, suits or proceedings pending or, to Shipper's knowledge, threatened against or affecting Shipper before any Court or administrative body that might materially adversely affect the ability of Shipper to meet and carry out its obligations hereunder; (iv) the execution and delivery by Shipper of this Agreement has been duly authorized by all requisite limited liability company action, and (v) upon execution and

delivery of the Service Agreement, Shipper will satisfy the Agreed Creditworthiness Requirements.

9. Term. This Agreement shall become effective when executed by both Gulfstream and Shipper, and shall remain in effect unless and until terminated as hereinafter provided.

(a) Termination of Precedent Agreement. In addition to the termination notice provided for in Paragraph 1 above and the right to terminate provided for in Subparagraph 5(a) above, in the event each of the conditions precedent set forth in Paragraph 6 above has not been satisfied or waived by the Party on whose behalf such condition is imposed by the date specified in such Paragraph, then such Party may terminate this Agreement by giving written notice of termination to the other Party within thirty (30) days of such date.

(b) Commencement of Transportation Service(s). If this Agreement is not terminated pursuant to Paragraph 9(a) above, then this Agreement will terminate by its express terms on the date of commencement of transportation service(s) under the Service Agreement, and thereafter Gulfstream's and Shipper's respective rights and obligations related to the transactions contemplated herein shall be determined pursuant to the terms and conditions of the Service Agreement and the terms and conditions of Gulfstream's FERC Gas Tariff, as in effect from time to time.

10. Assignment. This Agreement shall be binding upon Gulfstream, Shipper and their respective successors and assigns; provided, however, that neither Party shall assign this Agreement or any rights or obligations hereunder without first

obtaining the prior written consent of the other Party (which consent shall not be unreasonably withheld), the consent of Gulfstream's lenders if required, and any necessary governmental and regulatory authorizations. Nothing contained herein shall prevent (1) Gulfstream or Shipper from pledging, mortgaging or assigning its rights as security for its indebtedness, (2) Shipper from assigning this Agreement to an affiliate which satisfies the Agreed Creditworthiness Requirements at the effective time of such assignment, and (3) Gulfstream from assigning to the pledgee or mortgagee (or to a trustee for a holder of such indebtedness) any monies due or to become due under the Service Agreement.

11. Modification or Waiver.

No modification or waiver of the terms and conditions of this Agreement shall be made except by the execution by the Parties of a written amendment to this Agreement.

12. Notices.

All notices, requests, demands, instructions and other communications required or permitted to be given hereunder shall be in writing and shall be delivered personally or mailed by certified mail, postage prepaid and return receipt requested or by facsimile, as follows:

If to Gulfstream:

Gulfstream Natural Gas System, L.L.C.
500 Renaissance Center
Detroit, Michigan 48243
Attention: Stanley A. Babiuk
Senior Vice President

Telephone: (313) 496- 5653
Facsimile: (313) 496-5052

If to Shipper:

Okeechobee Generating Company, L.L.C
One Bowdoin Square
Boston, MA 02114-2910
Attention: Project Manager
Copy to: General Counsel
Telephone: (617) 788-3658
Facsimile: (617) 788-3400

or to such other place within the United States of America as either Party may designate as to itself by written notice to the other Party. All notices given by personal delivery or mail shall be effective on the date of actual receipt at the appropriate address. Notice given by facsimile shall be effective upon actual receipt if received during recipient's normal business hours or at the beginning of the next business day after receipt if received after the recipient's normal business hours.

13. Limitation of Liability. Each Party agrees that any and all claims, demands and causes of action that it may bring against the other Party shall be limited to the assets of the other Party. Execution of this Agreement does not bind any Member of Gulfstream or any of its affiliates (or any member of Shipper or any of its affiliates) or require any Member of Gulfstream or any of its affiliates (or any member of Shipper or any of its affiliates) to undertake any obligation in connection with this Agreement. Accordingly, Shipper waives its rights to proceed against the Members of Gulfstream or any of their respective affiliates and Gulfstream waives its rights to proceed against the members of Shipper or any of their respective affiliates. Shipper and Gulfstream

further agree that neither Party shall be liable to the other Party for consequential, incidental, indirect or punitive damages, whether arising in contract, tort or otherwise.

14. No Third Person Beneficiary. This Agreement shall not create any rights in third parties, and no provision hereof shall be construed as creating any obligations for the benefit of, or rights in favor of, any person or entity other than Gulfstream and Shipper.

15. Governing Law. THE CONSTRUCTION, INTERPRETATION, AND ENFORCEMENT OF THIS AGREEMENT SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE, EXCLUDING ANY CONFLICT OF LAW OR RULE WHICH WOULD REFER ANY MATTER TO THE LAWS OF A JURISDICTION OTHER THAN THE STATE OF DELAWARE.

16. Multiple Counterparts. This Agreement may be executed by the Parties in any number of counterparts, each of which shall be deemed an original instrument, but all of which shall constitute but one and the same agreement.

17. Effect of Invalid Provision. Except as otherwise expressly stated herein, in the event any provision contained in this Agreement shall for any reason be held invalid, illegal or unenforceable by a court or regulatory agency of competent jurisdiction by reason of a statutory change or enactment, such invalidity, illegality or unenforceability shall not affect the remaining provisions of this Agreement.

18. Confidentiality. Except as hereinafter provided, neither Gulfstream nor Shipper, nor their respective affiliates, directors, officers, and employees, advisors and representatives shall disclose to any third person (other than their respective Lenders)

the terms and conditions of this Agreement, without the other Party's prior written consent to such disclosure which consent shall not be unreasonably withheld. This Paragraph 18 shall not apply to disclosures that, in the opinion of Gulfstream's or Shipper's counsel, as the case may be, are required by state or federal laws, rules or regulations or are required by the FERC in respect of the Gulfstream Project or by the Florida Public Service Commission in respect of the Plant (in which case, the Party so required to make such disclosure shall advise the other Party prior to such disclosure and, if requested by the other Party, shall use reasonable efforts to maintain the confidentiality of this Agreement, including, without limitation, seeking a protective order). The disclosure of any information pertaining to this Agreement within Gulfstream's or Shipper's internal organization (including affiliates) and within the organization of any third person to which disclosure is authorized by Gulfstream or Shipper shall be limited to those personnel whose duties require their review or counsel with respect to this Agreement and the Party making such disclosure shall instruct such personnel to maintain the confidentiality of this Agreement.

19. Entire Agreement. This Agreement and the Attachments hereto constitute the entire agreement between the Parties with respect to the subject matter hereof, superseding any and all prior negotiations, discussions, agreements and understandings, whether oral or written, relating to such subject matter.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed in multiple originals by their duly authorized officers as of the date first written above.

GULFSTREAM NATURAL GAS SYSTEM, L.L.C.

By: Stanley A. Babitt
Name: STANLEY A. BABITT
Title: SENIOR VICE PRESIDENT

OKEECHOBEE GENERATING COMPANY, L.L.C.

By: Douglas F. Egan
Name: DOUGLAS F. EGAN
Title: SENIOR VICE PRESIDENT

Attachment 1

FORM OF AGREEMENT
Rate Schedule FTS

Date: _____

Contract No. _____

SERVICE AGREEMENT

This AGREEMENT is entered into by Gulfstream Natural Gas System, L.L.C. ("Transporter") and Okeechobee Generating Company L.L.C. ("Shipper").

WHEREAS, Shipper has requested Transporter to transport Gas on its behalf and Transporter represents that it is willing to transport Gas under the terms and conditions of this Agreement.

NOW, THEREFORE, Transporter and Shipper agree that the terms below, together with the terms and conditions of Transporter's applicable Rate Schedule and General Terms and Conditions of Transporter's FERC Gas Tariff constitute the transportation service to be provided and the rights and obligations of Shipper and Transporter.

1. AUTHORITY FOR TRANSPORTATION SERVICE WILL BE UNDER SECTION 284G.
2. RATE SCHEDULE: FTS
3. CONTRACT DATA:

Note: List Receipt Point(s) Delivery Point, MDQ, MHQ, Receipt Point MDQ and delivery pressure on Exhibit A.

Such Contract Quantities shall be reduced for scheduling purposes, but not for billing purposes, by the Contract Quantities that Shipper has released through Transporter's capacity release program for the period of any release.

4. TERM:

5. RATES:

6. INCORPORATION BY REFERENCE:

The provisions of Transporter's applicable Rate Schedule and the General Terms and Conditions of Transporter's FERC Gas Tariff are specifically incorporated herein by reference and made a part hereof.

7. NOTICES:

All notices can be given by telephone or other electronic means, however, such notice shall be confirmed in writing at the addresses below or through Transporter's EBB. Shipper or Transporter may change the addresses below by written notice to the other without the necessity of amending this Agreement:

TRANSPORTER:

Gulfstream Natural Gas System, L.L.C.
500 Renaissance Center
Detroit, MI 48243
Attention: Gas Control (Nominations)
Volume Management (Statements)
Cash Control (Payments)
System Marketing (All Other Matters)

SHIPPER:

Okeechobee Generating Company, L.L.C.
One Bowdoin Square
Boston, MA 02114-2910
Attention: Project Manager
Copy to: General Counsel
Telephone: (617) 788-3658
Facsimile: (617) 788-3400

8. FURTHER AGREEMENT:

None

9. OPERATIONAL FLOW ORDERS:

Transporter has the right to issue an effective Operational Flow Order pursuant to Section 13 of the General Terms and Conditions.

10. SPECIFICATION OF NEGOTIATED RATE (See Exhibit B):

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their respective Officers or Representatives thereunto duly authorized to be effective as of the date stated above.

SHIPPER :Okeechobee Generating
Company L.L.C.

TRANSPORTER: Gulfstream Natural
Gas System, L.L.C.

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

EXHIBIT A
FORM OF AGREEMENT
Rate Schedule FTS
(Continued)

BETWEEN GULFSTREAM NATURAL GAS SYSTEM, L.L.C.
AND OKEECHOBEE GENERATING COMPANY L.L.C.

CONTRACT NUMBERS: _____

CONTRACTED CAPACITY: 90,000 Dth/d (1)

ORIGINAL CONTRACT DATE: _____

AMENDMENT DATE: _____

PRIMARY DELIVERY POINT: Okeechobee

TOTAL DELIVERY POINT MDQ: 90,000 Dth/d (1)(2)

ATTACHMENT II
TO
PRECEDENT AGREEMENT DATED JULY 1, 1999
BETWEEN
OKEECHOBEE GENERATING COMPANY, L.L.C.
AND
GULFSTREAM NATURAL GAS SYSTEM, L.L.C.

Creditworthiness Requirements

Shipper commits that it can and will, at the time it enters into the Service Agreement, satisfy one of the following creditworthiness requirements:

Mr. Norman Karloff
PG&E Generating Company
One Bowdoin Square
Boston, MA 02114-2910



October 21, 1999

Dear Norm:

You requested that I update you regarding the status of the Gulfstream Natural Gas System L.L.C. project ("Gulfstream"). Gulfstream filed its application with the Federal Energy Regulatory Commission ("FERC") on October 15, 1999 for a certificate of public convenience and necessity to construct, own and operate an interstate natural gas pipeline.

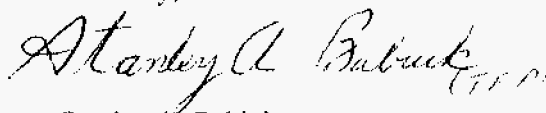
As required by the FERC, the filing includes a comprehensive environmental report that reflects extensive research and field activities relating to Gulfstream's route. This includes surveys for endangered species, cultural resources, wetlands and other land features. Gulfstream was determined to develop a project that respected, protected, and where possible, enhanced the environment. Furthermore, in preparing the filing, Gulfstream developed a route that took into account the needs and desires of affected landowners. To accomplish this, early in the pipeline's planning stages, Gulfstream invited the views of landowners, government agencies, environmental groups and others with respect to the best possible route for the pipeline. Taking into account their views, and revisiting each of these groups as the process continued, Gulfstream narrowed the route from an original study corridor of 10 miles, to a three mile study corridor, and later, to a 1000 foot study corridor. The corridor was finally narrowed to 300 feet. Gulfstream then notified each affected landowner in writing of Gulfstream's plans and requested written permission to survey their property. Gulfstream obtained written survey permission for and surveyed a substantial portion of its route in Alabama, Mississippi and Florida. Gulfstream believes that, as a result of this process, the route filed is the most environmentally preferable route, and the route most satisfactory to affected landowners. Indeed, Gulfstream believes that the collaborative process engaged in with landowners, government agencies, environmental groups and others has resulted in unprecedented support for the project.

In addition, Gulfstream has substantial market support. It has entered into 10 firm precedent agreements with non-affiliated shippers for terms ranging from 15 to 20 years for a substantial percentage of the pipeline capacity and expects that the remaining capacity will be fully contracted. Gulfstream's shippers will be wholesale and retail electric utilities, gas distribution companies, municipalities, and independent power generators. These shippers will receive from Gulfstream competitively priced transportation services that will provide them with greater flexibility than traditionally provided by pipelines.

Given the comprehensiveness of its application, Gulfstream expects that the processing of its application will move forward expeditiously. Based upon the timelines in other cases, and given the completeness of the application that was filed, Gulfstream projects that it will have a certificate by the first quarter of 2001, and will be in service by June 2002.

If you need any additional information, please call me at (313) 496-5653.

Sincerely,



Stanley A. Babiuik
Sr. V.P. Facility Planning & Project Development

Gulfstream Natural Gas System, L.L.C.

500 Renaissance Center • Detroit, MI 48243 9201 • (313) 496-3371 • Fax (313) 496-5052 • www.gulfstreamgas.com

Corporate Office

2502 Rocky Point Drive • Suite 1040 • Tampa, FL 33607 • (813) 288-1811 • Fax (813) 289-4438 • www.gulfstreamgas.com

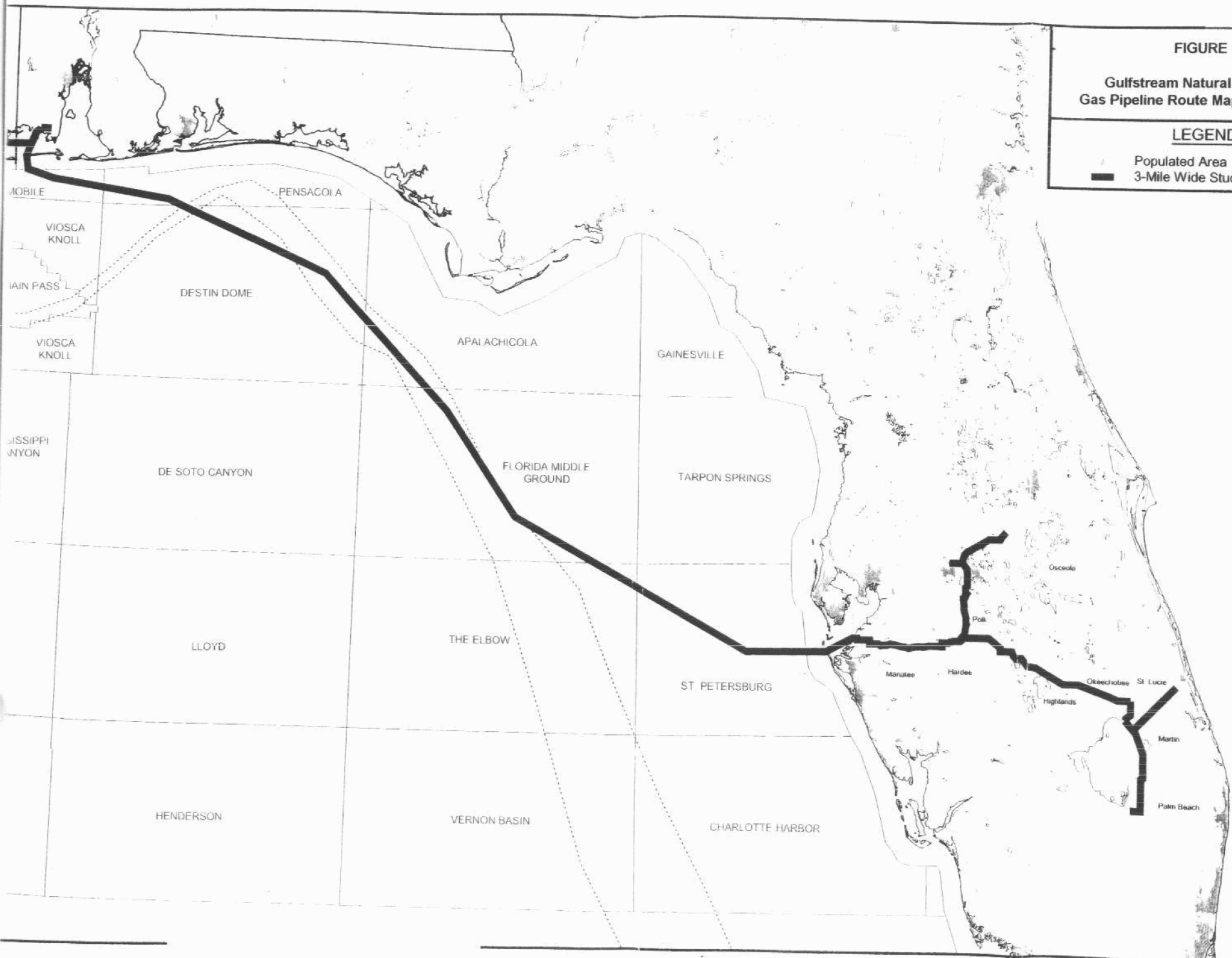
FPSC Docket No. 991462-EU
OGC: Karloff
Exhibit NDK-3
Page 1 of 1

FIGURE 11

Gulfstream Natural Gas System
Gas Pipeline Route Map (Total System)

LEGEND

- Populated Area
- 3-Mile Wide Study Corridor



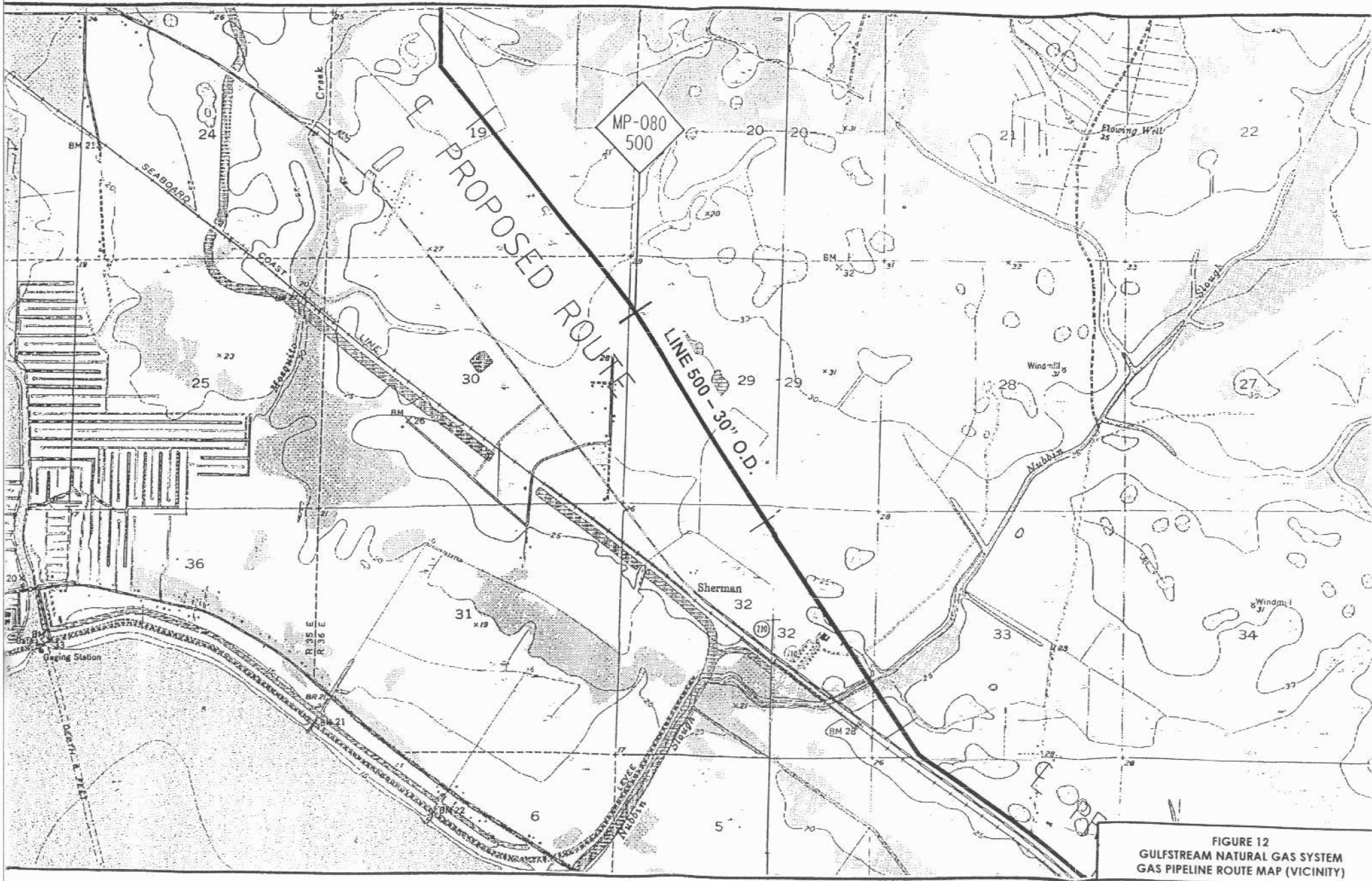


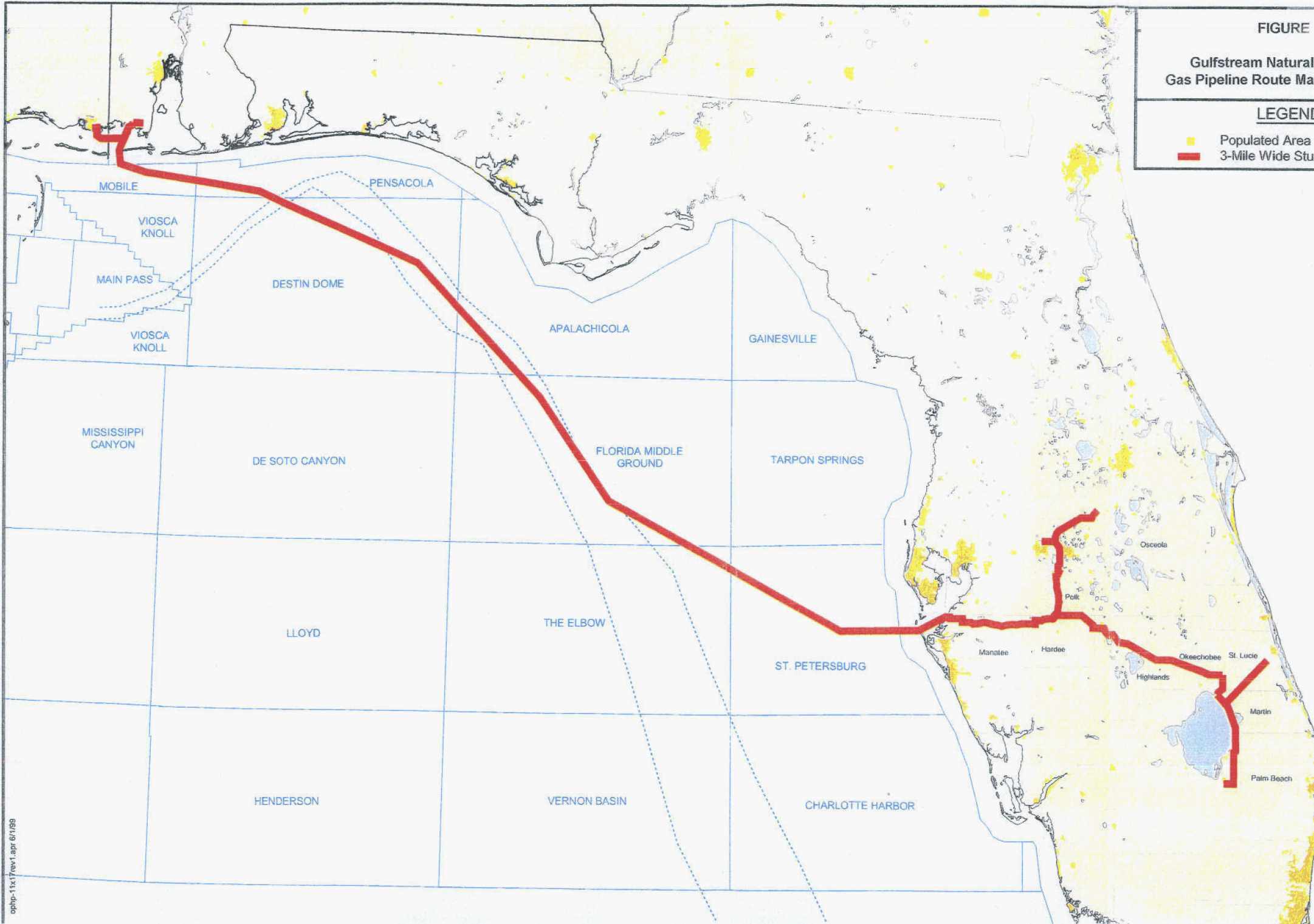
FIGURE 12
GULFSTREAM NATURAL GAS SYSTEM
GAS PIPELINE ROUTE MAP (VICINITY)

FIGURE 11

Gulfstream Natural Gas System
Gas Pipeline Route Map (Total System)

LEGEND

- Populated Area
- 3-Mile Wide Study Corridor



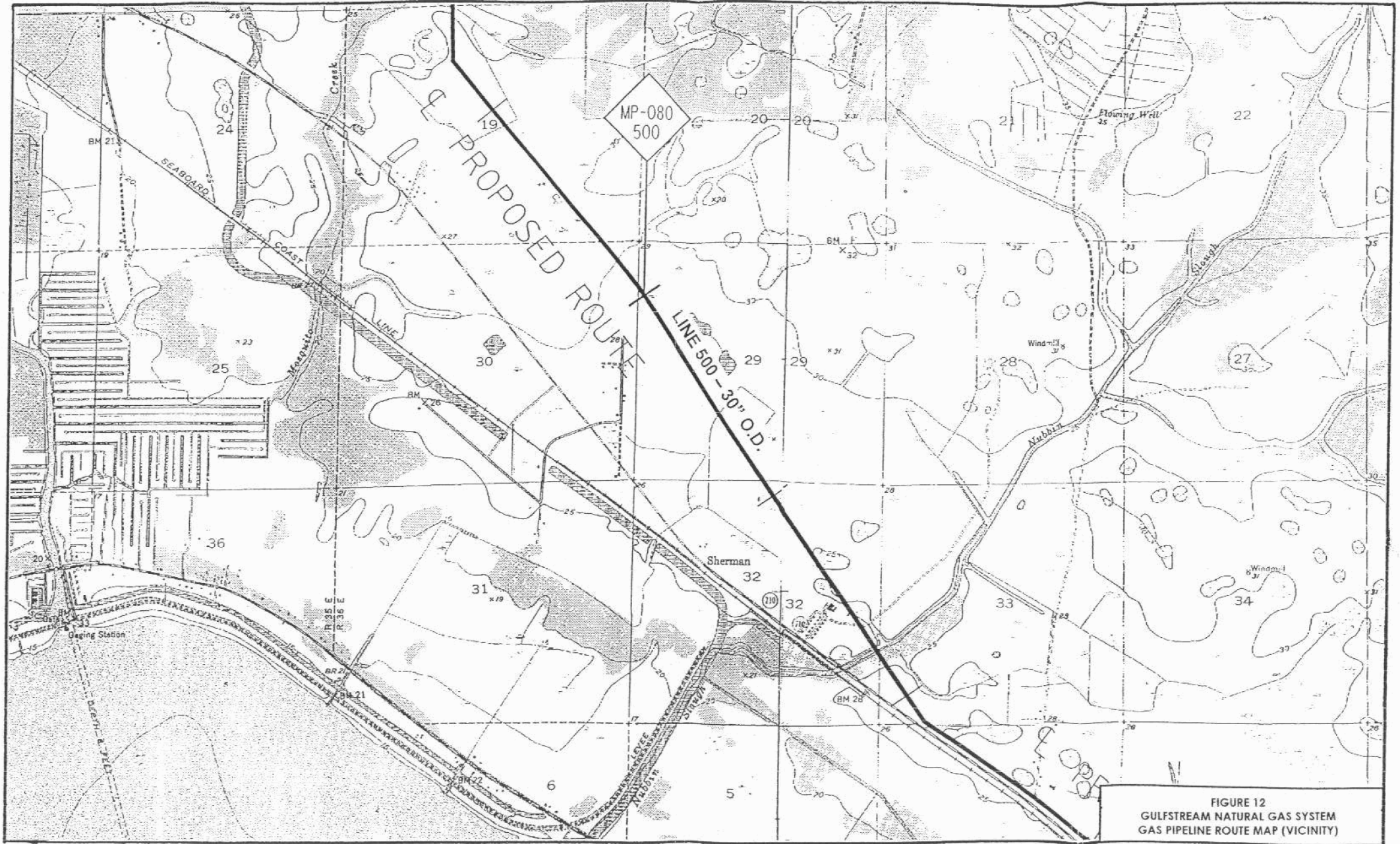


FIGURE 12
GULFSTREAM NATURAL GAS SYSTEM
GAS PIPELINE ROUTE MAP (VICINITY)