

JOINT PETITION FOR DETERMINATION OF NEED
FOR THE OSPREY ENERGY CENTER

EXHIBITS - VOLUME II

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EXECUTIVE SUMMARY

General Description of the Osprey Energy Center

The Osprey Energy Center (the "Osprey Project" or the "Project") is a natural gas-fired combined cycle generating plant that will be located in the City of Auburndale, Polk County, Florida. The Osprey Project will have 529 megawatts ("MW") of net generating capacity at average ambient site conditions, excluding duct-firing and power augmentation. The Project is expected to commence commercial operation in the second quarter of 2003. Pursuant to a Memorandum of Understanding (the "MOU") between Seminole Electric Cooperative, Inc. ("Seminole") and Calpine Energy Services, L.P., an affiliate of Calpine, Calpine has committed to make up to the full output of the Osprey Project available to Seminole for an initial term of five years, from June 1, 2004 through May 31, 2009.

This Volume II of the Exhibits contains information describing Calpine Construction Finance Company, L.P., the Project site, the Project and its operating characteristics, Calpine's need for the Project, Peninsular Florida's need for the Project, the basic contractual arrangements pursuant to which Calpine has committed the Project's output to Seminole, the economics of the Project, the permitting and construction schedules for the Project, the Project's electrical interconnection to the Peninsular Florida grid, and the Project's fuel supply and fuel transportation

agreements. Volume I of the Exhibits contains information describing Seminole and Seminole's need for the Project.

The Project will include two advanced technology combustion turbine generators, two matched heat recovery steam generators that include duct-firing capability for increased output, and one steam turbine generator. The Project is expected to have a heat rate of approximately 6,800 British thermal units ("Btu") per kilowatt-hour ("kWh"), based on the Higher Heating Value ("HHV") of natural gas at average ambient site conditions. The Project will meet or exceed all applicable environmental requirements. The Project's primary sources of makeup water to the cooling towers will be supplied by reclaimed water from the City of Auburndale and by on-site groundwater wells.

Projections prepared for Calpine indicate that the Project will operate approximately 7,500 to 8,500 hours per year, with projected generation of approximately 4.0 million to 4.4 million megawatt-hours ("MWH") per year, when operated on an economic dispatch basis within the Peninsular Florida power supply system.

The Project will be interconnected to the Peninsular Florida transmission grid at the Tampa Electric Company ("TECO") Recker Substation located adjacent to the east boundary of the Project site. The Project will be fueled by natural gas, which will be delivered through a new trans-Florida pipeline to be constructed by Gulfstream Natural Gas System, L.L.C. ("Gulfstream") pursuant to a 20-year firm gas transportation agreement. Gulfstream will obtain

all necessary permits for and construct the natural gas lateral pipeline to connect the main Gulfstream pipeline to the Project.

Ownership and Management

The Osprey Energy Center will be developed by Calpine Construction Finance Company, L.P., which will own the Project. Calpine Construction Finance Company, L.P., is a wholly-owned subsidiary of Calpine Corporation. Environmental engineering for the Project will be performed by Calpine and Golder Associates, Inc. Construction of the Project will be overseen by Calpine. The Osprey Energy Center will be managed by Calpine. Calpine plans to sell the power produced by the Project at wholesale to Seminole and, in the event that Seminole does not purchase all of the Project's output, Calpine expects to sell that output to other load-serving entities and retail-serving utilities for use in Peninsular Florida.

Site Description and Location

The Osprey Energy Center will be located in the City of Auburndale, Polk County, Florida, on approximately 19.5 acres situated approximately 1.5 miles south of downtown Auburndale and approximately 37 miles east of Tampa Bay. The site was formerly a citrus grove and is currently unused. Land uses adjacent to the site include the TECO Recker Substation and existing TECO 230 kV transmission lines, the existing Auburndale Power Plant, which is a 150 MW natural gas-fired cogeneration plant (with oil back-up

fuel) owned by Auburndale Power Partners, the Auburndale Memorial Park cemetery, commercial and industrial businesses, and two small residential enclaves. Access to the site will be from West Derby Avenue, a two-lane county collector road. The Project has been planned and designed to be consistent with the City of Auburndale's zoning category and comprehensive plan future land use designation applicable to utility uses.

Description of the Power Plant and Related Facilities

The power plant will consist of two advanced technology Siemens-Westinghouse Model 501F combustion turbine generators ("CTGs") in combined-cycle configuration. Each CTG will be connected to a heat recovery steam generator ("HRSG") producing steam for a single steam turbine generator ("STG"). The net electrical output of the plant will be 529 MW at average ambient site conditions, excluding duct-firing and power augmentation. The Project will include the capability to duct-fire the HRSGs to increase steam production and power output. Duct-firing is a process whereby gas burners are placed within the HRSGs to increase gas temperature and generate more steam, thus increasing power generation from the STG. The Project will also include the capability for power augmentation. Power augmentation is accomplished by injecting steam from the HRSGs into the gas turbines for the purpose of increasing mass flow through the CTGs, thereby increasing the electrical power output from the CTGs. The

Project will utilize state-of-the-art dry low-NO_x¹ combustion technology and selective catalytic reduction ("SCR") to minimize NO_x emissions.

The Osprey Energy Center will be connected to the Peninsular Florida transmission grid at the existing TECO Recker 230 kV substation. Gas will be delivered through a 16-inch lateral pipeline from the new Gulfstream pipeline. Process and makeup water will be supplied from the City of Auburndale's wastewater treatment facilities and from on-site groundwater wells, and wastewater will be returned to the Allred treatment facilities. The City of Auburndale will obtain the necessary permits for the new pipelines for delivery of the reclaimed water to and return of wastewater from the Project; these pipelines will be paid for by Calpine.

Fuel Supply

The Project will be fueled by natural gas, which will be delivered via firm transportation service on the Gulfstream pipeline. The natural gas will be supplied to Gulfstream pipeline receipt points by various natural gas commodity producers and suppliers.

Project Costs and Financing

The Osprey Energy Center's direct construction cost is

¹"NO_x" is used to refer generically to the oxides of nitrogen produced in the combustion process.

expected to be approximately \$194.8 million, reflecting a cost of approximately \$357 per kW of installed capacity (based on 545 MW at ISO). The Project will be constructed and brought into commercial service with a combination of equity and debt. Calpine Corporation will provide the equity, and the debt will be supplied from Calpine's "construction revolver," a form of revolving credit account with several investment banks used to fund the debt portion of the construction and development costs of multiple projects being developed by Calpine.

I. INTRODUCTION

The purpose of the Joint Petition for Determination of Need (the "Joint Petition") submitted by Seminole Electric Cooperative, Inc. and Calpine Construction Finance Company, L.P., is to obtain the Florida Public Service Commission's ("FPSC" or "Commission") affirmative determination of need for the Osprey Energy Center, a 529 MW natural gas-fired combined cycle generating plant that will be located in the City of Auburndale, Polk County, Florida.

The Commission's determination of need pursuant to Section 403.519, Florida Statutes, is part of the comprehensive permitting process for the Project under the Florida Electrical Power Plant Siting Act, Sections 403.501 through 403.518, Florida Statutes (the "Siting Act"). Under Section 403.519, the Commission is to consider the following factors when making its decision whether to grant a determination of need for a power plant subject to the Siting Act:

1. the need for electric system reliability and integrity;
2. the need for adequate electricity at a reasonable cost;
3. whether the proposed plant is the most cost-effective alternative available for serving an identified need for power;
4. conservation measures taken by, or reasonably available to, the affected utility or utilities which might mitigate the need for the proposed plant; and
5. other matters within the Commission's jurisdiction that the Commission deems relevant to its determination.

The Joint Petition and Volumes I and II of the Exhibits demonstrate that the Osprey Energy Center satisfies all relevant

criteria under Section 403.519 and all relevant criteria under Rule 25-22.081, Florida Administrative Code. The Project will provide a power supply resource with proven, reliable, highly efficient, highly available, and environmentally favorable technology. The Project will provide a cost-effective power supply resource for meeting Seminole's need for additional electric generating capacity and electrical energy to meet the needs of Seminole's Member systems and of these systems' members-consumers for system reliability and integrity.

The Project will also contribute meaningfully to the reliability of the power supply system in Peninsular Florida, lower the cost of electricity generation in Peninsular Florida, enhance the overall efficiency of electricity production in Peninsular Florida, and improve the environmental profile of electricity generation in Florida.

Section II of this Volume II of the Exhibits describes Calpine, one of the primarily affected utilities.² Section III describes technical aspects of the Project, including the site, generating technology, operational reliability and related information, major systems, associated facilities, fuel supply, and the schedules for permitting and constructing the Project. Section IV describes Peninsular Florida's and Calpine's need for the

²As noted above, Seminole, the other Joint Applicant and primarily affected utility, is described in Volume I of these Exhibits.

Project, including the energy efficiency and environmental benefits that the Project will provide. Section V describes the cost-effectiveness of the Project to Peninsular Florida and Calpine, and Section VI addresses the adverse consequences on power supply reliability, on power supply costs, and on Florida's environment of delaying the construction and operation of the Osprey Energy Center.

II. CALPINE CONSTRUCTION FINANCE COMPANY, L.P.

Calpine Construction Finance Company, L.P., is one of the Joint Applicants and one of the primarily affected utilities for the Commission's determination of need. This section of the Exhibits describes the organization and ownership structure of the Osprey Energy Center and Calpine. Seminole Electric Cooperative, Inc., is also a primarily affected utility within the meaning of the Commission's rules and orders. Volume I of the Exhibits contains appropriate descriptive information concerning Seminole.

A. Overview and Project Structure.

Calpine Construction Finance Company, L.P. will be the owner of the Osprey Energy Center. Calpine will sell the Project's capacity and energy at wholesale to Seminole and, in the event that Seminole does not purchase all of the Project's output, to other load-serving utilities in Florida. Calpine is authorized by its FERC-approved tariff to engage in the business of generating and selling electricity at wholesale in Florida.

Calpine Construction Finance Company, L.P. is the developer of the Project, and in that role negotiated the MOU with Seminole and will negotiate various other contracts and perform other activities necessary for the Project's development and construction. The Project will be constructed and brought into commercial service solely with funding arranged by Calpine. Calpine anticipates that the Project will be financed with a combination of equity and debt

that will be used to pay the development and construction costs. Calpine has retained Golder Associates, Inc. to provide engineering support and environmental licensing and permitting services for the Project. The natural gas fuel supply for the Project will be provided by natural gas marketing companies or producers to receipt points on the new trans-Florida natural gas pipeline to be constructed by Gulfstream Natural Gas System, L.L.C.

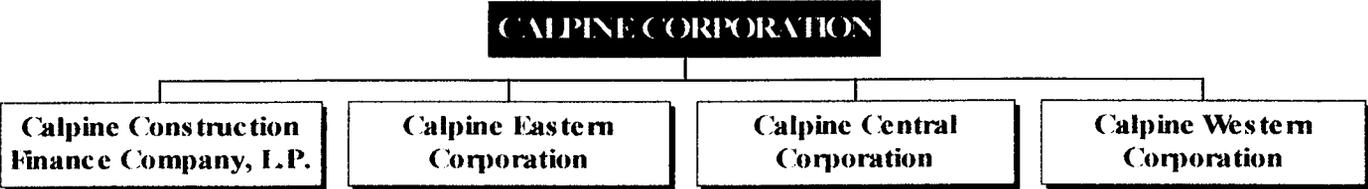
B. Calpine Construction Finance Company, L.P.

Calpine Construction Finance Company, L.P., a Delaware Limited Partnership, is a wholly-owned subsidiary of Calpine Corporation, a Delaware corporation. See Figure II-1.

Calpine is a public utility under Section 201 of the Federal Power Act. 16 USCA §§824(b)(1)&(e)(1994). By order issued on February 23, 2000, FERC approved Calpine's tariff to sell wholesale power at market-based rates. In Re: Calpine Construction Finance Company, L.P., 90 FERC ¶61,164 (February 23, 2000). A copy of the order is included in Appendix A to Volume II of these Exhibits. On November 3, 2000, Calpine submitted its application to the FERC for certification as an Exempt Wholesale Generator.

Calpine is the developer of the Osprey Energy Center. In that role, Calpine is arranging for the permitting of the Project, for the engineering, procurement, and construction of the Project, for the Project's fuel supply, and for other services necessary to bring the Project to commercial operation.

FIGURE II-1
CALPINE CONSTRUCTION FINANCE COMPANY, L.P.
OWNERSHIP STRUCTURE



Calpine's business strategy is to focus on building clean, environmentally responsible, efficient, natural gas-fired combined cycle power plants. Calpine expects to be represented on the Florida Reliability Coordinating Council.

C. Calpine Corporation.

Calpine Corporation, a Delaware corporation, is the parent corporation of Calpine Construction Finance Company, L.P. Calpine Corporation is headquartered in San Jose, California with regional offices in Boston, Massachusetts, Tampa, Florida, Houston, Texas, and Pleasanton, California. Founded over 15 years ago, Calpine Corporation is a leading independent power company engaged in the development, acquisition, ownership and operation of power generation facilities, and in the sale of electricity from Calpine's plants, predominantly in the United States. Calpine Corporation currently owns, has ownership interest in, or is developing or constructing a total of 77 generating assets (28 existing gas-fired and 19 existing geothermal projects, 18 projects under construction, and 12 projects under development) having a combined nominal capacity of 23,913.70 MW with Calpine Corporation's net ownership interest in these assets totaling 20,957.9 MW. Calpine Corporation's 28 operating gas-fired generating plants are located in California (7 plants), New Jersey (3 plants), New York (4 plants), Pennsylvania (2 plants), Texas (5 plants), and 1 plant each in Florida, Illinois, Massachusetts,

Oklahoma, Rhode Island, Virginia and Washington. Calpine Corporation now owns the entire ownership interest in Auburndale Power Partners' Auburndale Power Plant, which is immediately adjacent to the Osprey Project site. Calpine Corporation's geothermal power generating units have approximately 850 MW of capacity. Table II-1 presents a summary of Calpine Corporation's generating portfolio.

Calpine Corporation is a vertically integrated company with a full competency set that enables it to develop, finance, construct, own, and operate, on a long-term basis, power plants across the United States. As part of the above competencies, Calpine Corporation possesses the asset management, power marketing, risk management, and fuel management capabilities required for the long-term sustainable and reliable operation of a diverse set of generating assets. Additionally, Calpine Corporation has recently completed the acquisition of gas reserves in the Sacramento basin. The acquisition of additional gas reserves is part of Calpine Corporation's long-term business strategy.



TABLE II-1
Calpine Corporation Portfolio
of Generating Assets

Calpine

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Operating Gas Fired Power Plants	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Agnews</u> San Jose, CA	26.5	100%	26.5
<u>Auburndale</u> Auburndale, FL	143.0	100%	143.0
<u>Bayonne</u> Bayonne, NJ	158.0	7.5%	11.9
<u>Bethpage</u> Hicksville, NY	52.0	100%	52.0
<u>Clear Lake</u> Pasadena, TX	335.0	100%	335.0
<u>Dighton</u> Dighton, MA	162.0	50%	81.0
<u>Gilroy</u> Gilroy, CA	112.0	100%	112.0
<u>Gordonsville</u> Gordonsville, VA	233.0	50%	116.5
<u>Grays Ferry</u> Philadelphia, PA	143.0	40%	57.2
<u>Greenleaf 1</u> Yuba City, CA	50.0	100%	50.0
<u>Greenleaf 2</u> Yuba City, CA	50.0	100%	50.0
<u>Hidalgo</u> Edinburg, TX	502.0	78.5%	394.1
<u>Kennedy</u> Jamaica, NY	95.0	100%	95.0
<u>King City</u> King City, CA	103.0	100%	103.0
<u>Lockport</u> Lockport, NY	177.0	11.36%	20.1
<u>Morris</u> Morris, IL	155.0	86.45%	134.0
<u>Newark</u> Newark, NJ	47.0	80%	37.6
<u>Parlin</u> Parlin, NJ	89.0	80%	71.2
<u>Pasadena</u> Pasadena, TX	231.0	100%	231.0
<u>Pasadena Expansion</u> Pasadena, TX	520.0	100%	520.0
Philadelphia	15		

<u>Philadelphia</u> Philadelphia, PA	22.0	66.4%	14.6
<u>Pittsburg</u> Pittsburg, CA	64.0	100%	64.0
<u>Pryor</u> Pryor, OK	109.0	80%	87.2
<u>Stony Brook</u> Stony Brook, NY	36.0	100%	36.0
<u>Sumas</u> Sumas, WA	120.0	70%	84.0
<u>Texas City</u> Texas City, TX	465.0	100%	465.0
<u>Tiverton</u> Tiverton, RI	240.0	62.8%	150.7
<u>Watsonville</u> Watsonville, CA	29.0	100%	29.0
Operating Geothermal Power Plants	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Aidlin</u> Middletown, CA	20.0	100%	20.0
<u>Bear Canyon</u> Middletown, CA	20.0	100%	20.0
<u>Calistoga</u> Middletown, CA	73.0	100%	73.0
<u>Lake County</u> (2 power plants) Middletown, CA	145.0	100%	145.0
<u>Sonoma</u> Middletown, CA	53.0	100%	53.0
<u>Sonoma County</u> (12 power plants) Middletown, CA	512.0	100%	512.0
<u>West Ford Flat</u> Middletown, CA	27.0	100%	27.0
Under Construction	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Acadia</u> Eunice, LA	1,080.0	50%	540.0
<u>Aries</u> Pleasant Hill, MO	516.0	50%	258.0
<u>Baytown</u> Baytown, TX	704.0	100%	704.0
<u>Channel</u> Houston, TX	519.0	100%	519.0
<u>Decatur</u> Decatur, AL	659.0	100%	659.0

<u>Delta</u> Pittsburg, CA	798.0	50%	399.0
<u>Freestone</u> Freestone County, TX	1,002.8	100%	1,002.8
<u>Hermiston</u> Hermiston, OR	530.0	100%	530.0
<u>Los Medanos</u> Pittsburg, CA	493.0	100%	493.0
<u>Lost Pines I</u> Austin, TX	522.0	50%	261.0
<u>Magic Valley</u> Edinburg, TX	687.0	100%	687.0
<u>Morgan</u> Decatur, AL	660.0	100%	660.0
<u>Oneta</u> Coweta, OK	960.3	100%	960.3
<u>Ontelaunee</u> Ontelaunee, PA	511.0	100%	511.0
<u>Rumford</u> Rumford, ME	237.0	66.7%	158.1
<u>South Point</u> Bullhead City, AZ	526.0	100%	526.0
<u>Sutter</u> Yuba City, CA	516.0	100%	516.0
<u>Westbrook</u> Westbrook, ME	487.0	100%	487.0
Under Development	Baseload Capacity (megawatts)	Calpine Interest Percentage	Calpine Net Interest (megawatts)
<u>Blue Heron</u> Indian River County, FL	1,080.0	100%	1,080.0
<u>Calgary Energy Centre</u> Calgary, Alberta	198.0	100%	198.0
<u>Fremont</u> Fremont, Ohio	500.0	100%	500.0
<u>Haywood</u> Haywood County, TN	763.0	100%	763.0
<u>Hillabee</u> Tallapoosa County, AL	700.0	100%	700.0
<u>Lone Oak</u> Lowndes County, MS	763.0	100%	763.0
<u>Metcalf</u> San Jose, CA	533.0	50%	266.5
<u>Osprey</u> Auburndale, FL	540.0	100%	540.0

Auburndale, FL			
<u>Teayawa</u> Thermal, CA	530.0	100%	530.0
<u>Towantic</u> Oxford, CT	508.0	100%	508.0
<u>Wawayanda</u> Middletown, NY	530.0	100%	530.0
<u>West Phoenix</u> Phoenix, AZ	511.0	50%	255.5

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 TO THE FOLLOWING TERMS AND CONDITIONS

III. DESCRIPTION OF THE OSPREY ENERGY CENTER

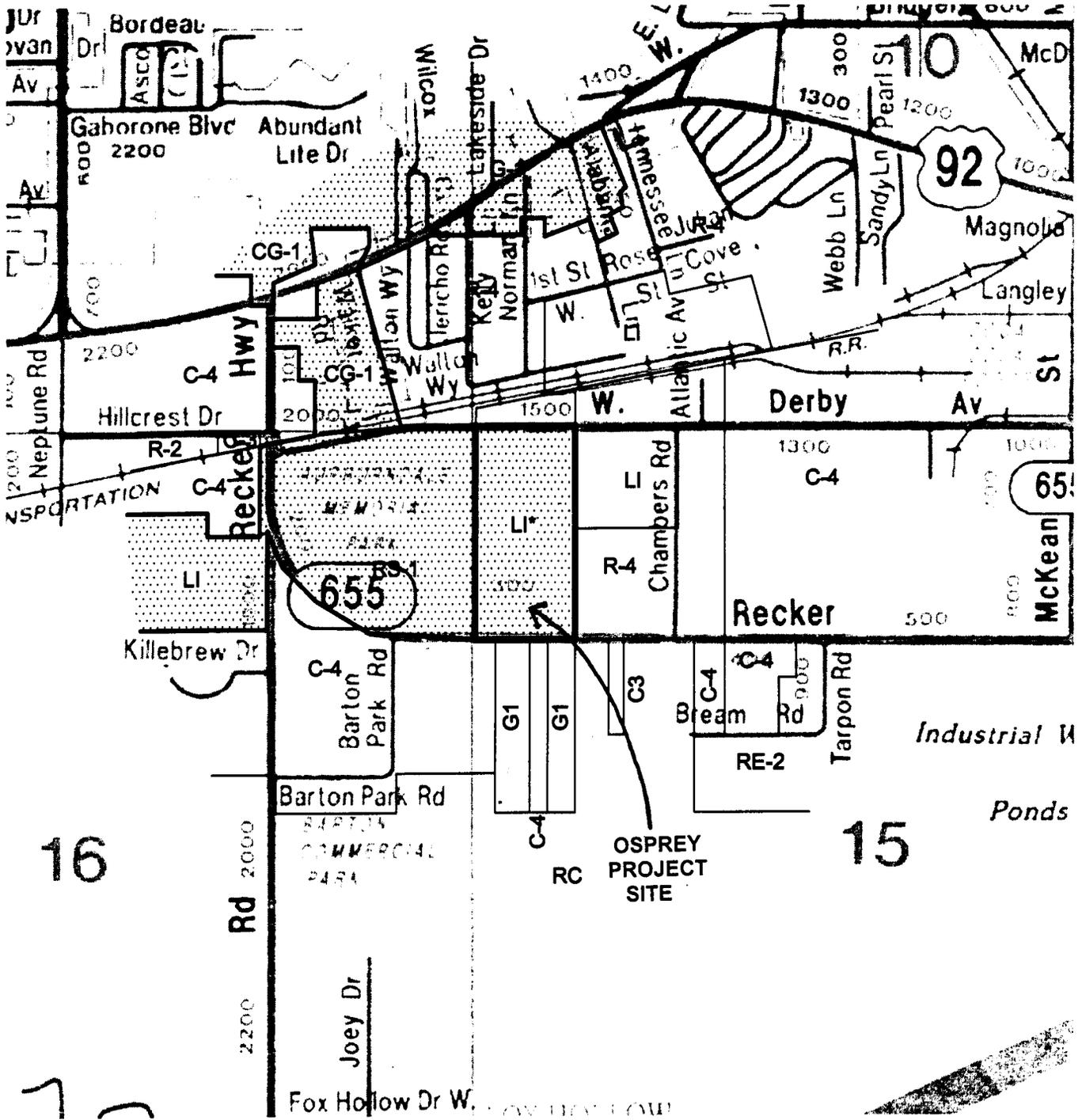
This section of the Exhibits describes the Osprey Energy Center, including the Project's location, site arrangement, major systems and facilities, associated facilities, capital costs and financing, fuel supply, operational reliability, permitting and construction schedules, and operation and maintenance plan.

A. Site Location and Land Use Designation.

The Osprey Energy Center site will be located in the City of Auburndale, in Polk County, Florida, on approximately 19.5 acres situated approximately 1.5 miles southwest of downtown Auburndale and approximately 37 miles east of Tampa Bay. The site is a non-producing citrus grove zoned "Light Industry" and is currently unused. Land uses adjacent to the site include the TECO Recker Substation and 230 kV transmission lines; the existing Auburndale Power Plant, which is a 150 MW natural gas-fired (with oil backup fuel) cogeneration plant owned by Auburndale Power Partners (and ultimately owned by Calpine Corporation); two small residential enclaves; a cemetery; and commercial and industrial businesses. Access to the site will be from West Derby Avenue, a two-lane county collector road. Figure II-2 is a map of the site location.

B. Site Arrangement.

A drawing of the expected layout of the generators, cooling towers and water processing and storage facilities is shown in Figure II-3, the site plan for the Project. The general arrangement of the power plant on the Project site is shown in Figure II-4, the



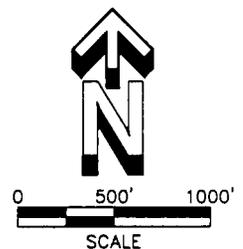
- Auburndale Zoning Districts**
- LI Light Industry
 - RS-1 Single Family Residential
 - GI General Industrial

- Polk County Zoning Districts**
- C-3 Regional Commercial
 - C-4 Heavy Commercial
 - GI General Industrial
 - R-4 Residential
 - RC Rural Conservation
 - RE-2 Rural Estates

REFERENCE

City of Auburndale Zoning Map
 Polk County Zoning Map, Feb., 2000

* Site has been annexed. Zoning designation is based on Auburndale District



Tampa, Florida

**FIGURE II-2
 SITE LOCATION RELATIVE TO LOCAL
 LANDMARKS AND ZONING DESIGNATIONS**

Client / Project
 Calpine Construction Finance Company, L.P.
 Osprey Energy Center 20

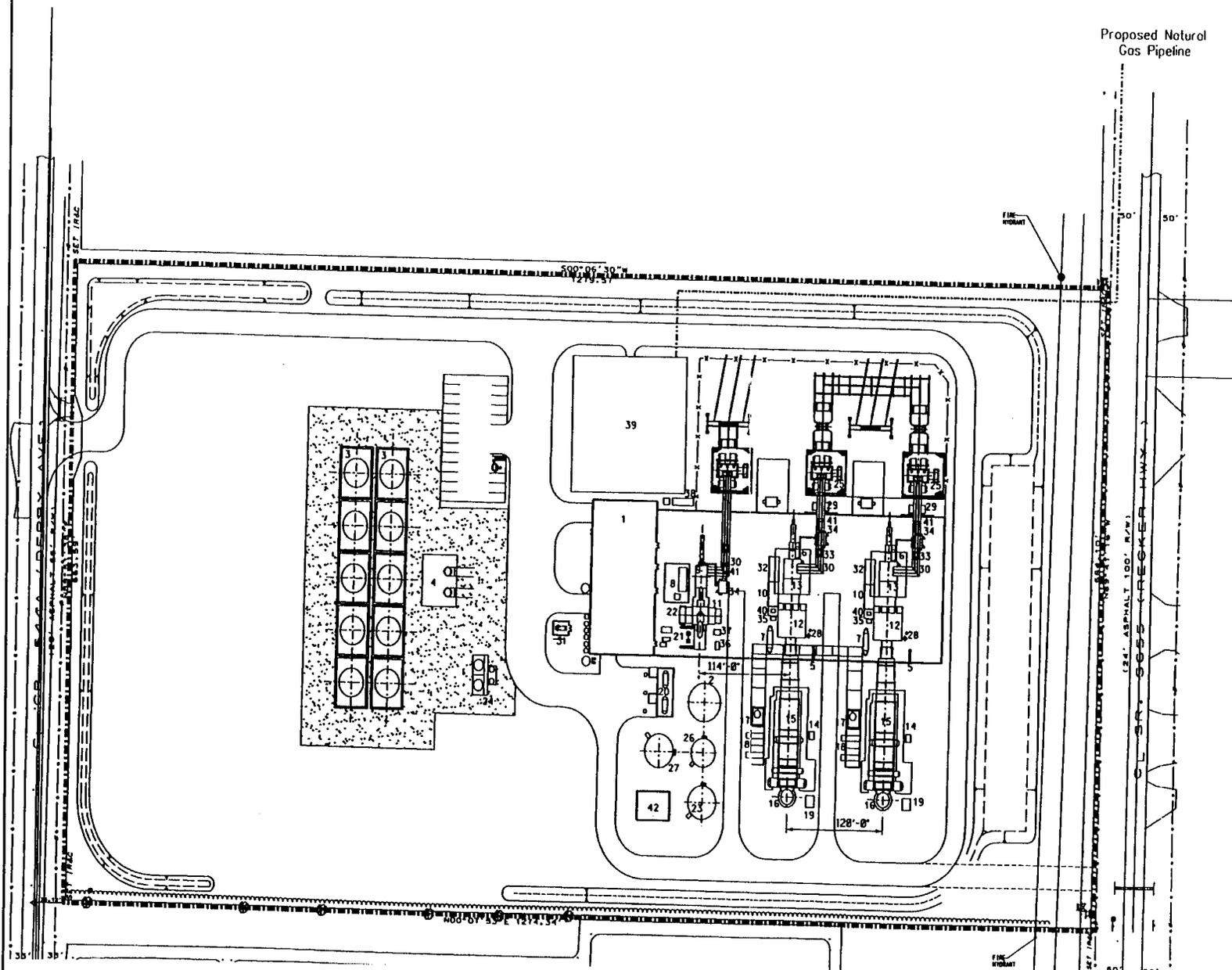
CAD BY: CDT	SCALE: 1"=1000'
CHK BY: CA	DATE: 02/08/00
REV BY: -	FILE No.: fig2_2_2-2.dwg

Job No. 993-9570

FIGURE

Legend

1. ADMINISTRATION AND MAINTENANCE BUILDING
2. SERVICE WATER TANK
3. COOLING TOWER
4. CIRCULATING WATER PUMPS
5. FUEL GAS HEATER
6. COMBUSTION TURBINE AIR INLET FILTER
7. KETTLE BOILER
8. LUBE OIL SKID
9. ST GENERATOR
10. CT MECHANICAL PACKAGE
11. STEAM TURBINE
12. COMBUSTION TURBINE
13. CT GENERATOR
14. AMMONIA INJECTION SKID
15. HEAT RECOVERY STEAM GENERATOR
16. HRSG STACK
17. HRSG BLOWDOWN TANK
18. BOILER FEED PUMP HOUSE
19. CEMS
20. AMMONIA STORAGE TANKS
21. CONDENSATE PUMPS
22. CONDENSER
23. DEMINERALIZED WATER STORAGE TANK
24. WET SURFACE AIR COOLER
25. GENERATOR STEP-UP TRANSFORMER
26. WASTEWATER TANK
27. RAW WATER STORAGE TANK
28. FUEL GAS SCRUBBER
29. UNIT AUX. TRANSFORMER
30. ISO-PHASE BUS DUCT
31. STANDBY GENERATOR
32. ELECTRICAL EQUIPMENT PACKAGE
33. GENERATOR VT & SURGE CUBICLE
34. GENERATOR EXCITATION SKID
35. COMPRESSOR WATER WASH SKID
36. STEAM JET AIR EJECTORS
37. GLAND STEAM CONDENSER
38. OIL/WATER SEPARATOR
39. GAS METER BUILDING
40. HYDRAULIC SKID
41. EXCITATION TRANSFORMER
42. CENTRAL PUMP HOUSE



Proposed Natural Gas Pipeline

FIRE HYDRANT

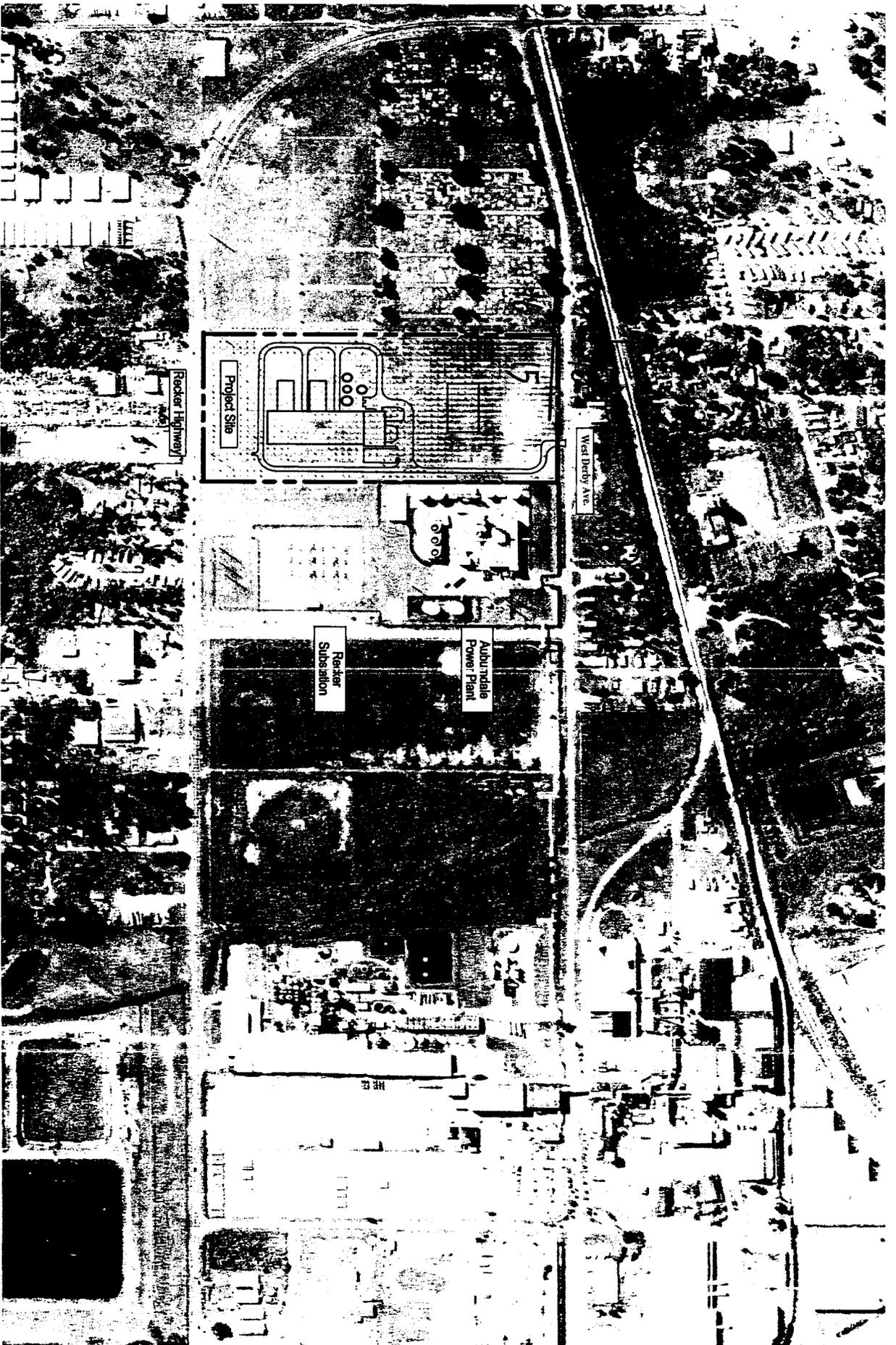
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Golder Associates
Tampa, Florida

Client / Project
Calpine Construction Finance Company, L.P.
Osprey Energy Center

FIGURE II-3
Site Plan

CAD BY: CDT	SCALE: 1"=120'	Job No. 993-9570
CHK BY: HGB	DATE: 08/11/00	FIGURE Revision 1
REV BY: -	FILE No: fig3_2_0-2.dwg	3.2.0-2



 Goldier Associates Tampa, Florida	
Client / Project Calpine Construction Finance Copany, L.P. Osprey Energy Center	
CDD no: CDT CDE no: RAZ REV no: -	SCALE: 1"=400' DATE: 03/02/00 FILE No.: plot-plan.dwg
FIGURE II-4 PLOT PLAN	
Job No.	903-9570
FIGURE	

plot plan for the Project. An artist's computer-generated rendering of the Osprey Project is presented in Figure II-5.

C. Description of Major Systems and Facilities.

The Project will produce 529 MW at average ambient temperature, excluding duct-firing and power augmentation, and is rated at 496 MW at summer peak conditions and 578 MW at winter peak conditions (also without power augmentation or duct-firing). The power block will consist of two advanced-technology, dry low-NO_x combustion turbine generators with the capability to use power augmentation to increase the CTGs' power output, two matched heat recovery steam generators that include duct-firing capability to increase the steam generation capability of the HRSGs, and one steam turbine generator rated for the full steam production capacity (including duct-firing) of the HRSGs. Figure II-6 depicts the cycle of a gas-fired combined cycle power plant with a single combustion turbine and a single heat recovery steam generator.³ Figure II-7 presents a one-line electrical diagram for the Project. The Project will be interconnected to the Peninsular Florida bulk transmission grid at the TECO Recker Substation and associated 230 kV transmission lines located adjacent to the east boundary of the site.

The Osprey Project will utilize a combination of reclaimed water and well water for its process and makeup water supply.

³ The Project will have two combustion turbines and two heat recovery steam generators.

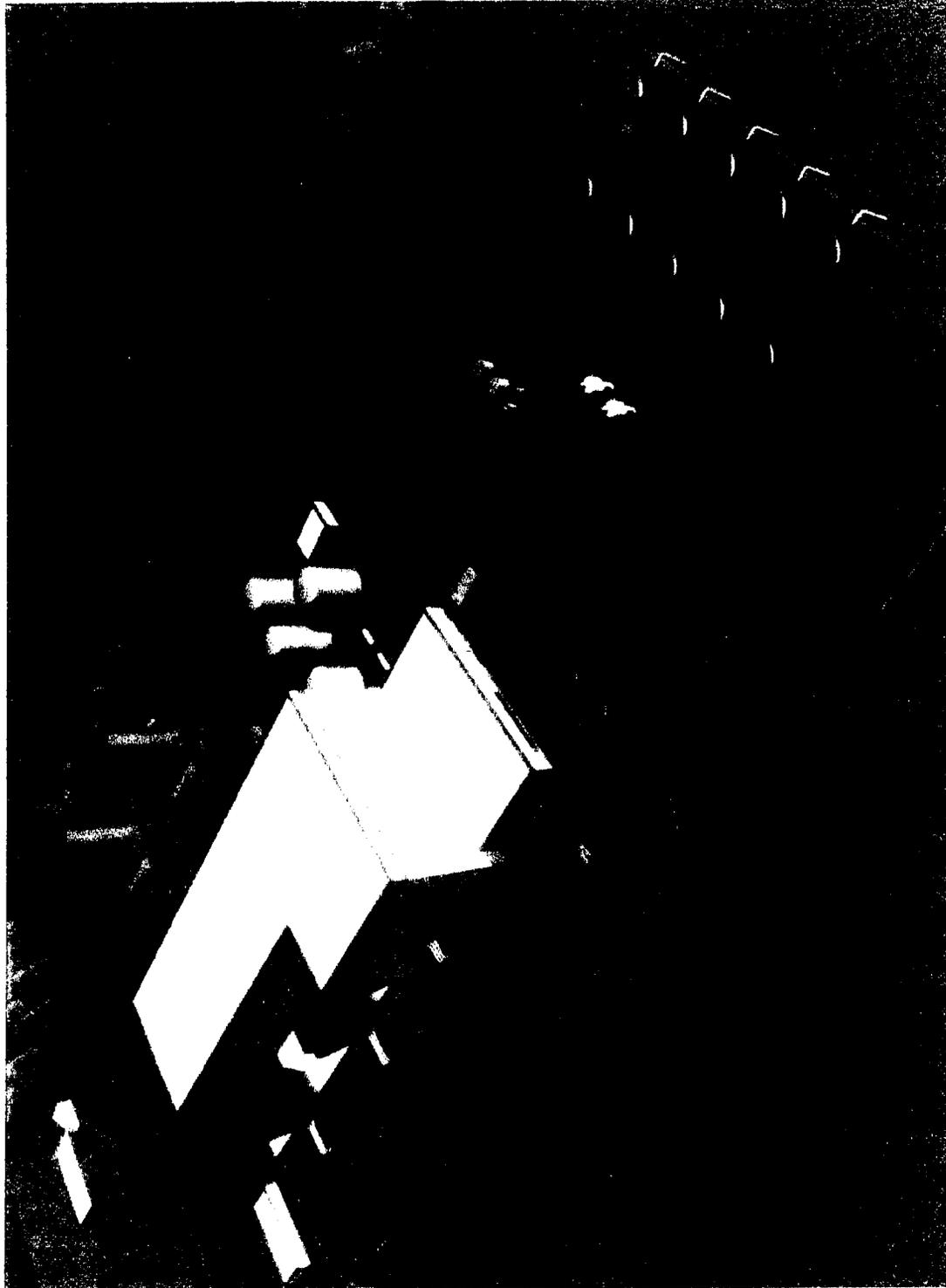


FIGURE II-5
PERSPECTIVE RENDITION

Tampa, Florida

Calpine Construction Finance Company, L.P.
 Osprey Energy Center



Client / Project

CAD BY: CDT

SCALE: NTS

Job No. 993-9570

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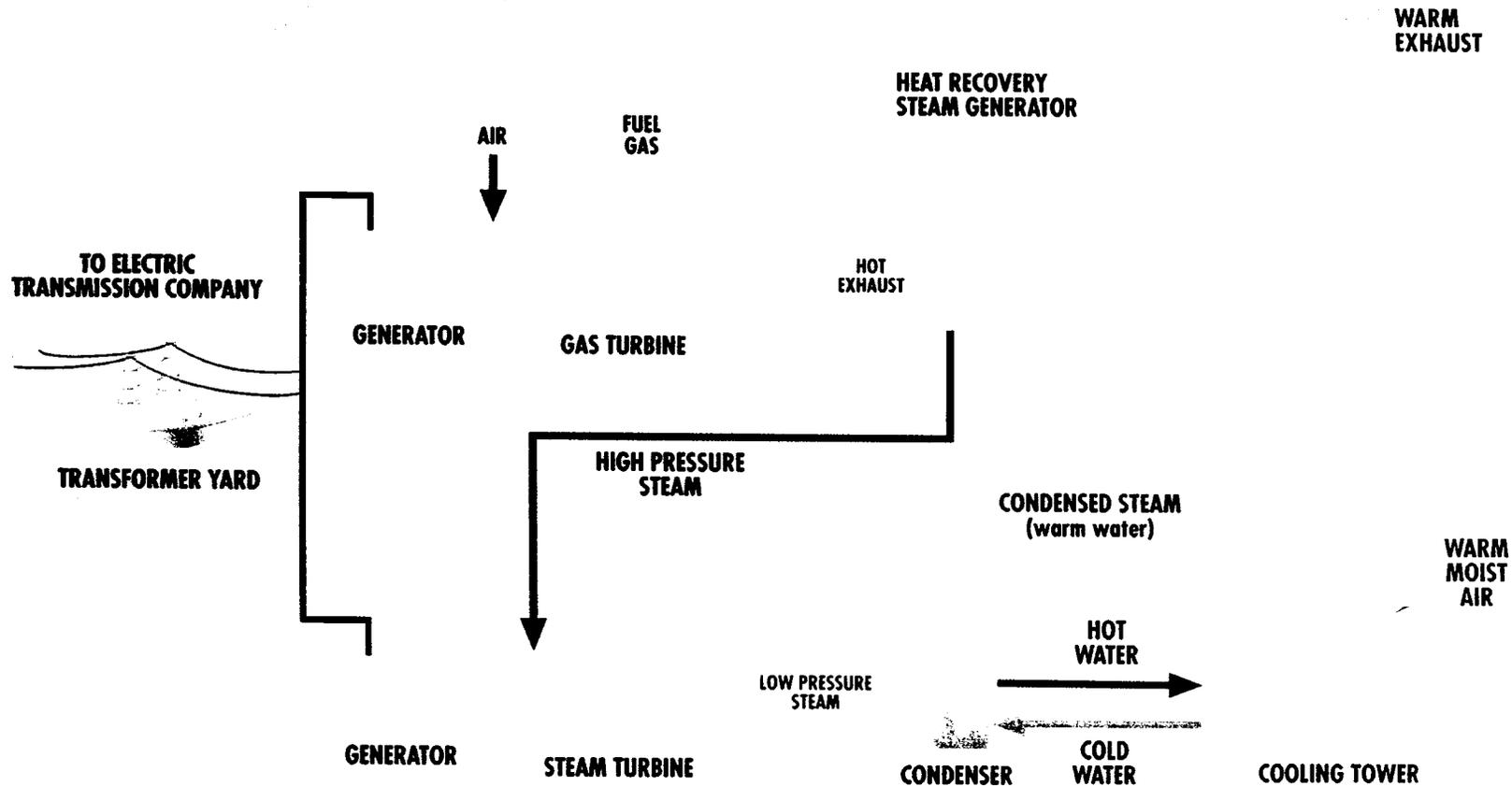
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FIGURE

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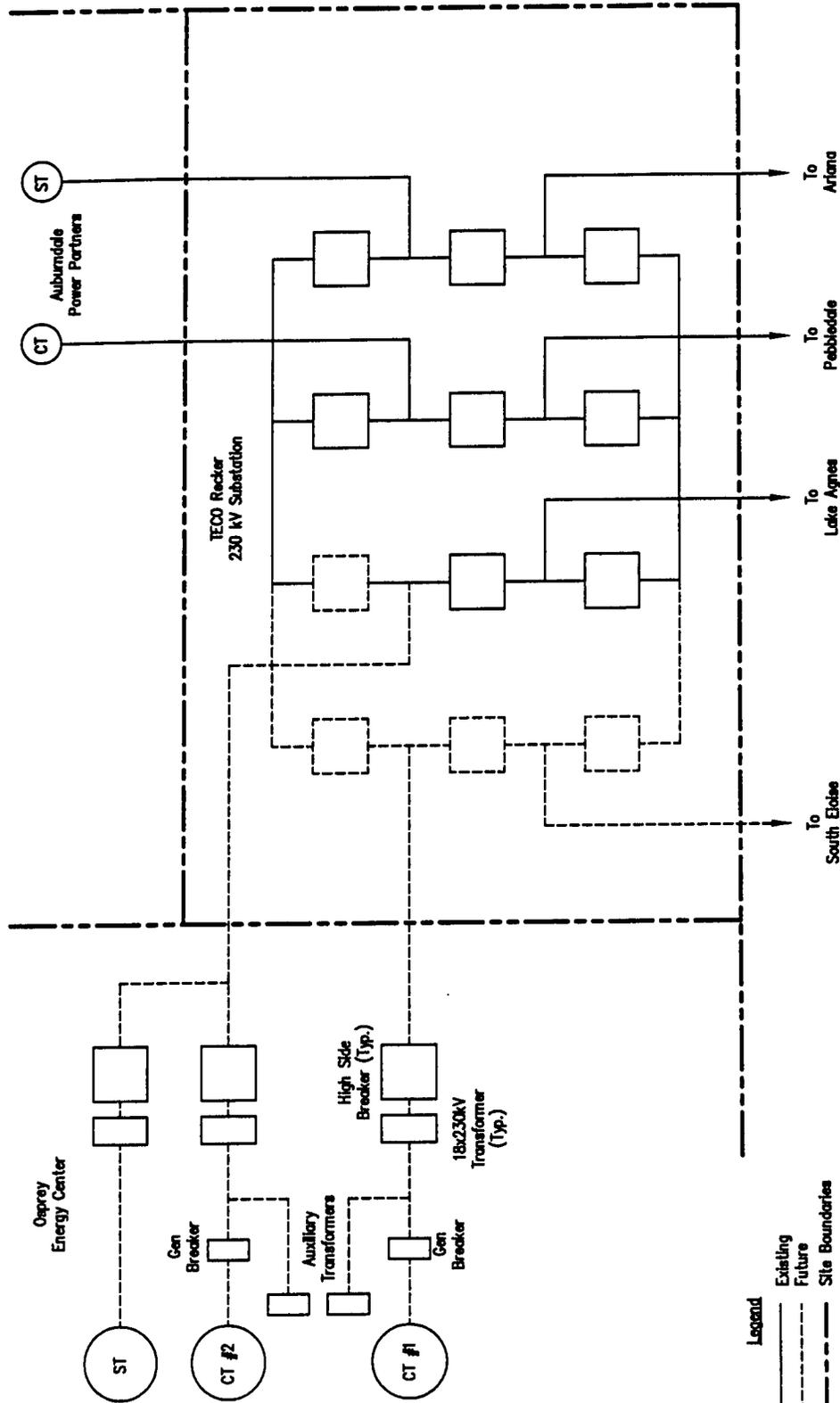
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FIGURE 6 COMBINED-CYCLE GENERATION SCHEMATIC DIAGRAM



25





Station One-Line
Electrical Diagram

Tampa, Florida



Client / Project

Calpine Construction Finance Company, L.P.
Opfrey Energy Center

CAD BY: CDT

Job No. 983-9570

CHK BY: RAZ

FIGURE

REV BY: -

II-7

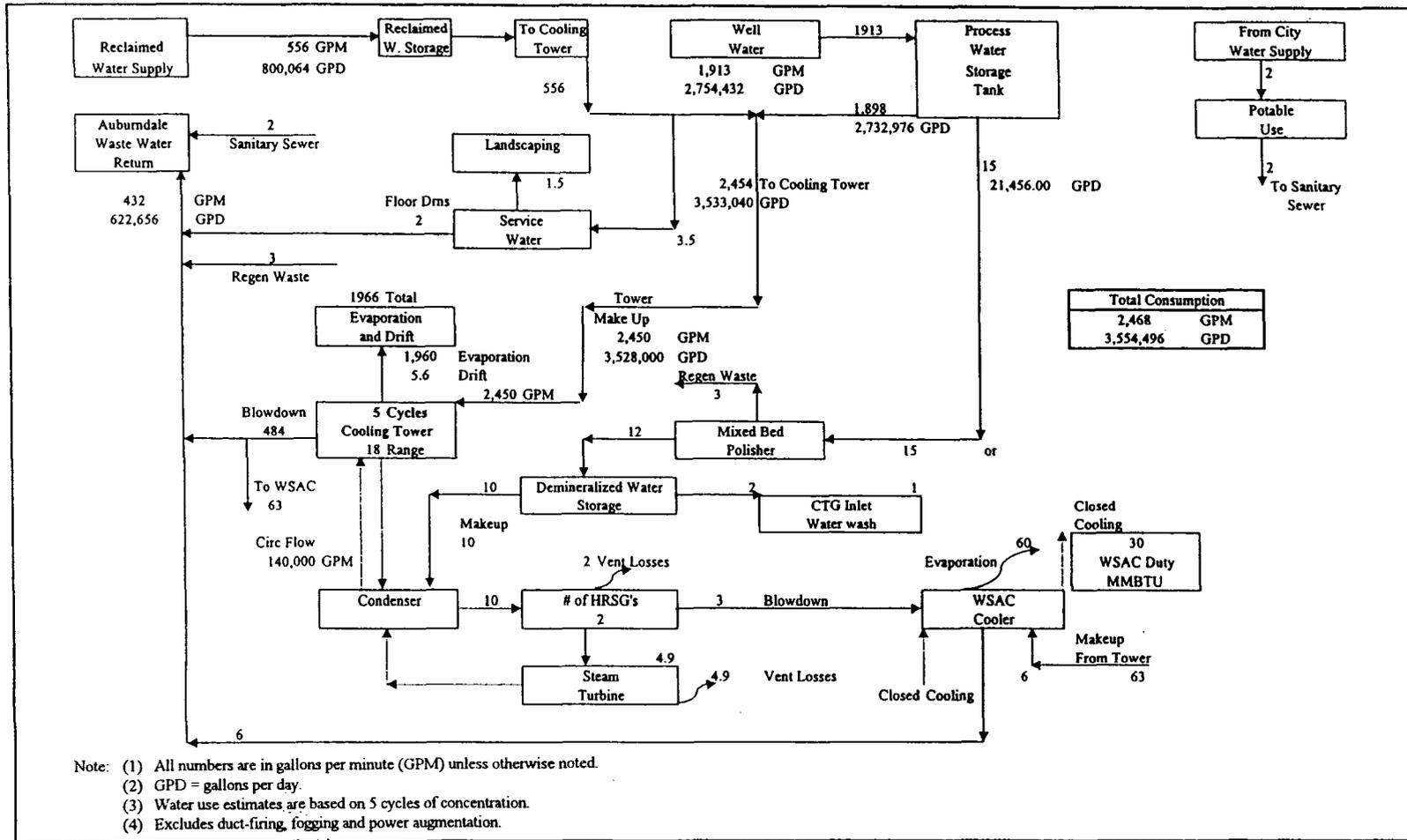
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DATE: 08/10/00

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Reclaimed water will be supplied from the City of Auburndale's Allred Wastewater Treatment Plant and may also be supplied from the City of Auburndale's Westside Regional Wastewater Treatment Plant. The Project will require the construction of reclaimed water pipelines to intertie with the City of Auburndale's wastewater treatment facilities. The pipelines to the Allred wastewater treatment facilities will be approximately one mile in length and will be constructed in existing public rights-of-way. Additionally, other minor pipeline modifications will be made to enhance discharge capability. The reclaimed water supply and return pipelines will run along the north Recker Highway right-of-way to the Osprey Project site boundary. The City of Auburndale will obtain the necessary permits for the water and wastewater pipelines. The remainder of the Osprey Project's water supply will be provided by new on-site wells withdrawing water from the Upper Floridan aquifer. The Project's preliminary average annual daily water balance for average conditions is shown in Figure II-8, and the preliminary peak monthly daily water balance is shown in Figure II-9.

The Osprey Energy Center is expected to have an estimated Equivalent Availability Factor of approximately 94.5 percent, and, based on production simulation analyses prepared for Calpine of the Project's operations within the Peninsular Florida bulk power supply system, an average capacity factor of approximately 91 percent. The Project's direct construction cost is projected to be



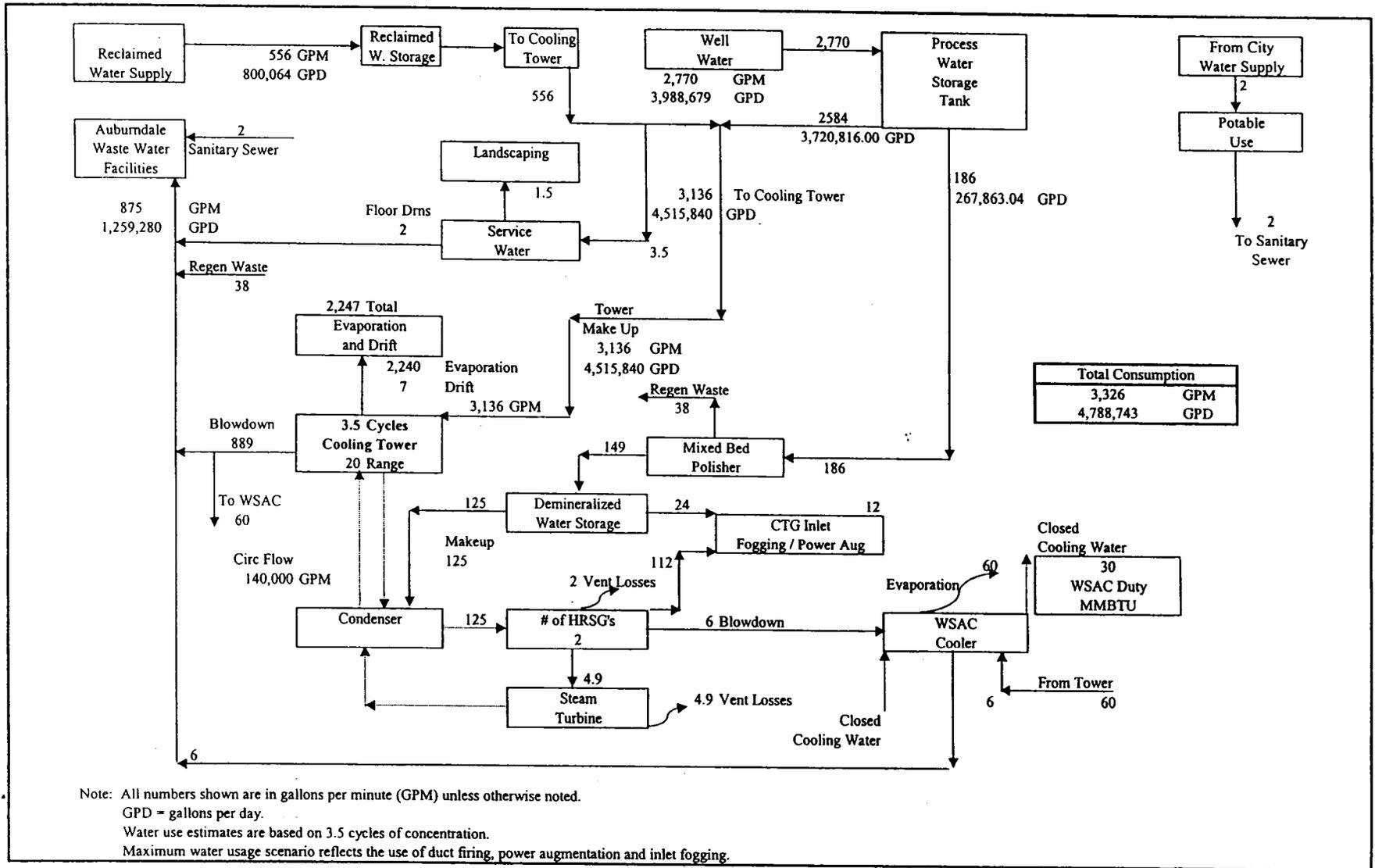
Tampa, Florida

Average Annual Daily Water Balance Diagram

Client / Project

Calpine Construction Finance Company, L.P.
Osprey Energy Center

CAD BY: CDT	SCALE: NTS	Job No. 993-9570
CHK BY: RAZ	DATE: 11/29/00	FIGURE II-8
REV BY: -	FILE No: fig3_5_0-1.dwg	



Tampa, Florida

Peak Month Daily Water Balance Diagram

Client / Project

Calpine Construction Finance Company, L.P.
 Osprey Energy Center

CAD BY: CDT

SCALE: NTS

Job No. 993-9570

CHK BY: RAZ

DATE: 11/29/00

REV BY: -

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FIGURE II-9

approximately \$194.8 million, or approximately \$357 per kW of installed capacity (based on 545 MW output at ISO temperature and humidity conditions).

The Project has been designed with careful consideration of environmental issues and has a responsible environmental profile. The Project will be designed to control NO_x emissions using Best Available Control Technology ("BACT") measures, including state-of-the-art dry low-NO_x combustion technology and selective catalytic reduction. The Project will meet NO_x emission levels of 3.5 ppmvd, corrected to 15 percent oxygen. Both the use of clean-burning natural gas and good combustion practices will minimize sulfur dioxide, carbon monoxide, and volatile organic compound emissions and ensure that such emissions stay within permitted limits. See Table II-2 of this volume of the Exhibits.

More detailed plant performance and emissions data for the Project are shown in Table II-3 of this volume of the Exhibits. An overall schematic diagram of the power generation cycle is presented in Figure II-10.

D. Transmission Facilities.

The Osprey Energy Center will be electrically interconnected to the Peninsular Florida bulk transmission grid at TECO's Recker Substation, which is located adjacent to the east boundary of the Project site. The Recker Substation is tied to the transmission grid by three 230 kV transmission lines: one line that interconnects to the Lake Agnes 230 kV Substation, one line that

TABLE II-2

OSPREY ENERGY CENTER
PROJECT PROFILE

Expected Plant Capacity:

a.	Average ambient rating (74°F, 80% R.H.):	529 MW
b.	Summer (95°F, 80% R.H.):	496 MW
	With Duct-firing & Power Augmentation:	575 MW
c.	Winter (32°F, 60% R.H.):	578 MW
	With Duct-firing & Power Augmentation:	666 MW
d.	ISO (59°F, 60% R.H.):	545 MW

Project Energy Production: Approximately 4,300,000 MWH/year
(not including duct-firing or power augmentation)

Technology Type: Two Siemens-Westinghouse 501F advanced firing temperature technology combustion turbines, two heat recovery steam generators, and one steam turbine generator in combined cycle configuration

Anticipated Construction Schedule:

a.	Engineering release date:	February 2001
b.	Construction mobilization date:	June 2001
c.	Commercial in-service date:	2nd quarter 2003

Fuel Use: Approximately 86 million Standard Cubic Feet of natural gas/day, annual average conditions (74°F, 80% R.H.), full load

Air Pollution Control Strategy: Dry low-NOx burners and SCR

Cooling Method: Wet Cooling Tower

Total Site Area: 19.5 acres (approximate)

Construction Status: Planned

Certification Status: Need Determination Petition and Site Certification Application filed.

Status with Federal Agencies: FERC has issued its order granting Calpine market-based rate authority.

TABLE II-2

OSPREY ENERGY CENTER
PROJECT PROFILE
(CONTINUED)

Projected Unit Performance Data:

Planned Outage Factor (POF):	3.5%
Forced Outage Factor (FOF):	2.0%
Equivalent Availability Factor (EAF):	94.5%
Estimated Annual Average Capacity Factor (%):	91.0%

Average Net Operating Heat Rate (ANOHR): 6800 Btu/kWh (HHV)
(74°F, 80°R.H.) expected

Project Unit Financial Data (per Calpine Corporation):

Book Life (years):	35 years
Direct Construction Cost:	Approx. \$194.8 million
AFUDC Amount:	Not applicable
Escalation (\$/kW):	Not applicable
Fixed O&M (\$/kW per year):	Proprietary
Variable O&M (¢/MWH):	Proprietary
K-Factor:	Not applicable
Project Life:	35 years

Expected Plant Air Emissions: NO_x: 3.5 ppmvd @15% O₂
SO₂: 20.8 lbs/hour
CO: 10 ppm

New Transmission Lines Required: None

Gas Pipeline Required: None

Water Requirements: Approx. 4.79 MGD, summer peak
(Including Reclaimed Water) Conditions (95°F, 80 R.H.),
(with power augmentation and duct-firing)
Approx. 3.55 MGD average
(74°F, 80 R.H.), (without
power augmentation or duct-firing)

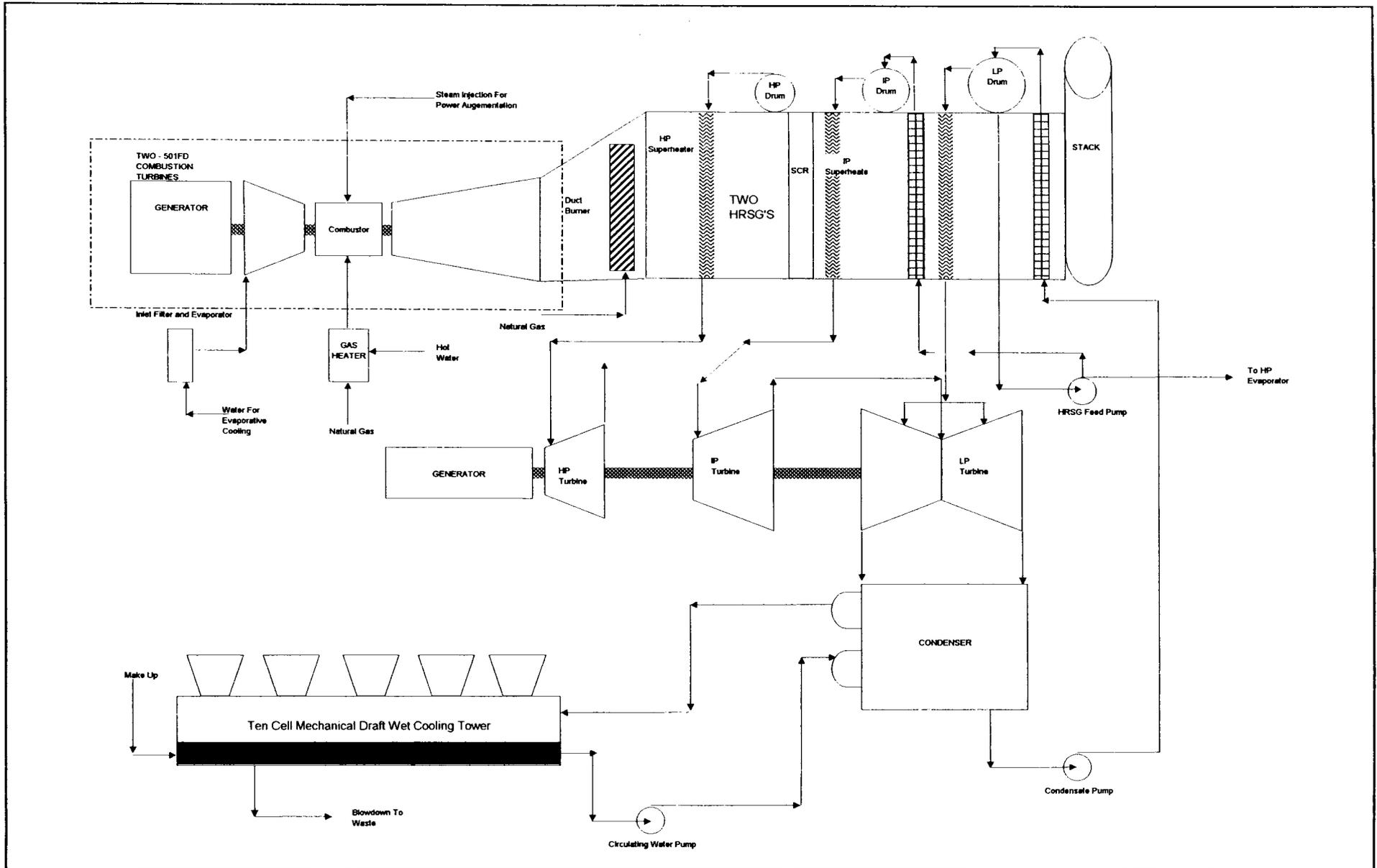
Wastewater Discharge: Approx. 1.26 MGD, summer peak
conditions (with power
augmentation and duct-firing)
Approx. 0.62 MGD, average
conditions (3.9 cycles of
concentration without power
augmentation and duct-firing)

**TABLE II-3
OSPREY ENERGY CENTER
Estimated Plant Performance and Emissions Data**

Percent Load		100%	100%	100%	100%	70%	70%	70%	70%	60%	60%	60%	60%	100%
Ambient Temperature	F	95	74	59	32	95	74	59	32	95	74	59	32	95
Ambient Relative Humidity	%	80%	80%	60%	60%	80%	80%	60%	60%	80%	80%	60%	60%	80%
Gas Turbine Power	MW	324	347	362	390	222	240	253	272	190	205	216	233	357
Steam Turbine Power	MW	185	195	197	203	145	153	152	154	135	143	149	148	233
Net Cycle Power	MW	496	529	545	578	358	383	395	416	317	339	356	371	575
Net Cycle LHV Heat Rate	BTU/kW-hr	6,187	6,122	6,125	6,137	6,497	6,430	6,359	6,373	6,599	6,529	6,478	6,457	6,576
Net Cycle LHV Efficiency	%	55.2%	55.7%	55.7%	55.6%	52.5%	53.1%	53.7%	53.5%	51.7%	52.3%	52.7%	52.9%	51.9%
Net Cycle HHV Heat Rate	BTU/kW-hr	6,871	6,798	6,802	6,815	7,215	7,140	7,062	7,077	7,329	7,251	7,193	7,170	7,303
CTG fuel flow (lb/h)- total for two CTGs	lb/hr	146,325	154,237	159,099	168,918	110,864	117,346	119,634	126,212	99,806	105,621	109,911	114,296	155,858
CTG heat input, HHV basis (mmBtu/h)- total for two CTGs	MMBtu/hr	3,409	3,594	3,707	3,936	2,583	2,734	2,787	2,941	2,325	2,461	2,561	2,663	3,631
Duct burner fuel flow (lb/h)- total for two burners	lb/hr	0	0	0	0	0	0	0	0	0	0	0	0	24,308
Duct burner heat input, HHV basis (mmBtu/h)- two burners	MMBtu/hr	0	0	0	0	0	0	0	0	0	0	0	0	566
CTG exhaust gas flow (lb/h)- total for two CTGs (two duct burners when on)	lb/hr	6,630,800	6,973,469	7,218,232	7,578,560	5,692,996	5,888,867	6,028,774	6,258,506	5,081,836	5,240,757	5,354,272	5,539,920	6,655,108
CTG exhaust gas composition (% by volume)														
Nitrogen	%	72.64	73.47	74.37	74.82	72.93	73.82	74.63	75.07	72.93	73.77	74.56	75.04	68.31
Argon	%	0.91	0.92	0.93	0.94	0.92	0.09	0.94	0.94	0.92	0.93	0.94	0.94	0.86
Oxygen	%	12.13	12.28	12.51	12.53	13.00	13.11	13.26	13.26	12.99	12.97	13.07	13.15	9.85
Carbon dioxide	%	3.70	3.74	3.74	3.79	3.31	3.37	3.40	3.47	3.31	3.43	3.49	3.52	4.26
Water	%	10.62	9.59	8.44	7.92	9.85	8.77	7.77	7.26	9.86	8.90	7.94	7.36	16.73
NOx as NO2 (lb/h)- total for two stacks	lb/hr	44.1	46.3	48.6	51.5	34.2	35.4	36.7	38.9	30.4	32.0	33.5	34.8	55.0
based on ppmvd @ 15% O2	ppm	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
CO (lb/h)- total for two stacks	lb/hr	78	82	86	90	60	62	64	68	266	279	292	304	279
based on ppmvd @ 15% O2	ppm	10	10	10	10	10	10	10	10	50	50	50	50	29
VOC as CH4 (lb/h)- total for two stacks	lb/hr	9.9	10.4	10.9	11.5	14.1	14.7	15.3	16.0	12.7	13.3	14.0	14.5	24.8
based on ppmvd @ 15% O2	ppm	2.3	2.3	2.3	2.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.6
SO2 (lb/h)- total for two stacks	lb/hr	18.8	19.8	20.7	22.0	14.4	15.0	15.6	16.4	13.0	13.7	14.3	14.9	23.9
Particulates as PM10 (lb/h)- total for two stacks	lb/hr	38.0	40.1	42.2	44.5	32.1	33.4	34.6	36.1	28.7	29.8	30.9	32.1	45.6

ω

**FIGURE II-10
OSPREY ENERGY CENTER
CYCLE SCHEMATIC DIAGRAM**



interconnects with the Pebbledale Substation via the Crews Lake Substation, and one line that interconnects with the Ariana Substation. The Peninsular Florida transmission grid in the region of the Osprey Energy Center is shown in Figure II-11.⁴

Transmission system impact studies prepared for Calpine included load flow analyses, transient stability analyses, and short circuit analyses. The transmission system impact studies indicate that, with certain upgrades of transmission facilities, the existing Peninsular Florida transmission grid will accommodate the delivery of the Osprey Project's net output for use in Peninsular Florida, regardless which Florida utilities purchase and receive the Project's output.⁵ The studies also indicate that, under normal operating conditions, i.e., with all facilities in service, the Project will not materially burden the transmission system or violate any transmission constraints or contingencies in Peninsular Florida. The actual transmission upgrades required have been determined in accordance with TECO's open access transmission tariff. Pursuant to Calpine's request and TECO's tariff, TECO

⁴ This information regarding transmission facilities and studies is provided to the Commission for informational purposes only. No transmission facilities are proposed in the Site Certification Application for the Osprey Energy Center.

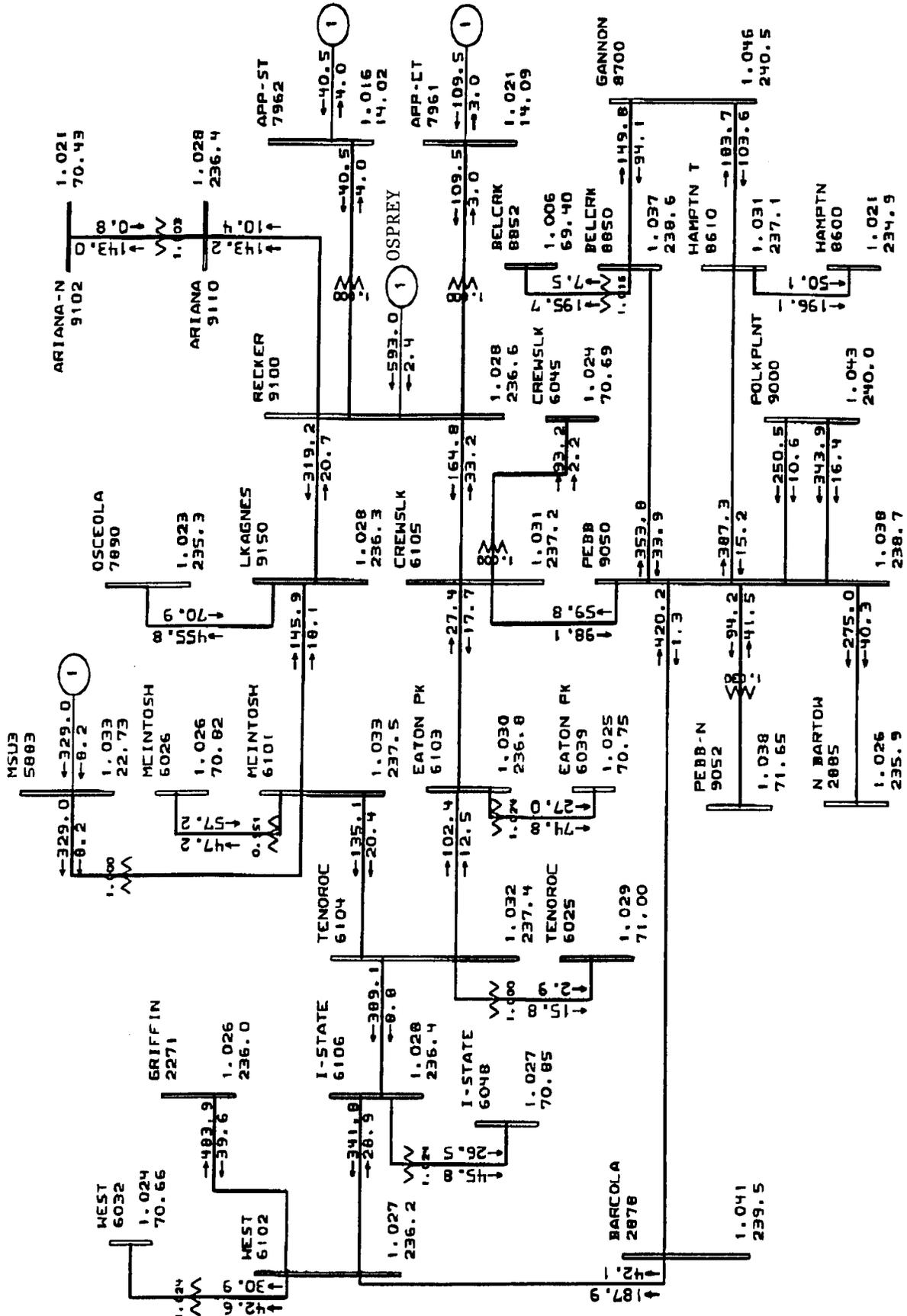
⁵The transmission system impact studies were commissioned by Calpine and completed before Seminole and Calpine executed the MOU. These studies confirm that, with upgrades pursuant to TECO's open access transmission tariff, the entire output of the Project can be delivered to Seminole without materially burdening the Peninsular Florida transmission system and without violating any transmission constraints or contingencies.

issued the Transmission Service Request Facilities Study report on August 31, 2000. The report estimated the cost to interconnect the Osprey Project to TECO's Recker Substation at \$2.4 million. In addition, the cost of the network upgrades required to provide firm transmission service was estimated at \$11.5 million. These figures, according to TECO, are based on detailed cost estimates prepared by TECO's engineering departments. Figure II-12 depicts projected load flows in the vicinity of the Osprey Project, with the Project in service, in the summer of 2004.⁵

E. Associated Facilities.

Natural gas will be provided to the Project through the trans-Florida pipeline being developed by Gulfstream Natural Gas System, L.L.C. Gulfstream will obtain all necessary permits for this pipeline in separate proceedings. The pipeline will run from the Mobile Bay area of Alabama and Mississippi across the Gulf of Mexico to its landfall on the southeastern shore of Tampa Bay. From there, the pipeline will run east and southeast to delivery points in west-central, central, and southeast Florida. See Figure II-13. In the vicinity of the Osprey Project, the Gulfstream pipeline will run generally north through Polk County. See Figures II-13 and II-14. A 16-inch diameter lateral pipeline will be

⁵ The Osprey Project's output value shown in Figure II-12 is 593 MW, which differs slightly from the maximum summer output level (with duct-firing and power augmentation) of 575 MW shown in Table II-3. This difference resulted from the transmission load flow studies being performed using the preliminary summer output level for the Project.



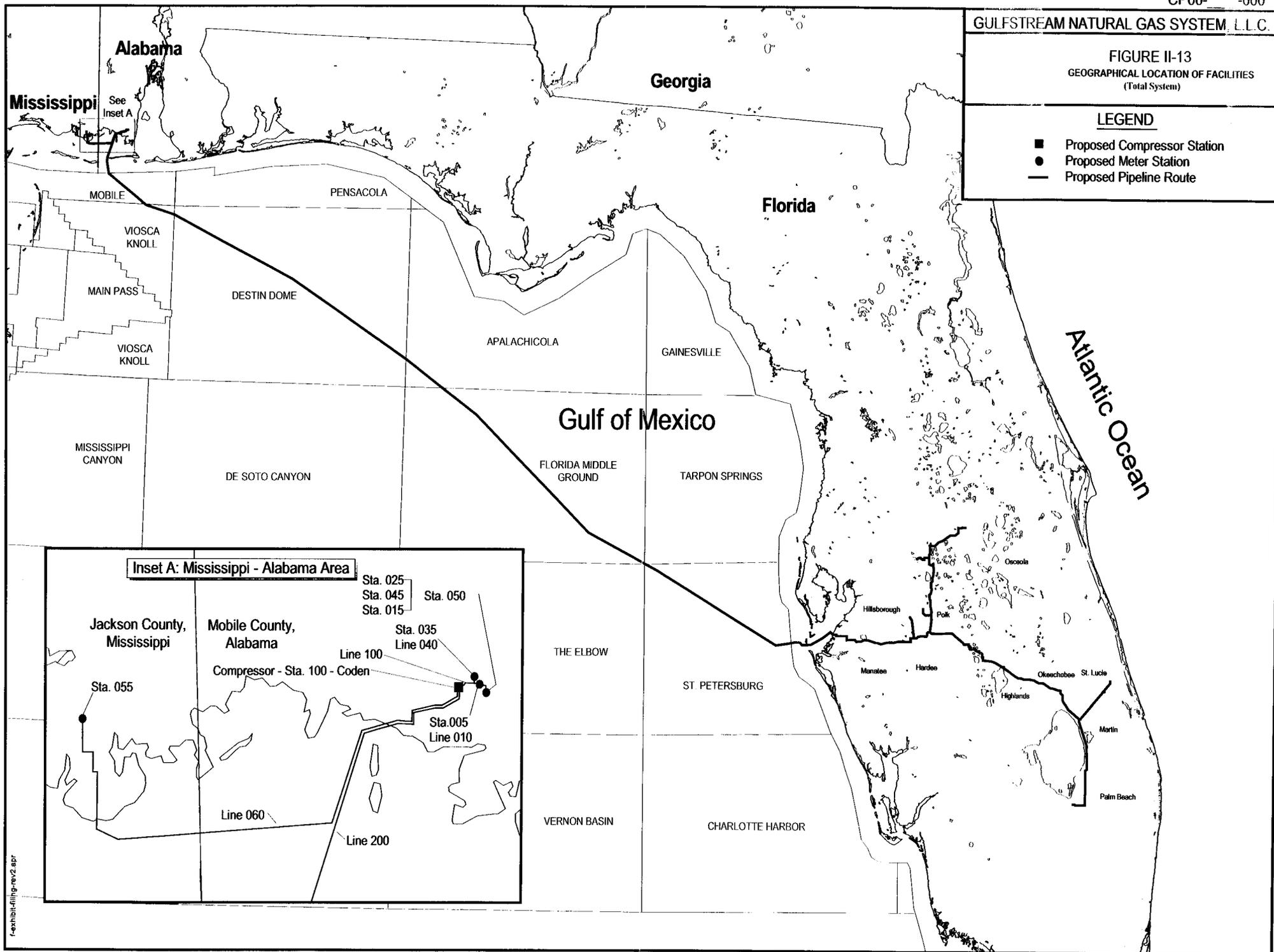
 <p>General Electric Company</p>	<p>FIGURE II-12 OSPREY ENERGY CENTER SUMMER 2004 BASE CASE LOAD FLOWS</p>	<p>REVISION 5</p>	<p>DATE: 2004 SUMMER BASE CASE PROPOSED OSPREY ENERGY CENTER</p>
<p>PROJECT NUMBER</p>	<p>FIG. NO. 99 15333E1 2004</p>	<p>DATE: 07/2004</p>	<p>SCALE: 1" = 1000'</p>

GULFSTREAM NATURAL GAS SYSTEM, L.L.C.

FIGURE II-13
GEOGRAPHICAL LOCATION OF FACILITIES
(Total System)

LEGEND

- Proposed Compressor Station
- Proposed Meter Station
- Proposed Pipeline Route

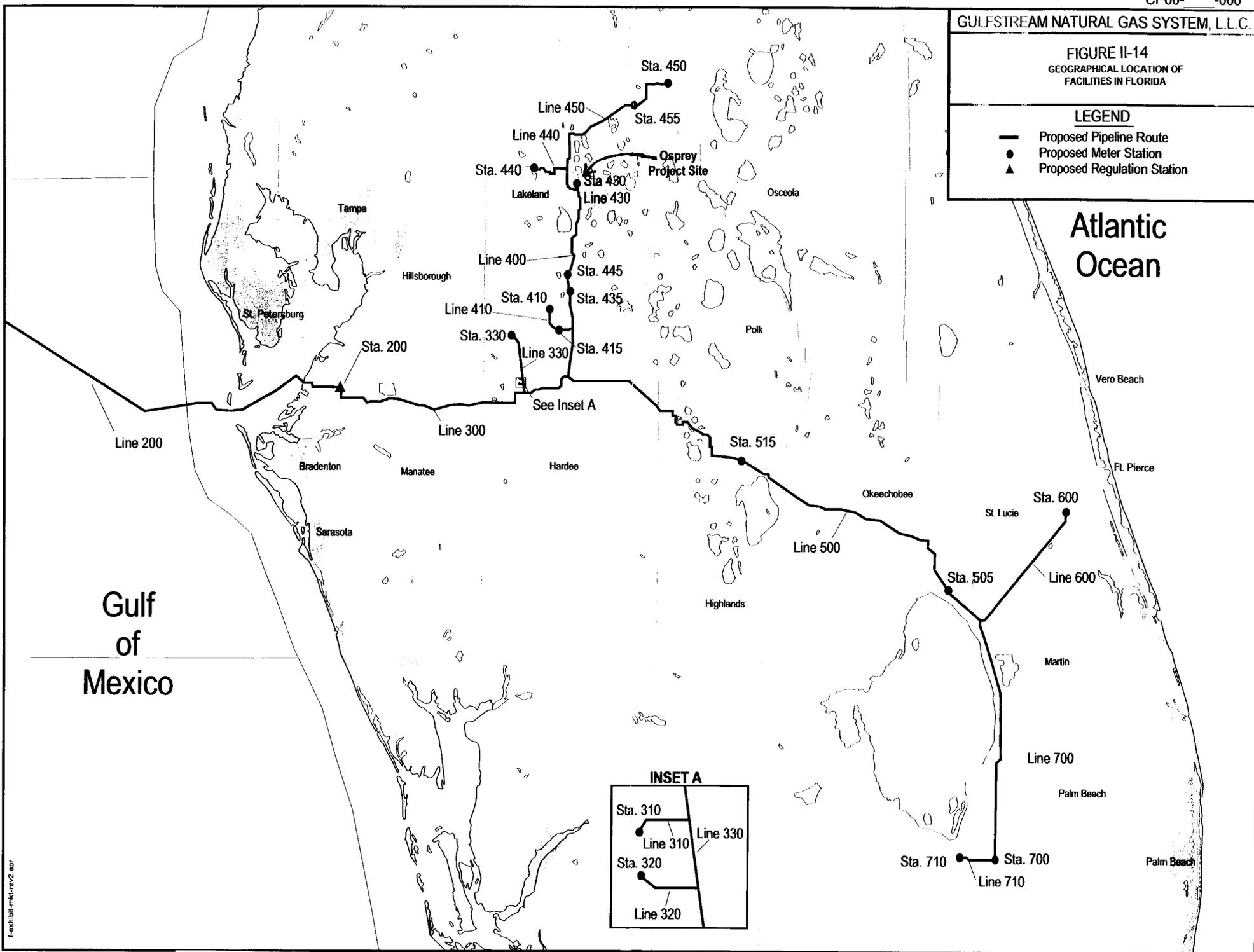


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FIGURE II-14
GEOGRAPHICAL LOCATION OF
FACILITIES IN FLORIDA

LEGEND

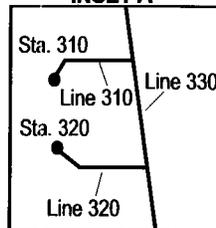
- Proposed Pipeline Route
- Proposed Meter Station
- ▲ Proposed Regulation Station



Gulf of Mexico

Atlantic Ocean

INSET A

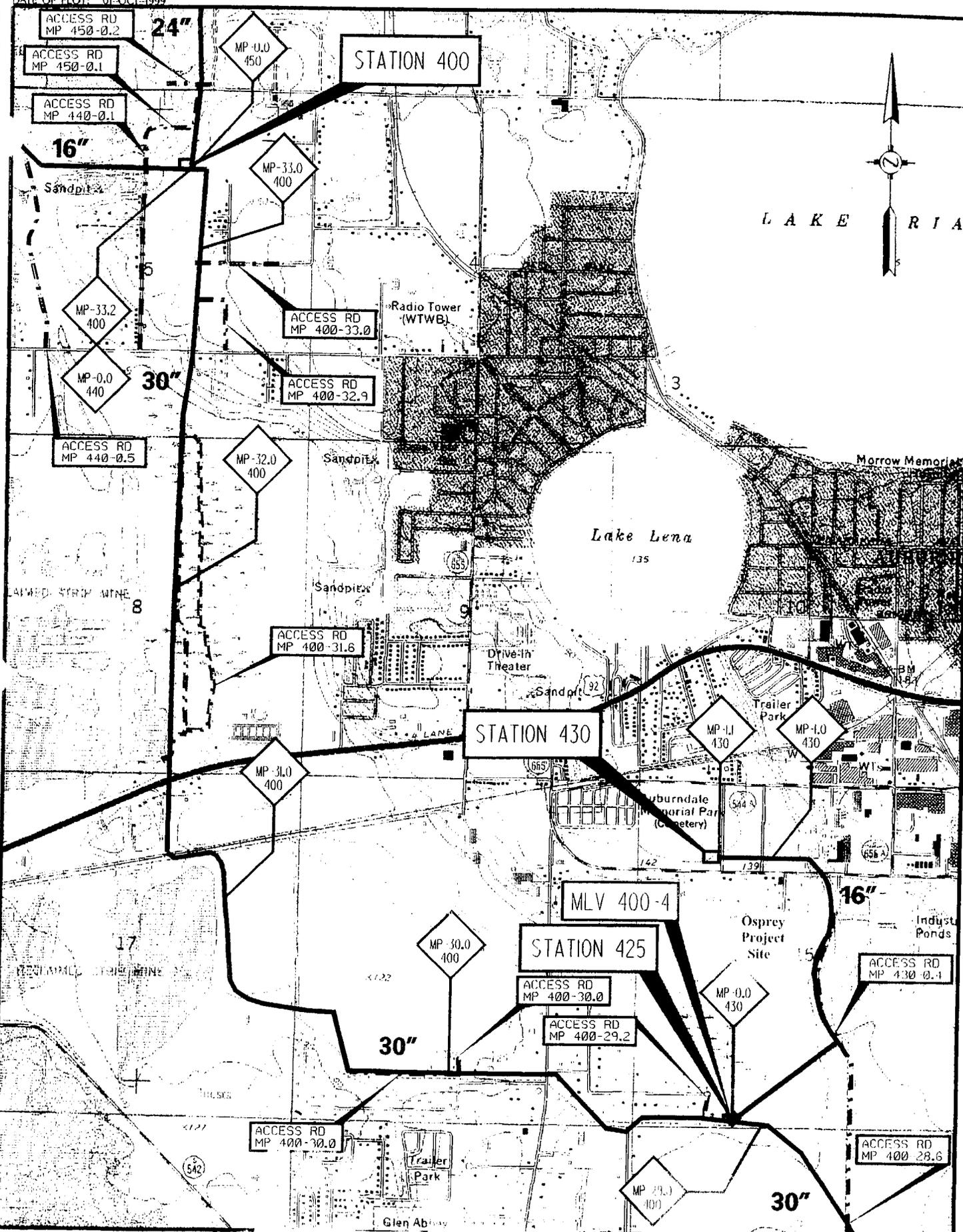


constructed by Gulfstream from Station number 430 to the boundary of the Osprey Energy Center site. Figure II-15 is a map of the Gulfstream pipeline's route in the local vicinity of the Project. The pipeline pressure at the Calpine site is guaranteed by Gulfstream to be a minimum of 650 psig.⁶ Gas transportation will be pursuant to an executed Precedent Agreement between Calpine and Gulfstream. Pursuant to the Precedent Agreement, Gulfstream has committed to provide firm gas transportation service to operate the Project for a term of 20 years with renewal provisions beyond the initial term. A copy of the Precedent Agreement, redacted to protect confidential, proprietary business information, is included as Appendix B to these Exhibits.

Reclaimed water will be provided to the Project from the City of Auburndale's Allred Municipal Wastewater Treatment Plant (the "Allred Plant"). A new pipeline will be required to connect the Project to the Allred Plant. The pipeline to the Allred Plant will be approximately one mile in length and will be constructed in existing public rights-of-way. Additionally, other minor pipeline modifications will be made to enhance discharge capability. The reclaimed water supply and return pipelines to the Allred Plant will run along the north Recker Highway right-of-way to the Osprey Project site boundary. The reclaimed water supply and return

⁶ Details of the natural gas transportation arrangements are provided for informational purposes only. Permitting of the pipeline will be sought by Gulfstream in a separate proceeding.

USGS QUAD
AUBURDALE (1975)



M.J. Harden Associates Inc.
Tallahassee, FL 32309

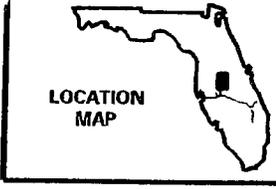


FIGURE II-15
GULFSTREAM NATURAL GAS SYSTEM, L.L.C.
GEOGRAPHICAL LOCATION OF FACILITIES
(Auburdales/Osprey Area)

LOC.	POLK COUNTY, FLORIDA			REV.	0
CKD. BY	ENG.	DATE	10-15-99	W.O.	
DRN. BY	SCALE	1"=2000'		DWG. NO.	9 of 9



pipelines to the Westside Plant are planned to run west along the Polk County Parkway right-of-way to U.S. Highway 92 and then on an existing City of Auburndale right-of-way east along Highway 92, to Recker Highway, to Derby Avenue, and onto the Osprey Project site. The City of Auburndale will obtain all necessary permits for the water supply and process water return pipelines in separate proceedings, and these pipelines will be paid for by Calpine.

F. Capital Cost of the Osprey Energy Center.

The direct construction cost of the Osprey Energy Center is expected to be approximately \$194.8 million. The natural gas pipeline will be constructed by Gulfstream at its expense.

G. Project Financing.

The Project will be constructed and brought into commercial service with a combination of equity and debt, with the debt being structured by Calpine through its construction revolver.

H. Fuel Supply.

The fuel for the Project will be natural gas. Pursuant to an executed Precedent Agreement between Calpine and Gulfstream, Gulfstream will provide firm gas transportation service for sufficient gas volumes to meet the Project's total fuel requirements. Natural gas fuel supply for the Project will be provided to Gulfstream receipt points by natural gas marketing companies or producers. Calpine will procure the natural gas supply for the Osprey Energy Center through an optimized combination of short-term contract purchases, long-term contract

purchases, and spot market purchases. Specifically, Calpine will purchase natural gas from producers and marketing companies that have access to those natural gas treatment plants, processing plants, and interstate natural gas transmission systems with supply located in the vicinity of Mobile Bay, Alabama, and Pascagoula, Mississippi. In addition, Gulfstream proposes interconnections with the Mobile Bay Pipeline (Koch), the Destin Pipeline, the Dauphin Island Gathering Pipeline, the Mobile Bay Processing Partners' Plant (DIGS Plant), the Williams Plant, and the Mobil Mary Ann Plant. The ultimate capacity of the proposed Gulfstream system will be more than one billion cubic feet per day. The Project's natural gas suppliers will be responsible for delivery into the Gulfstream pipeline system.

I. Projected Operational Reliability.

The combined cycle generating unit utilizes high efficiency generation technology with high reliability and availability rates. With a heat rate of 6,800 Btu per kWh (based on the Higher Heating Value of natural gas) at ambient site conditions, the net thermal efficiency is expected to be approximately 50.2 percent. The Project is estimated to have an Equivalent Availability Factor of 94.5 percent, which is based on an estimated Forced Outage Rate of 2.0 percent per year and an average Planned Outage Rate of 3.5 percent per year. Based on production simulation analyses of the Osprey Project's operations within the Peninsular Florida power supply system, the Project is expected to operate at an annual

average Capacity Factor of approximately 91 percent. Basic operational reliability information for the Project is shown on the Project Profile. See Table II-2 above.

J. Project Schedule.

Conceptual engineering for the Project is complete. An in-depth site review has been completed. No areas of jurisdictional wetland vegetation were found on the site. No threatened or endangered species were found on the site. Detailed design and engineering for the Project are scheduled to begin in March 2001. Calpine has secured a significant number of Siemens-Westinghouse Model 501F combustion turbines by deposit and these components are in a delivery queue. As the permitting of the Osprey Project goes forward and the construction timetable becomes firmly established, two specific CTGs will be designated for use in the Osprey Project. Full release of the heat recovery steam generators and the steam turbine generators is projected to occur before construction begins. An engineering services provider has been selected and contract negotiations will be concluded at the appropriate time. A separate construction contract will be awarded (following bid solicitation and evaluation) to a contractor who will procure the balance of plant equipment. This contract will be awarded prior to the issuance of the site certification, which is expected in August 2001. The Project is scheduled to achieve commercial in-service status by the second quarter of 2003. The Project engineering and construction schedule is depicted in Figure II-16.

FIGURE II-16 OSPREY ENERGY CENTER PRELIMINARY PROJECT SCHEDULE

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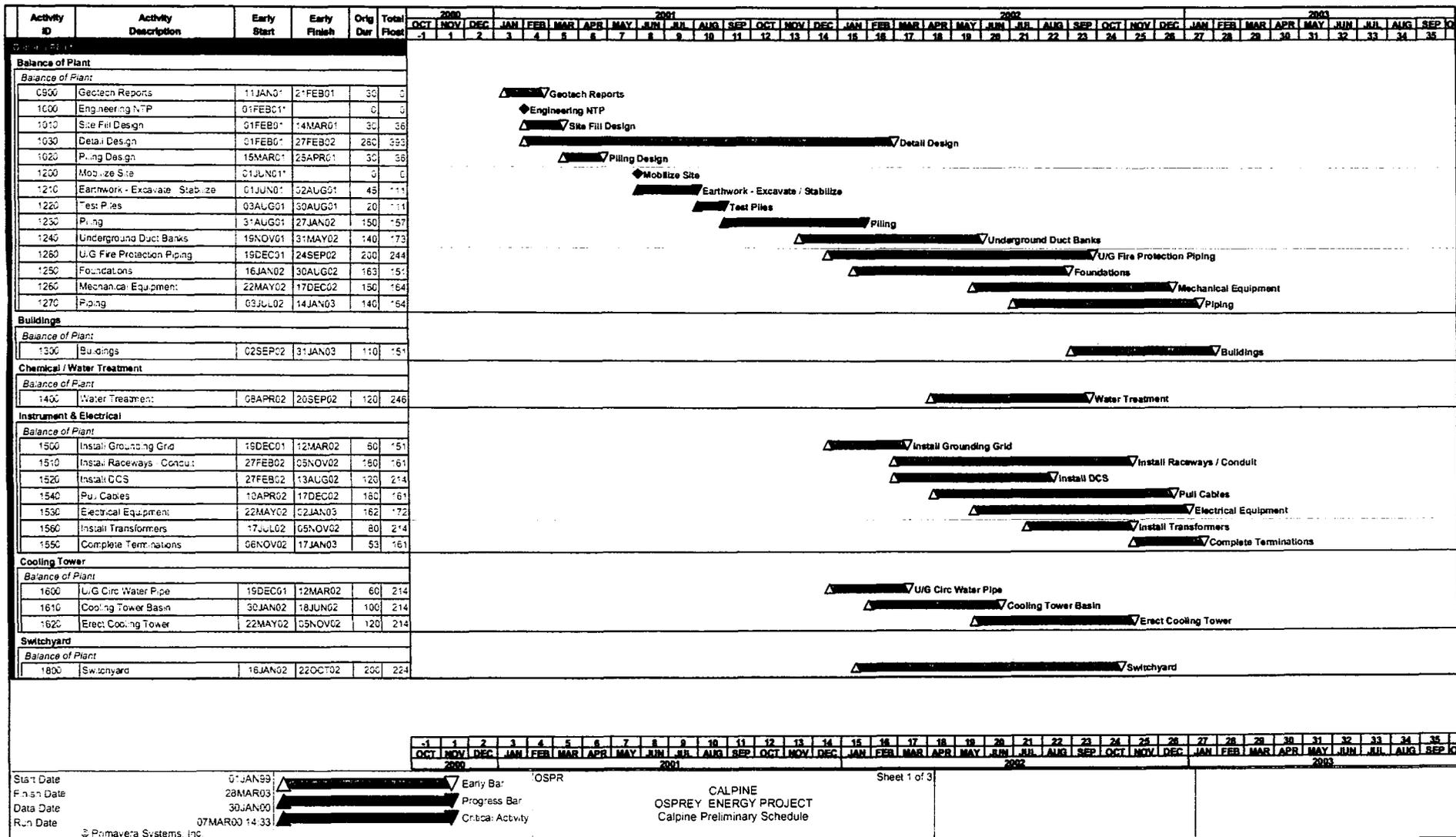
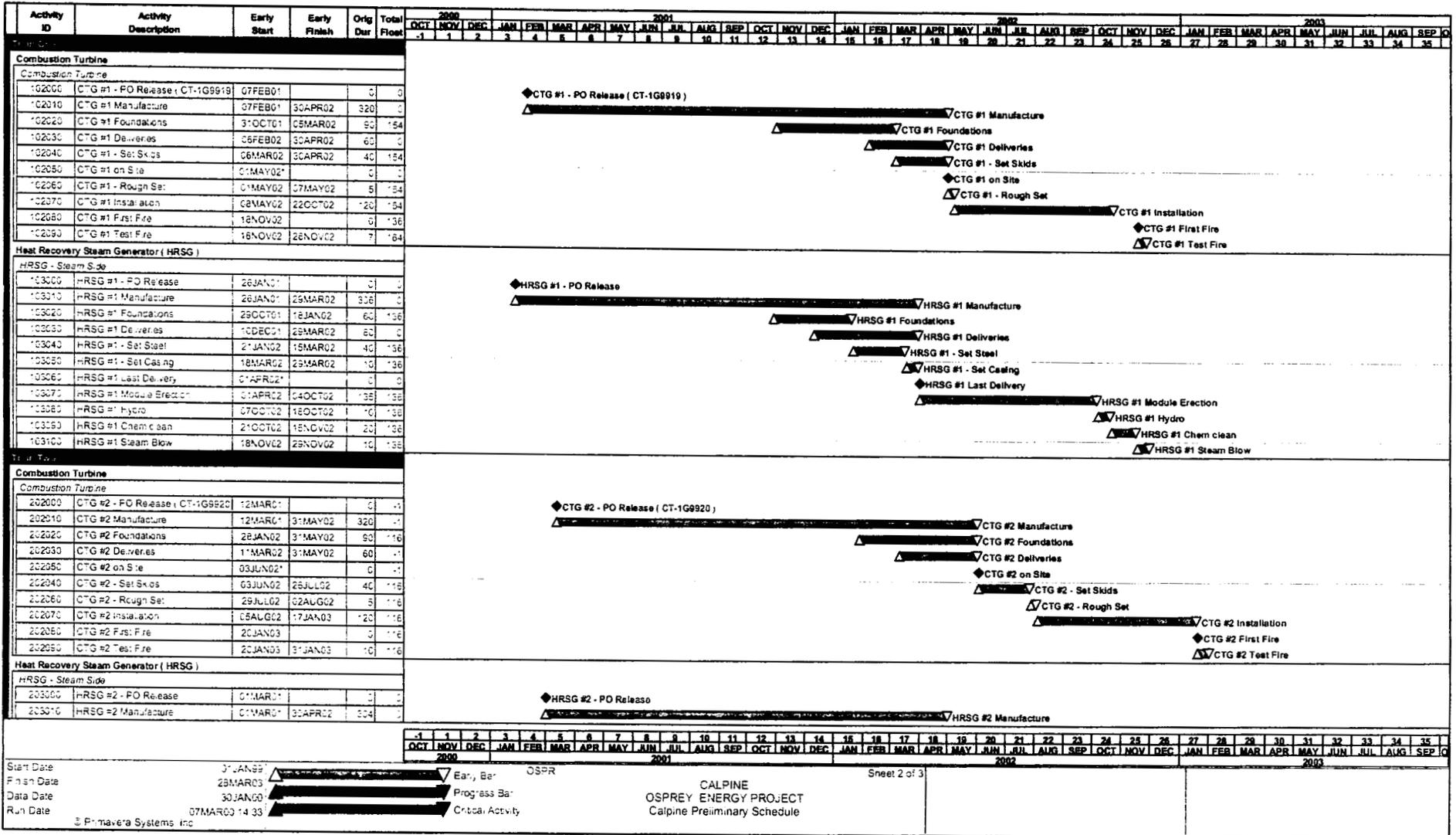


FIGURE II-16 OSPREY ENERGY CENTER PRELIMINARY PROJECT SCHEDULE (continued)



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K. Regulatory and Permitting Schedules.

The Joint Applicants filed their Joint Petition and accompanying volumes of Exhibits for the Project with the Commission on December 1, 2000. The need determination hearing is expected to be held in January 2001. The Commission's order is expected in February 2001. Calpine filed the Site Certification Application ("SCA") for the Project on March 16, 2000, and the Department of Environmental Protection issued its notice that the SCA was complete on March 31, 2000. The only agency that filed insufficiency comments was the Southwest Florida Water Management District. Calpine responded to the District's questions in August 2000, and supplemented those responses in October 2000. Based on those responses and further discussions with the District Staff, Calpine expects that its site certification application will be deemed sufficient in the near future. The land use hearing and site certification hearing are expected to be held by April 2001. Final certification by the Siting Board is expected by October 2001. Details of the site certification schedule are shown in Figure II-17 of these Exhibits.

L. Operations and Maintenance Plan.

The Siemens-Westinghouse Model 501F turbines that will be used in the Project are extremely reliable. The Project's forced outage rate is expected to average only 2.0 percent per year. The maintenance or planned outage rate is expected to average approximately 3.5 percent per year. The Siemens-Westinghouse Model

FIGURE II-17

PRELIMINARY SCHEDULE OF SITE CERTIFICATION
PROCEEDING FOR CALPINE'S OSPREY ENERGY CENTER
DOAH Case No. 00-1288EPP
OGC Case No. 00-0740

<u>Deadlines</u>	<u>Activities</u>
March 20, 2000	Calpine's Site Certification Application (SCA), including application for Prevention of Significant Deterioration (PSD) permit, filed with DEP Siting Coordination Office (SCO)
March 28, 2000	SCO requested Division of Administrative Hearings (DOAH) to appoint Administrative Law Judge (Judge)
April 7, 2000	DEP issued notice that Calpine's SCA is complete
May 22, 2000	DEP issued notice that Calpine's SCA is insufficient
Aug. 15, Oct.12, and Nov. 9, 2000	Calpine filed supplemental information in response to DEP's notice of insufficiency
January 2001	PSC need determination hearing
January 23, 2001	Land Use Hearing held by Judge
February 2001	PSC issues Order on need determination petition
February 2001	DEP delivers Staff Analysis Report to Judge and Calpine
April 17, 2001	Certification Hearing held by Judge
May 2001	Hearing before Siting Board regarding land use issues
October 2001	Hearing before Siting Board concerning certification issues
October 2001	Final order issued by Siting Board; PSD permit issued by DEP

501F turbines have an 8,000 hour maintenance cycle. A minor inspection, referred to as a combustor inspection, will be conducted at the end of each 8,000 hours of operation. A slightly more detailed inspection, referred to as a hot gas inspection, along with the combustor inspection, will be conducted at the end of 24,000 hours of operation. A major inspection will be conducted at 48,000 hours of operation. This cycle will be repeated for the life of the equipment. Combustor and hot gas inspections take approximately 7 days and 14 days respectively, and a major inspection will take approximately 21 days. Thus, the annual availability factor for the Osprey Energy Center is expected to average approximately 94.5 percent over the life of the Project.

IV. NEED FOR THE OSPREY ENERGY CENTER

The Osprey Energy Center will provide total net generation capability of 496 MW at summer peak conditions (95°F.) and 578 MW at winter peak conditions (32°F.) without power augmentation or duct-firing. The new capacity produced by the Project will meet the power supply needs of Seminole Electric Cooperative, Inc.⁷ (and Calpine's need for resources with which to meet its contractual obligations to Seminole) and will significantly increase the reliability and cost-effectiveness of power supply in Peninsular Florida.

A. Power Supply Needs of Peninsular Florida.

Peninsular Florida's firm winter peak demand is projected to increase from approximately 37,000 MW in 2000-2001 to more than 45,000 MW in 2009-2010. See Table II-4. Peninsular Florida's total winter peak demand is projected to increase from approximately 41,000 MW to approximately 49,000 MW in the same period. See Table II-8. Peninsular Florida's firm summer peak demand is projected to increase from approximately 35,000 MW in 2000 to more than 42,000 MW in 2009. See Table II-4 of these Exhibits. Peninsular Florida's total summer peak demand is projected to increase from approximately 38,000 MW to approximately 46,000 MW over the same period. See Table II-7. Net Energy for Load in Peninsular Florida is projected to increase from

⁷A complete discussion of Seminole's need for the Project is included in Volume I of these Exhibits.

TABLE II-4
PENINSULAR FLORIDA, HISTORICAL AND
PROJECTED SUMMER AND WINTER
FIRM PEAK DEMANDS

1991-2012

ACTUAL PEAK DEMAND (MW)

	1991	1992	1993	1994	1995	1996	1997	1998
SUMMER	27,662	28,930	29,748	29,321	31,801	32,315	32,924	37,153
WINTER	28,179	27,215	28,149	32,618	34,552	34,762	30,932	35,907

PROJECTED FIRM PEAK DEMAND (MW)

	1999 (Actual)	2000	2001	2002	2003	2004	2005	2006
SUMMER	37,493	34,832	35,560	36,432	37,313	38,164	39,065	40,347
WINTER	40,178	36,814	37,753	38,679	39,592	40,551	41,585	42,541

PROJECTED FIRM PEAK DEMAND (MW)

	2007	2008	2009	2010	2011	2012
SUMMER	41,255	42,094	42,980	43,895	44,830	45,785
WINTER	43,445	44,386	45,316	46,281	47,266	48,272

Data Source:

Florida Reliability Coordinating Council,
 1991-2009 values, 2000 Regional Load & Resource Plan, Peninsular Florida, July 2000.
 2010-2012 values extrapolated at the FRCC projected average annual compound growth rates for 2006-2009.
 1991-1999 actual peak demand values exclude interruptible load and load management reductions.
 2000-2012 forecasted firm peak demand values include projected interruptible load and load management
 reduction values, and are non-coincident.

approximately 196,000 GWH in 2000 to approximately 235,000 GWH in 2009 and to approximately 250,000 GWH in 2012. See Table II-5. As of January 1, 2000, total Peninsular Florida existing generating capacity was approximately 40,155 MW for the winter and 38,065 MW for the summer. See Table II-6. Tables II-7 and II-8 present projected capacity and reserve margin information for Peninsular Florida, with and without the capacity of the Osprey Energy Center.

The Osprey Energy Center will provide reliable and cost-effective power to Seminole and to other utilities that provide retail service in Peninsular Florida. Peninsular Florida needs approximately 12,000 MW of new generation capacity in order to maintain installed generation reserve margins between 7.0% and 15.5% for the winters of 2000-2001 through 2009-2010. (See Table II-8.) The Project will contribute meaningfully to Peninsular Florida's summer and winter reserve margins and to cost-effective power supply.

Data extracted from the 2000 Regional Load & Resource Plan, dated July, 2000, prepared by the Florida Reliability Coordinating Council (the "FRCC 2000 Resource Plan"), show that without the Osprey Energy Center, Peninsular Florida's summer reserve margins in 2003 through 2009 will range from 11.9 percent to 16.5 percent, without exercising load management and interruptible capabilities. With the Osprey Project, the summer reserve margins will be improved by approximately 1.1 to 1.2 percent in each year, e.g., from 15.3 percent to 16.5 percent in 2003. The annual summer

TABLE II-5

**PENINSULAR FLORIDA, HISTORICAL AND
PROJECTED NET ENERGY FOR LOAD
AND NUMBER OF CUSTOMERS**

1991 - 2012

ACTUAL NET ENERGY FOR LOAD (GWH)

	1991	1992	1993	1994	1995	1996	1997	1998
ENERGY	146,786	147,728	153,269	159,353	168,982	173,327	175,534	187,868
LOAD FACTOR	60.58%	58.29%	58.82%	62.04%	59.14%	57.26%	57.64%	57.72%
CUSTOMERS	6,155,380	6,269,358	6,410,797	6,550,760	6,687,155	6,812,603	6,948,888	7,091,803

PROJECTED NET ENERGY FOR LOAD (GWH)

	1999 (Actual)	2000	2001	2002	2003	2004	2005	2006
ENERGY	188,598	196,042	200,188	204,779	209,853	214,507	218,950	223,453
LOAD FACTOR	57.42%	55.70%	62.08%	61.92%	61.93%	61.85%	61.64%	61.34%
CUSTOMERS	7,555,341	7,517,881	7,688,054	7,832,016	7,974,676	8,113,738	8,249,138	8,380,749

PROJECTED NET ENERGY FOR LOAD (GWH)

	2007	2008	2009	2010	2011	2012
ENERGY	227,798	232,032	236,224	240,641	245,141	249,725
LOAD FACTOR	61.13%	60.97%	60.75%	59.36%	59.21%	58.89%
CUSTOMERS	8,510,779	8,640,757	8,771,153	8,905,288	9,041,474	9,179,743

Data Source:

Florida Reliability Coordinating Council,
1991-2009 Energy values, 2000 Regional Load & Resource Plan, Peninsular Florida, July 2000.
2010-2012 Energy values extrapolated at the FRCC projected average annual compound growth rates for 2006-2009.
Load factor values were calculated from these energy values and the peak demand values in Table 4.
1991-2009 Customer values, 2000 Regional Load & Resource Plan, Peninsular Florida, July 2000.
2010-2012 Customer values extrapolated at the FRCC projected average annual compound growth rates for 2006-2009.

TABLE II-6

**PENINSULAR FLORIDA
SUMMARY OF EXISTING CAPACITY
AS OF JANUARY 1, 2000**

UTILITY	NET CAPABILITY	
	SUMMER	WINTER
FLORIDA KEYS ELECTRIC COOPERATIVE ASSOC., INC	22	22
FLORIDA MUNICIPAL POWER AGENCY	498	527
FLORIDA POWER CORPORATION	7,525	8,277
FLORIDA POWER & LIGHT COMPANY	16,444	17,234
FORT PIERCE UTILITIES AUTHORITY	119	119
GAINESVILLE REGIONAL UTILITIES	550	563
CITY OF HOMESTEAD	60	60
JACKSONVILLE ELECTRIC AUTHORITY	2,626	2,749
UTILITY BOARD OF THE CITY OF KEY WEST	52	52
KISSIMMEE UTILITY AUTHORITY	172	190
CITY OF LAKELAND	615	650
CITY OF LAKE WORTH UTILITIES	127	138
UTILITIES COMMISSION OF NEW SMYRNA BEACH	24	24
OCALA ELECTRIC UTILITY	11	11
ORLANDO UTILITIES COMMISSION	1,028	1,072
REEDY CREEK IMPROVEMENT DISTRICT	48	49
SEMINOLE ELECTRIC COOPERATIVE INC.	1,331	1,345
CITY OF ST. CLOUD	22	21
CITY OF TALLAHASSEE	429	449
TAMPA ELECTRIC COMPANY	3,455	3,594
CITY OF VERO BEACH	150	155
TOTALS		
FRCC UTILITIES EXISTING CAPACITY	35,308	37,301
NON-UTILITY GENERATING FACILITIES (FIRM)	2,060	2,124
NON-UTILITY GENERATING FACILITIES (NON-FIRM)	74	85
MERCHANT PLANT FACILITIES (FIRM)	593	593
MERCHANT PLANT FACILITIES (NON-FIRM)	15	26
TOTAL PENINSULAR FLORIDA EXISTING CAPACITY	38,050	40,129

Data Source:

Florida Reliability Coordinating Council

2000 Regional Load & Resource Plan, Peninsular Florida, July 2000

**TABLE II-7
SUMMARY OF PENINSULAR FLORIDA CAPACITY, DEMAND, AND RESERVE MARGIN
AT TIME OF SUMMER PEAK WITHOUT OSPREY ENERGY CENTER**

Year	NET INSTALLED CAPACITY (MW)	NET CONTRACT FIRM INTERCHG (MW)	PROJECTED FIRM NET TO GRID FROM NUG (MW)	TOTAL AVAILABLE CAPACITY (MW)	TOTAL PEAK DEMAND (MW)	RESERVE MARGIN W/O EXERCISING LOAD MGMT. & INT.		LOAD MGMT. & INT. (MW)	FIRM PEAK DEMAND (MW)	RESERVE MARGIN WITH EXERCISING LOAD MGMT. & INT.	
						(MW)	% OF PEAK			(MW)	(MW)
2000	36,033	1,697	2,653	40,383	37,728	2,655	7.04	2,896	34,832	5,551	15.94
2001	38,244	1,699	2,653	42,596	38,445	4,151	10.80	2,885	35,560	7,036	19.79
2002	39,380	1,675	2,906	43,961	39,282	4,679	11.91	2,850	36,432	7,529	20.67
2003	41,484	1,583	3,221	46,288	40,157	6,131	15.27	2,844	37,313	8,975	24.05
2004	42,615	1,583	2,768	46,966	41,004	5,962	14.54	2,840	38,164	8,802	23.06
2005	43,211	1,583	2,658	47,452	41,905	5,547	13.24	2,840	39,065	8,387	21.47
2006	44,651	1,583	2,525	48,759	43,190	5,569	12.89	2,843	40,347	8,412	20.85
2007	45,364	1,583	2,220	49,167	44,097	5,070	11.50	2,842	41,255	7,912	19.18
2008	46,393	1,583	2,205	50,181	44,926	5,255	11.70	2,832	42,094	8,087	19.21
2009	47,100	1,583	2,096	50,779	45,810	4,969	10.85	2,830	42,980	7,799	18.15

1/ 777 MW - 300 MW = 477 MW OF OLEANDER POWER PROJECT ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2002, SEMINOLE ELECTRIC COOPERATIVE WILL PURCHASE 300 MW UNDER CONTRACT STARTING IN DECEMBER 2002.

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**SUMMARY OF PENINSULAR FLORIDA CAPACITY, DEMAND, AND RESERVE MARGIN
AT TIME OF SUMMER PEAK WITH OSPREY ENERGY CENTER, 496 MW IN 2003**

Year	NET INSTALLED CAPACITY (MW)	NET CONTRACT FIRM INTERCHG (MW)	PROJECTED FIRM NET TO GRID FROM NUG (MW)	TOTAL AVAILABLE CAPACITY (MW)	TOTAL PEAK DEMAND (MW)	RESERVE MARGIN W/O EXERCISING LOAD MGMT. & INT.		LOAD MGMT. & INT. (MW)	FIRM PEAK DEMAND (MW)	RESERVE MARGIN WITH EXERCISING LOAD MGMT. & INT.	
						(MW)	% OF PEAK			(MW)	(MW)
2000	36,033	1,697	2,653	40,383	37,728	2,655	7.04	2,896	34,832	5,551	15.94
2001	38,244	1,699	2,653	42,596	38,445	4,151	10.80	2,885	35,560	7,036	19.79
2002	39,380	1,675	2,906	43,961	39,282	4,679	11.91	2,850	36,432	7,529	20.67
2003	41,980	1,583	3,221	46,784	40,157	6,627	16.50	2,844	37,313	9,471	25.38
2004	43,111	1,583	2,768	47,462	41,004	6,458	15.75	2,840	38,164	9,298	24.36
2005	43,707	1,583	2,658	47,948	41,905	6,043	14.42	2,840	39,065	8,883	22.74
2006	45,147	1,583	2,525	49,255	43,190	6,065	14.04	2,843	40,347	8,908	22.08
2007	45,860	1,583	2,220	49,663	44,097	5,566	12.62	2,842	41,255	8,408	20.38
2008	46,889	1,583	2,205	50,677	44,926	5,751	12.80	2,832	42,094	8,583	20.39
2009	47,596	1,583	2,096	51,275	45,810	5,465	11.93	2,830	42,980	8,295	19.30

1/ 496 MW OF OSPREY ENERGY CENTER ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2003

2/ 777 MW - 300 MW = 477 MW OF OLEANDER POWER PROJECT ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2002, SEMINOLE ELECTRIC COOPERATIVE WILL PURCHASE 300 MW UNDER CONTRACT STARTING IN DECEMBER 2002.

SOURCES: Florida Reliability Coordinating Council, 2000 Regional Load & Resource Plan, Peninsular Florida, July, 2000
Calpine Construction Finance Company, L.P.

**TABLE II-8
SUMMARY OF PENINSULAR FLORIDA CAPACITY, DEMAND, AND RESERVE MARGIN
AT TIME OF WINTER PEAK WITHOUT OSPREY ENERGY CENTER**

Year	NET INSTALLED CAPACITY (MW)	NET CONTRACT FIRM INTERCHG (MW)	PROJECTED FIRM NET TO GRID FROM NUG (MW)	TOTAL AVAILABLE CAPACITY (MW)	TOTAL PEAK DEMAND (MW)	RESERVE MARGIN W/O EXERCISING		LOAD MGMT. & INT. (MW)	FIRM PEAK DEMAND (MW)	RESERVE MARGIN WITH EXERCISING	
						LOAD	% OF PEAK			LOAD	% OF PEAK
2000/01	39,342	1,786	2,717	43,845	40,894	2,951	7.22	4,080	36,814	7,031	19.10
2001/02	40,075	1,688	3,002	44,765	41,811	2,954	7.07	4,058	37,753	7,012	18.57
2002/03	43,513	1,583	3,365	48,461	42,739	5,722	13.39	4,060	38,679	9,782	25.29
2003/04	45,329	1,583	2,912	49,824	43,663	6,161	14.11	4,071	39,592	10,232	25.84
2004/05	45,881	1,583	2,802	50,266	44,638	5,628	12.61	4,087	40,551	9,715	23.96
2005/06	46,845	1,583	2,669	51,097	45,694	5,403	11.82	4,109	41,585	9,512	22.87
2006/07	48,177	1,583	2,324	52,084	46,668	5,416	11.61	4,127	42,541	9,543	22.43
2007/08	49,520	1,583	2,309	53,412	47,573	5,839	12.27	4,128	43,445	9,967	22.94
2008/09	50,129	1,583	2,200	53,912	48,531	5,381	11.09	4,145	44,386	9,526	21.46
2009/10	51,316	1,583	1,778	54,677	49,478	5,199	10.51	4,162	45,316	9,361	20.66

1/ 910 MW - 340 MW = 570 MW OF OLEANDER POWER PROJECT ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2002/03, SEMINOLE ELECTRIC COOPERATIVE WILL PURCHASE 340 MW UNDER CONTRACT STARTING IN DECEMBER 2002.

**SUMMARY OF PENINSULAR FLORIDA CAPACITY, DEMAND, AND RESERVE MARGIN
AT TIME OF WINTER PEAK WITH OSPREY ENERGY CENTER, 578 MW IN 2003/04**

Year	NET INSTALLED CAPACITY (MW)	NET CONTRACT FIRM INTERCHG (MW)	PROJECTED FIRM NET TO GRID FROM NUG (MW)	TOTAL AVAILABLE CAPACITY (MW)	TOTAL PEAK DEMAND (MW)	RESERVE MARGIN W/O EXERCISING		LOAD MGMT. & INT. (MW)	FIRM PEAK DEMAND (MW)	RESERVE MARGIN WITH EXERCISING	
						LOAD	% OF PEAK			LOAD	% OF PEAK
2000/01	39,342	1,786	2,717	43,845	40,894	2,951	7.22	4,080	36,814	7,031	19.10
2001/02	40,075	1,688	3,002	44,765	41,811	2,954	7.07	4,058	37,753	7,012	18.57
2002/03	43,513	1,583	3,365	48,461	42,739	5,722	13.39	4,060	38,679	9,782	25.29
2003/04	45,907	1,583	2,912	50,402	43,663	6,739	15.43	4,071	39,592	10,810	27.30
2004/05	46,459	1,583	2,802	50,844	44,638	6,206	13.90	4,087	40,551	10,293	25.38
2005/06	47,423	1,583	2,669	51,675	45,694	5,981	13.09	4,109	41,585	10,090	24.26
2006/07	48,755	1,583	2,324	52,662	46,668	5,994	12.84	4,127	42,541	10,121	23.79
2007/08	50,098	1,583	2,309	53,990	47,573	6,417	13.49	4,128	43,445	10,545	24.27
2008/09	50,707	1,583	2,200	54,490	48,531	5,959	12.28	4,145	44,386	10,104	22.76
2009/10	51,894	1,583	1,778	55,255	49,478	5,777	11.68	4,162	45,316	9,939	21.93

1/ 578 MW OF OSPREY ENERGY CENTER ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2003/04

2/ 910 MW - 340 MW = 570 MW OF OLEANDER POWER PROJECT ADDED TO THE INSTALLED CAPACITY COLUMN STARTING IN 2002/03, SEMINOLE ELECTRIC COOPERATIVE WILL PURCHASE 340 MW UNDER CONTRACT STARTING IN DECEMBER 2002.

SOURCES: Florida Reliability Coordinating Council, 2000 Regional Load & Resource Plan, Peninsular Florida, July, 2000

Calpine Construction Finance Company, L.P.

reserve margins for Peninsular Florida, with and without the Project's capacity, are shown in Table II-7.

Similarly, data presented in the FRCC 2000 Resource Plan show that without the Osprey Energy Center, Peninsular Florida's winter reserve margins in 2003-2004 through 2009-2010 will range from 10.5 percent to 14.1 percent, without exercising load management and interruptible capabilities. With the Osprey Energy Center, the winter reserve margins will be improved by approximately 1.2 to 1.3 percent in each year, e.g., from 14.1 percent without Osprey to 15.5 percent with Osprey in 2003-2004. Winter reserve margins for Peninsular Florida, with and without the Project's capacity, and with and without exercising load management and interruptible resources, are shown in Table II-8.

Based on production simulation analyses prepared for Calpine of the Osprey Energy Center's operations within the Peninsular Florida power supply system, modeled on an economic dispatch basis, the Project is expected to operate at an average annual capacity factor of approximately 91 percent from 2003 through 2012, reflecting approximately 7,500 to 8,500 operating hours per year and approximately 4.0 million to 4.4 million MWH per year of net generation based on operations without duct-firing. See Table II-9. Sensitivity analyses prepared for Calpine of the Project's operations based on specified changes in fuel price forecasts and in Peninsular Florida load growth assumptions are shown in Tables II-10 and II-11, respectively.

TABLE II-9

OSPREY ENERGY CENTER

SUMMARY OF PROJECTED OPERATIONS

2003-2012

<u>Year</u>	<u>PROJECTED GENERATION (GWH)</u>	<u>ANNUAL CAPACITY FACTOR %</u>
2003	2,624	95.5%
2004	4,379	92.7%
2005	4,293	91.1%
2006	4,279	90.8%
2007	4,333	92.0%
2008	4,254	90.0%
2009	4,172	88.6%
2010	4,301	91.3%
2011	4,070	86.4%
2012	4,389	92.9%

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Note: The Project is scheduled to come into service on June 1, 2003. The annual capacity factor reported for 2003 is calculated on the basis of the Project's operations for the period June 1 - December 31, 2003.

TABLE II-10

OSPREY ENERGY CENTER

SUMMARY OF PROJECTED OPERATIONS, 2003-2012

HIGHER NATURAL GAS PRICE SENSITIVITY ANALYSIS

<u>Year</u>	<u>PROJECTED GENERATION (GWH)</u>	<u>ANNUAL CAPACITY FACTOR %</u>
2003	2,616	95.1%
2004	4,351	92.1%
2005	4,264	90.5%
2006	4,229	89.8%
2007	4,266	90.6%
2008	4,149	87.8%
2009	4,066	86.3%
2010	4,161	88.3%
2011	3,935	83.5%
2012	4,265	90.3%

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Notes: (1) The Project is scheduled to come into service on June 1, 2003. The annual capacity factor reported for 2003 is calculated on the basis of the Project's operations for the period June 1 - December 31, 2003.

(2) The Base Case fuel price projections were developed by Slater Consulting based on actual data and the U. S. Energy Information Administration's 2000 Annual Energy Outlook Reference Case Forecast, but with the natural gas price escalations moderated to be more in keeping with the Standard & Poor's DRI forecast, which was included in the EIA's publication as a comparison forecast. The fuel prices for this sensitivity case were the same as for the Base Case except that the prices of natural gas were projected to escalate at the growth rates projected in the EIA Reference Case Forecast.

TABLE II-11

OSPREY ENERGY CENTER

SUMMARY OF PROJECTED OPERATIONS

LOAD GROWTH SENSITIVITY ANALYSES, 2003-2012

Year	LOW LOAD GROWTH		BASE LOAD		HIGH LOAD GROWTH	
	PROJECTED GENERATION (GWH)	ANNUAL CAPACITY FACTOR %	PROJECTED GENERATION (GWH)	ANNUAL CAPACITY FACTOR %	PROJECTED GENERATION (GWH)	ANNUAL CAPACITY FACTOR %
2003	2,622	95.4%	2,624	95.5%	2,633	95.8%
2004	4,364	92.4%	4,379	92.7%	4,400	93.1%
2005	4,279	90.8%	4,293	91.1%	4,307	91.4%
2006	4,270	90.6%	4,279	90.8%	4,214	89.4%
2007	4,139	87.9%	4,333	92.0%	4,441	94.3%
2008	4,402	93.2%	4,254	90.0%	4,032	85.4%
2009	4,065	86.3%	4,172	88.6%	4,365	92.7%
2010	4,357	92.5%	4,301	91.3%	4,267	90.6%
2011	4,216	89.5%	4,070	86.4%	4,284	90.9%
2012	4,190	88.7%	4,389	92.9%	4,455	94.3%

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Assumptions: The Base Case scenario was developed by Slater Consulting based on actual data and consideration of published sources, including the 1999 FRCC Regional Load & Resource Plan and Florida utilities' 2000 ten-year site plans. The Low Load Growth scenario reflects growth rates 0.5 percent per year less than in the Base Case. The High Lo Growth scenario reflects growth rates 1.0 percent per year greater than in the Base Case.

Calpine projects that all of the sales from the Project will be made to Seminole and, in the event that Seminole does not purchase all of the Project's output, to other Florida utilities for resale to their retail electric customers in Peninsular Florida.

The advanced technology, natural gas-fired combined cycle design of the Project is consistent with the type of capacity being added by many other Peninsular Florida utilities. Table II-12, which presents data from utility ten-year site plans and other published sources, shows that from 1999 through 2008, other Peninsular Florida utilities are projecting the addition of nearly 7,000 MW of gas-fired combined cycle capacity.

The above-referenced analyses of the projected operations of the Osprey Energy Center in the Peninsular Florida power supply system were prepared for Calpine using the PROMOD IV® computer model. PROMOD IV® is a widely known and widely used probabilistic model that simulates the operations of electric power systems. PROMOD IV® is primarily used as a production costing model and can also be used to evaluate electric system reliability. A brief description of PROMOD IV® is included in Appendix C to these Exhibits. PROMOD IV® can be used to prepare utility fuel budget forecasts, evaluate the economics and operations of proposed generating capacity additions, project utility operating costs, estimate the prices of firm power and energy in defined markets,

**TABLE II-12
COMPARISON OF PENINSULAR FLORIDA
PLANNED AND PROPOSED GENERATING UNITS**

PLANNED & PROPOSED UTILITY/UNIT	IN-SERVICE YEAR	SUMMER CAPACITY MW	WINTER CAPACITY MW	PRIMARY FUEL	ALTERNATE FUEL	HEAT RATE (Btu/kWH)	EQUIVALENT AVAILABILITY FACTOR %	TOTAL INSTALLED COST (\$/KW) 1/	DIRECT CONSTRUCTION COST (\$/KW) 1/	TECHNOLOGY TYPE
OLEANDER 2/	2002	777	910	GAS	NO. 2	9,700	97	N/A	\$235	COMBUSTION TURBINE
OSPREY ENERGY 3/	2003	496	578	GAS	NONE	6,800	94	N/A	\$357	COMBINED CYCLE
FPL/MARTIN CT	2001	298	362	GAS	NO. 2	10,450	98	\$371	\$323	COMBUSTION TURBINE
FPL/FT.MYERS	2002	930	1,073	GAS	NONE	6,830	96	\$557	\$502	COMB. CYCLE/REPOWER
FPL/SANFORD 4-5	2002	1,132	1,342	GAS	NONE	6,860	96	\$703	\$591	COMB. CYCLE/REPOWER
FPL/FT.MYERS CT	2003	298	362	GAS	NO. 2	10,450	98	\$378	\$323	COMBUSTION TURBINE
FPL/MARTIN 5-6	2006	788	858	GAS	NO. 2	6,346	96	\$679	\$484	COMBINED CYCLE
FPL/UNSITE	2007	394	429	GAS	NO. 2	6,830	96	\$783	\$552	COMBINED CYCLE
FPL/UNSITE	2008	394	429	GAS	NO. 2	6,830	96	\$798	\$552	COMBINED CYCLE
FPL/UNSITE	2009	394	429	GAS	NO. 2	6,830	96	\$812	\$552	COMBINED CYCLE
TALLAH/PURDOM 8	2000	233	262	GAS	NO. 2	6,940	NR	\$483	\$434	COMBINED CYCLE
FPC/NTRCSS 12-14	2000	240	282	GAS	NO. 2	13,272	91	NOT REPORTED	NOT REPORTED	COMBUSTION TURBINE
FPC/HINES 2	2003	495	567	GAS	NO. 2	7,306	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
FPC/HINES 3	2005	495	567	GAS	NO. 2	7,306	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
FPC/HINES 4	2007	495	567	GAS	NO. 2	7,306	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
FPC/HINES 5	2009	495	567	GAS	NO. 2	7,306	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
TECO/POLK 2	2000	155	180	GAS	NO. 2	10,580	94	NOT REPORTED	NOT REPORTED	COMBUSTION TURBINE
TECO/POLK 3	2002	155	180	GAS	NO. 2	10,580	94	NOT REPORTED	NOT REPORTED	COMBUSTION TURBINE
TECO/BAYSIDE 1	2003	698	796	GAS	NO. 2	7,080	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
TECO/BAYSIDE 2	2004	711	802	GAS	NO. 2	7,050	91	NOT REPORTED	NOT REPORTED	COMBINED CYCLE
TECO/POLK 4-6	2005	465	540	GAS	NO. 2	10,580	94	NOT REPORTED	NOT REPORTED	COMBUSTION TURBINE
TECO/UNSITE	2009	155	180	GAS	NO. 2	10,580	94	NOT REPORTED	NOT REPORTED	COMBUSTION TURBINE
GVLLE/J.R. KELLY	2001	110	110	GAS	NO. 2	8,000	84	\$375	\$368	COMBINED CYCLE
SEC/PAYNE CRK 4/	2002	488	572	GAS	NO. 2	6,170	93	\$412	\$378	COMBINED CYCLE
FMPA-KUA CANE 3	2001	244	267	GAS	NO. 2	6,815	92	\$430	\$320	COMBINED CYCLE
LKLAND McINTSH 5	2002	337	384	GAS	NO. 2	6,523	91	\$749	\$671	COMBINED CYCLE
LKLAND McINTSH 4	2004	288	288	PET.COKE	COAL	8,452	81	\$1,617	\$1,317	PRESSURE FLUID BED
LKLAND McINTSH 6	2009	32	46	GAS	NO. 2	10,624	98	\$992	\$742	COMBUSTION TURBINE
JEA KENNEDY CT 7	2000	149	186	GAS	NO. 2	11,120	97	NOT REPORTED	\$261	COMBUSTION TURBINE
JEA BANDY CT 1-3	2001	149	186	GAS	NO. 2	11,120	97	NOT REPORTED	\$264	COMBUSTION TURBINE
JEA NORTHSID 1-2	2002	265	265	ET. COK	COAL	9,946	90	NOT REPORTED	\$658	CIRCULATING FLUID BED

DATA SOURCES:

1/ TOTAL INSTALLED COST AND DIRECT CONSTRUCTION COST DATA IS REPORTED DIRECTLY FROM THE INDIVIDUAL UTILITY'S 2000 TEN-YEAR SITE PLAN, SCHEDULE 9.

2/ OLEANDER POWER PROJECT DATA IS BASED ON INFORMATION FILED IN THE APRIL 2000 TEN-YEAR SITE PLAN, AND INCLUDES THE COST OF DIRECTLY ASSOCIATED TRANSMISSION LINES.

3/ OSPREY ENERGY CENTER DATA IS BASED ON INFORMATION FROM NEED DETERMINATION AND TEN-YEAR SITE

PLAN FILINGS AND INCLUDE THE COSTS OF DIRECTLY ASSOCIATED TRANSMISSION LINES. HEAT RATE IS CALCULATED BASED ON HIGHER HEATING VALUE (HHV).

4/ SEMINOLE ELECTRIC COOPERATIVE'S HEAT RATE FOR THE PAYNE CREEK UNIT 3 IS REPORTED BASED ON LOWER HEATING VALUE (LHV).

project hourly marginal energy costs, and calculate avoided energy costs.

The inputs to PROMOD IV® include generating unit data for existing and planned power plants in a defined power supply system, fuel consumption and fuel cost data, load and other utility system data, and data regarding transactions within the system. The primary outputs are individual utility or system production costs, generation by unit, fuel usage, and reliability information. PROMOD IV® utilizes computationally efficient algorithms that yield results identical to those that would be produced with direct specification of values for all availability states of all units in a power supply system.

B. Power Supply Needs of Calpine Construction Finance Company, L.P.

Calpine's business purpose with respect to the Osprey Energy Center is to develop the Project to provide reliable, competitively priced, environmentally clean power to Seminole and its Member utility systems (and, in the event that Seminole does not purchase all of the Project's output, to other Florida load-serving utilities) without risk to Florida's retail electric customers. To that end, Calpine has entered into the MOU with Seminole by which Calpine commits to make the full output of the Osprey Project available to Seminole for an initial term of five years with renegotiation provisions pursuant to which Seminole may procure up to the full output of the Project from the Project's commercial in-

service date through May 22, 2020. Specifically, Seminole will purchase 350 MW of firm capacity from the Osprey Project from June 1, 2004 through May 31, 2009; pursuant to the MOU, Seminole has the right to purchase up to the full amount of the Project's capacity, and all of its energy output, from the Project's commercial in-service date through May 31, 2009, to the extent that this additional capacity has not been committed to other Florida utilities at the time that Seminole wishes to exercise this option. Accordingly, Calpine needs the Project to meet its contractual obligations to Seminole reliably and cost-effectively.

C. Energy Efficiency and Environmental Impacts.

Pursuant to Section 403.519, the Commission is charged to consider conservation measures that are available to mitigate the need for a proposed power plant subject to the Siting Act and to consider other matters within its jurisdiction that it deems relevant to its decision. As a wholesale utility, Calpine does not engage in end-use conservation programs. The utilities to whom Calpine will sell the Osprey Project's output, such as Seminole,⁸ generally do have conservation programs and conservation goals approved by the Commission, however, and Calpine takes as given that those utilities' power supply needs are net of the effects of those conservation programs.

⁸A discussion of Seminole's Member cooperative utility systems' conservation programs and conservation goals is included in Volume I of these Exhibits.

This is not the end of the energy conservation analysis, however. The Commission is charged under the Florida Energy Efficiency and Conservation Act, Sections 366.08-.85 and 403.519, Florida Statutes, with developing and adopting conservation goals, and that statute contains express statements of legislative intent with respect to energy efficiency. Specifically, Section 366.81 provides that

The Legislature further finds and declares that ss. 366.80-366.85 and 403.519 are to be liberally construed in order to meet the complex problems of . . . increasing the overall efficiency and cost-effectiveness of electricity and natural gas production and use; . . . and conserving expensive resources, particularly petroleum fuels.

The Osprey Project will specifically promote the achievement of these goals. Tables II-13.A and II-13.B present the heat rates (measured in Btu per kWh, a direct measure of a power plant's energy efficiency) and the estimated dispatch costs (as modeled in the PROMOD IV® analyses performed for Calpine) for most of the power plants in Peninsular Florida. With regard to cost-effectiveness, Table II-13.B shows that, comparing the units' annual average dispatch costs, calculated on an as-dispatched basis, the Osprey Project has a lower dispatch cost than approximately 38,000 MW of the approximately 47,000 MW of fossil-fueled generating capacity that is projected to be serving Peninsular Florida in 2008. Table II-13.B shows that on a pure energy efficiency basis, the Osprey Project is more efficient than

TABLE II-13.A

**EFFICIENCY AND COST-EFFECTIVENESS OF
PENINSULAR FLORIDA GENERATING UNITS, 2003**

Plant	Unit	Summer Capacity (MW)	Average Annual Heat Rate (Btu/kwh)	Average Annual Dispatch Cost (\$/MWh)
<u>Nuclear</u>				
CRYSTAL	3	805	Must Run at Maximum Available Capacity	
STLUCIE	1	839	Must Run at Maximum Available Capacity	
STLUCIE	2	839	Must Run at Maximum Available Capacity	
TURKEYPT	3	697	Must Run at Maximum Available Capacity	
TURKEYPT	4	697	Must Run at Maximum Available Capacity	
<u>Coal and Petroleum Coke</u>				
BIG BEND	1	421	9,965	30.29
BIG BEND	2	421	9,972	30.57
BIG BEND	3	428	9,956	28.72
BIG BEND	4	442	9,943	26.93
CRYSTAL	1	386	9,679	25.40
CRYSTAL	2	488	9,596	25.26
CRYSTAL	4	714	9,094	23.67
CRYSTAL	5	697	9,092	23.41
DEERHAVN	2	228	10,608	25.20
GANNON	1	0	9,688	31.24
GANNON	2	0	9,671	31.19
GANNON	6	362	10,246	35.01
MCINTOSH	3	338	9,093	23.65
NORTHSID	1	265	9,753	23.34
NORTHSID	2	265	13,156	29.42
SCHERER	4	846	9,949	24.53
SEMINOLE	1	638	10,041	26.38
SEMINOLE	2	638	10,041	26.28
ST JOHNS	1	624	9,179	22.26
ST JOHNS	2	638	9,258	22.88
STANTON	1	442	9,777	24.99
STANTON	2	446	9,079	22.85

New Gas Combined Cycle

BAYSIDE	1	707	7,236	29.38
BRANDY B	4	482	7,176	29.68
CANE IS	3	260	6,999	28.11
FT MYERS	3	1446	7,145	29.08
HINES EC	1	470	7,049	28.30
HINES EC	2	0	7,002	29.59
KELLEY	4	113	8,362	36.91
N SMYRNA	1	520	6,971	28.04
OKEECHOB	1	260	6,965	27.76
OKEECHOB	2	260	6,966	27.76
OSPREY	1	520	6,967	28.09
PAYNECRK	3	520	7,001	28.14
PURDOM	8	260	6,995	28.10
SANFORD	14	964	7,206	29.29
SANFORD	15	964	7,208	29.29

Other Units

ANCLOTE	1	503	10,952	69.84
ANCLOTE	2	503	10,485	66.36
AVONPKGT	1	29	No Significant Output	
AVONPKGT	2	29	No Significant Output	
BARTOW	1	115	9,982	39.38
BARTOW	2	117	9,983	39.81
BARTOW	3	208	9,975	38.84
BARTOWGT	1	46	No Significant Output	
BARTOWGT	2	46	No Significant Output	
BARTOWGT	3	46	No Significant Output	
BARTOWGT	4	49	No Significant Output	
BAYBROGT	1	47	No Significant Output	
BAYBROGT	2	47	No Significant Output	
BAYBROGT	3	47	No Significant Output	
BAYBROGT	4	47	No Significant Output	
BGBENDGT	1	12	No Significant Output	
BGBENDGT	2	61	11,635	75.05
BGBENDGT	3	61	11,635	75.10
BRANDY B	1	0	11,224	56.71
BRANDY B	2	0	11,266	56.96
BRANDY B	3	153	11,383	56.01
CANE GT	1	30	11,166	50.91
CANE ISL	2	108	9,583	42.41
CAPECNVR	1	405	9,437	40.46

CAPECNVR	2	408	9,441	40.66
CUDJOE D	1	5	No Significant Output	
CUTLER	5	71	11,720	45.14
CUTLER	6	144	11,741	45.33
DEBARYGT	1	54	No Significant Output	
DEBARYGT	2	54	11,730	76.32
DEBARYGT	3	54	No Significant Output	
DEBARYGT	4	54	No Significant Output	
DEBARYGT	5	54	No Significant Output	
DEBARYGT	6	54	No Significant Output	
DEBARYGT	7	88	11,890	76.92
DEBARYGT	8	88	11,890	76.97
DEBARYGT	9	88	11,880	76.91
DEBARYGT	10	88	11,880	77.09
DEERHAVN	1	85	10,604	45.57
DRHVN GT	1	18	14,471	68.60
DRHVN GT	2	18	14,471	68.80
DRHVN GT	3	75	14,471	68.15
EVERGL T	1	35	17,121	74.24
EVERGL T	2	35	17,121	74.10
EVERGL T	3	35	17,121	73.81
EVERGL T	4	35	17,121	73.86
EVERGL T	5	35	17,121	73.60
EVERGL T	6	35	17,121	73.92
EVERGL T	7	35	17,121	73.65
EVERGL T	8	35	17,121	73.39
EVERGL T	9	35	17,121	73.35
EVERGL T	10	35	17,121	73.46
EVERGL T	11	35	17,121	73.04
EVERGL T	12	35	No Significant Output	
EVERGLDS	1	221	9,550	38.49
EVERGLDS	2	221	9,557	38.63
EVERGLDS	3	375	9,944	39.71
EVERGLDS	4	410	9,925	39.66
FTMYER T	1	54	No Significant Output	
FTMYER T	2	54	No Significant Output	
FTMYER T	3	54	No Significant Output	
FTMYER T	4	54	No Significant Output	
FTMYER T	5	54	No Significant Output	
FTMYER T	6	54	No Significant Output	
FTMYER T	7	54	No Significant Output	
FTMYER T	8	54	No Significant Output	
FTMYER T	9	54	No Significant Output	
FTMYER T	10	54	No Significant Output	
FTMYER T	11	54	No Significant Output	

FTMYER T	12	54	No Significant Output	
FTMYERCT	13	153	11,302	52.34
FTMYERCT	14	153	11,311	52.38
GANNONGT	1	12	No Significant Output	
HANSELCC	2	48	9,817	46.24
HANSELIC	8	3	9,300	43.19
HANSELIC	14	2	9,300	43.23
HANSELIC	15	2	9,300	43.25
HANSELIC	16	2	9,300	43.25
HANSELIC	17	2	9,300	43.23
HANSELIC	18	2	No Significant Output	
HANSELIC	19	3	No Significant Output	
HANSELIC	20	3	9,300	43.25
HARDEE	1	224	7,300	34.54
HARDEECT	1	74	9,732	45.33
HIGGNSGT	1	29	No Significant Output	
HIGGNSGT	2	29	No Significant Output	
HIGGNSGT	3	35	No Significant Output	
HIGGNSGT	4	35	No Significant Output	
HOOKERS	1	0	No Significant Output	
HOOKERS	2	0	No Significant Output	
HOOKERS	3	0	No Significant Output	
HOOKERS	4	0	No Significant Output	
HOOKERS	5	0	No Significant Output	
HOPKINGT	1	12	14,029	60.59
HOPKINGT	2	24	13,597	63.57
HOPKINS	1	75	11,357	47.25
HOPKINS	2	238	10,652	41.92
IND RIVR	1	88	10,033	42.34
IND RIVR	2	201	9,982	39.50
IND RIVR	3	319	10,469	41.65
INDRVRGT	1	37	11,540	52.40
INDRVRGT	2	37	11,540	52.51
INDRVRGT	3	108	11,100	50.84
INDRVRGT	4	108	11,100	50.84
INTER GT	1	47	No Significant Output	
INTER GT	2	47	No Significant Output	
INTER GT	3	47	No Significant Output	
INTER GT	4	47	No Significant Output	
INTER GT	5	47	No Significant Output	
INTER GT	6	47	No Significant Output	
INTER GT	7	83	12,210	79.38
INTER GT	8	83	No Significant Output	
INTER GT	9	83	No Significant Output	
INTER GT	10	83	12,030	77.69

INTER GT	11	143	12,030	78.03
INTER GT	12	76	12,572	59.75
INTER GT	13	76	12,558	59.59
INTER GT	14	76	12,523	59.47
IVEY IC	1	4	9,300	42.70
IVEY IC	2	5	9,300	42.71
IVEY IC	3	9	12,280	54.15
IVEY IC	4	6	12,280	54.23
IVEY IC	5	4	9,300	42.70
IVEY IC	6	18	9,300	42.70
KELLY	7	23	16,441	68.60
KELLY GT	1	14	No Significant Output	
KELLY GT	2	14	No Significant Output	
KELLY GT	3	14	No Significant Output	
KENEDYGT	3	54	No Significant Output	
KENEDYGT	4	54	No Significant Output	
KENEDYGT	5	54	No Significant Output	
KENEDYGT	7	153	11,380	56.05
KING	5	8	10,483	42.59
KING	6	17	12,842	51.73
KING	7	32	12,858	54.99
KING	8	50	12,710	52.43
KING DSL	1	5	No Significant Output	
KING GT	9	23	10,500	51.01
LARSEN	8	102	10,610	42.77
LARSENGT	2	10	No Significant Output	
LARSENGT	3	10	No Significant Output	
LAUDER T	1	36	15,908	66.47
LAUDER T	2	35	15,908	66.46
LAUDER T	3	35	15,908	66.53
LAUDER T	4	35	15,908	66.47
LAUDER T	5	35	15,908	66.54
LAUDER T	6	35	15,908	66.44
LAUDER T	7	35	15,908	66.55
LAUDER T	8	35	15,908	66.59
LAUDER T	9	35	15,908	66.62
LAUDER T	10	35	15,908	66.61
LAUDER T	11	35	15,908	66.70
LAUDER T	12	35	15,908	66.71
LAUDER T	13	35	16,227	67.94
LAUDER T	14	35	16,227	67.94
LAUDER T	15	35	16,227	67.92
LAUDER T	16	35	16,227	68.11
LAUDER T	17	35	16,227	68.09
LAUDER T	18	35	16,227	68.04

LAUDER T	19	35	16,227	68.02
LAUDER T	20	35	16,227	68.19
LAUDER T	21	35	16,227	68.28
LAUDER T	22	32	16,227	68.21
LAUDER T	23	32	16,227	68.15
LAUDER T	24	35	16,227	68.35
LAUDERCC	4	440	7,640	32.83
LAUDERCC	5	440	7,654	33.48
MANATEE	1	819	9,928	39.50
MANATEE	2	819	9,909	39.50
MARATHON	1	8	No Significant Output	
MARATHON	2	5	9,300	42.70
MARATHON	3	8	12,280	54.18
MARTIN	1	814	8,904	36.37
MARTIN	2	816	8,939	36.16
MARTINCC	3	445	7,232	31.20
MARTINCC	4	445	7,235	31.08
MARTINCT	1	153	11,266	52.39
MARTINCT	2	153	11,266	52.38
MCINT GT	1	17	15,000	65.71
MCINT IC	1	5	No Significant Output	
MCINTOSH	1	87	10,815	43.98
MCINTOSH	2	103	10,274	40.96
MCINTOSH	5	310	7,262	30.03
NORTH GT	3	52	No Significant Output	
NORTH GT	4	52	No Significant Output	
NORTH GT	5	52	No Significant Output	
NORTH GT	6	52	No Significant Output	
NORTHSID	3	505	9,688	40.75
OLEAN GT	1	153	11,291	52.41
OLEAN GT	2	153	11,303	52.48
OLEAN GT	3	153	11,301	52.43
OLEAN GT	4	153	11,316	52.50
OLEAN GT	5	153	11,325	52.51
PHILLIPS	1	17	13,500	55.45
PHILLIPS	2	17	13,500	55.48
POLK CT	2	153	11,366	54.72
POLK CT	3	153	11,348	54.74
POLKIGCC	1	250	10,079	29.97
PURDOM	7	48	16,947	69.23
PURDOMGT	1	12	No Significant Output	
PURDOMGT	2	12	No Significant Output	
PUTNAMCC	1	249	9,115	39.31
PUTNAMCC	2	249	9,114	39.36
REEDYCRK	1	35	10,400	45.89

RIOPINGT	1	15	No Significant Output	
RIVIERA	3	290	9,729	37.23
RIVIERA	4	290	9,729	37.52
SANFORD	3	153	8,877	40.06
SEM CT	1	153	11,357	54.83
SMITH	1	7	18,840	75.52
SMITH	2	7	18,822	75.58
SMITH	3	22	16,777	70.99
SMITH	4	32	16,798	71.08
SMITH D	1	9	No Significant Output	
SMITH CC	1	32	10,400	48.43
SMITH GT	1	26	No Significant Output	
SMITH ST	1	3	No Significant Output	
SMITH ST	2	2	No Significant Output	
SMITH ST	3	6	No Significant Output	
ST CLOUD	1	4	No Significant Output	
ST CLOUD	2	6	No Significant Output	
ST CLOUD	3	6	No Significant Output	
ST CLOUD	4	12	10,696	73.23
STOCK DS	1	9	9,300	64.95
STOCK DS	2	9	9,300	65.06
STOCK GT	1	21	No Significant Output	
STOCK GT	2	16	No Significant Output	
STOCK GT	3	16	No Significant Output	
STOCK IC	1	6	No Significant Output	
SUWAN GT	1	54	No Significant Output	
SUWAN GT	2	54	No Significant Output	
SUWAN GT	3	54	No Significant Output	
SUWANNEE	1	33	11,729	51.07
SUWANNEE	2	32	11,733	51.09
SUWANNEE	3	80	11,750	51.17
SWOOPEIC	1	5	No Significant Output	
TIGERBAY	1	194	7,553	32.32
TURKEYIC	1	14	No Significant Output	
TURKEYPT	1	410	9,433	39.54
TURKEYPT	2	400	9,395	39.80
TURNERGT	1	15	No Significant Output	
TURNERGT	2	15	No Significant Output	
TURNERGT	3	65	No Significant Output	
TURNERGT	4	65	No Significant Output	
UNIV FLA	1	36	11,166	50.41
VERO BCH	1	13	13,041	52.60
VERO BCH	2	13	8,928	36.66
VERO BCH	3	33	13,141	54.47
VERO BCH	4	56	11,739	48.61
VERO BCH	5	35	11,171	45.71

NUGs

AGRICHEM	1	6
AS-AVAIL	1	63
BAY CTY	1	11
BIOENRGY	1	10
BROWARDS	1	54
BROWARDS	2	56
CARGILL	2	15
CEDARBAY	1	250
CFRBIIGN	1	74
DADE CTY	1	43
ELDORADO	1	114
FLASTONE	1	133
HILLSBOR	1	26
INDIANTN	1	330
LAKE CTY	1	13
LAKECOGN	1	110
LFC JEFF	1	9
LFC MADS	1	9
MULB-FPC	1	79
ORANGE	1	22
ORLANDO	1	79
PALMBCH	1	44
PASCO	1	109
PASCOCTY	1	23
PINELLAS	1	40
PINELLAS	2	15
RIDGE	1	40
ROYSTER	1	31
TAMPACTY	1	19
JEA-QFs		17

External Purchases

ENTERGY	1	23
SOUTHERN CO.		1615

Source: PROMOD IV(R) analyses prepared by Slater Consulting

TABLE II-13.B

**EFFICIENCY AND COST-EFFECTIVENESS OF
PENINSULAR FLORIDA GENERATING UNITS, 2008**

Plant	Unit	Summer Capacity (MW)	Average Annual Heat Rate (Btu/kwh)	Average Annual Dispatch Cost (\$/MWh)
<u>Nuclear</u>				
CRYSTAL	3	805	Must Run at Maximum Available Capacity	
STLUCIE	1	839	Must Run at Maximum Available Capacity	
STLUCIE	2	839	Must Run at Maximum Available Capacity	
TURKEYPT	3	697	Must Run at Maximum Available Capacity	
TURKEYPT	4	697	Must Run at Maximum Available Capacity	
<u>Coal and Petroleum Coke</u>				
BIG BEND	1	421	10,017	34.67
BIG BEND	2	421	10,018	35.01
BIG BEND	3	428	9,998	32.60
BIG BEND	4	442	9,980	30.78
CRYSTAL	1	386	9,682	28.16
CRYSTAL	2	488	9,600	28.04
CRYSTAL	4	714	9,124	26.57
CRYSTAL	5	697	9,121	26.10
DEERHAVN	2	228	10,609	28.60
MCINTOSH	3	338	9,099	26.95
MCINTOSH	4	288	8,492	24.19
NORTHSID	1	265	9,786	26.49
NORTHSID	2	265	13,421	34.04
SCHERER	4	846	9,969	27.53
SEMINOLE	1	638	10,089	29.97
SEMINOLE	2	638	10,077	29.62
ST JOHNS	1	624	9,204	25.31
ST JOHNS	2	638	9,288	25.77
STANTON	1	442	9,782	27.70
STANTON	2	446	9,086	26.03

New Gas Combined Cycle

BAYSIDE	1	707	7,221	34.15
BAYSIDE	2	715	7,186	34.01
BRANDY B	4	482	7,254	34.71
CANE IS	3	260	7,026	32.74
FT MYERS	3	1446	7,203	33.90
GREEN CC	1	260	6,979	32.57
HINES EC	1	470	7,082	32.95
HINES EC	2	520	7,005	32.69
HINES EC	3	520	7,016	32.67
HINES EC	4	520	7,020	32.74
KELLEY	4	113	8,536	43.43
MARTINCC	5	380	6,804	31.96
MARTINCC	6	380	6,804	31.96
N SMYRNA	1	520	6,992	32.62
OKEECHOB	1	260	6,978	32.44
OKEECHOB	2	260	6,977	32.56
OSPREY	1	520	6,984	32.57
PAYNECRK	3	520	7,037	32.76
PURDOM	8	260	7,009	32.69
SANFORD	14	964	7,276	34.17
SANFORD	15	964	7,282	34.17
SEMIN CC	4	260	7,010	32.67
SEMIN CC	5	260	7,011	32.67
UNKNOWCC	1	364	6,981	32.53
UNKNOWCC	2	364	6,990	32.63

Other Units

ANCLOTE	1	503	11,581	90.11
ANCLOTE	2	503	11,378	89.16
BARTOW	1	115	9,971	46.89
BARTOW	2	117	10,003	46.60
BARTOW	3	208	9,978	46.05
BARTOWGT	1	46	No Significant Output	
BARTOWGT	2	46	No Significant Output	
BARTOWGT	3	46	No Significant Output	
BARTOWGT	4	49	No Significant Output	
BGBENDGT	1	12	No Significant Output	
BGBENDGT	2	61	No Significant Output	
BGBENDGT	3	61	No Significant Output	
BRANDY B	3	153	11,464	65.79
CANE GT	1	30	11,166	59.41
CANE ISL	2	108	9,581	49.24
CAPECNVR	1	405	9,444	48.37
CAPECNVR	2	408	9,444	48.47
CUDJOE D	1	5	No Significant Output	

CUTLER	5	71	11,721	52.49
CUTLER	6	144	11,734	52.59
DEBARYGT	1	54	No Significant Output	
DEBARYGT	2	54	No Significant Output	
DEBARYGT	3	54	No Significant Output	
DEBARYGT	4	54	No Significant Output	
DEBARYGT	5	54	No Significant Output	
DEBARYGT	6	54	No Significant Output	
DEBARYGT	7	88	No Significant Output	
DEBARYGT	8	88	No Significant Output	
DEBARYGT	9	88	No Significant Output	
DEBARYGT	10	88	No Significant Output	
DEERHAVN	1	85	10,609	52.93
DRHVN GT	1	18	No Significant Output	
DRHVN GT	2	18	No Significant Output	
DRHVN GT	3	75	No Significant Output	
EVERGL T	1	35	No Significant Output	
EVERGL T	2	35	No Significant Output	
EVERGL T	3	35	No Significant Output	
EVERGL T	4	35	No Significant Output	
EVERGL T	5	35	No Significant Output	
EVERGL T	6	35	No Significant Output	
EVERGL T	7	35	No Significant Output	
EVERGL T	8	35	No Significant Output	
EVERGL T	9	35	No Significant Output	
EVERGL T	10	35	No Significant Output	
EVERGL T	11	35	No Significant Output	
EVERGL T	12	35	No Significant Output	
EVERGLDS	1	221	9,546	44.78
EVERGLDS	2	221	9,551	44.71
EVERGLDS	3	375	9,897	45.90
EVERGLDS	4	410	9,892	45.91
FTMYER T	1	54	No Significant Output	
FTMYER T	2	54	No Significant Output	
FTMYER T	3	54	No Significant Output	
FTMYER T	4	54	No Significant Output	
FTMYER T	5	54	No Significant Output	
FTMYER T	6	54	No Significant Output	
FTMYER T	7	54	No Significant Output	
FTMYER T	8	54	No Significant Output	
FTMYER T	9	54	No Significant Output	
FTMYER T	10	54	No Significant Output	
FTMYER T	11	54	No Significant Output	
FTMYER T	12	54	No Significant Output	
FTMYERCT	13	153	11,343	61.30
FTMYERCT	14	153	11,355	61.33
GANNONGT	1	12	No Significant Output	

HANSELCC	2	48	9,777	53.15
HANSELIC	8	3	9,300	50.48
HANSELIC	14	2	9,300	50.50
HANSELIC	15	2	9,300	50.41
HANSELIC	16	2	9,300	50.51
HANSELIC	17	2	9,300	50.42
HANSELIC	18	2	No Significant Output	
HANSELIC	19	3	No Significant Output	
HANSELIC	20	3	9,300	50.40
HARDEE	1	224	7,300	39.97
HARDEECT	1	74	9,732	52.50
HOPKINGT	1	12	No Significant Output	
HOPKINGT	2	24	No Significant Output	
HOPKINS	1	75	11,386	54.86
HOPKINS	2	238	10,636	48.54
IND RIVR	1	88	10,026	49.15
IND RIVR	2	201	9,971	45.80
IND RIVR	3	319	10,463	48.23
INDRVRGT	1	37	11,540	60.96
INDRVRGT	2	37	11,540	61.06
INDRVRGT	3	108	11,100	59.03
INDRVRGT	4	108	11,100	59.15
INTER GT	1	47	No Significant Output	
INTER GT	2	47	No Significant Output	
INTER GT	3	47	No Significant Output	
INTER GT	4	47	No Significant Output	
INTER GT	5	47	No Significant Output	
INTER GT	6	47	No Significant Output	
INTER GT	7	83	No Significant Output	
INTER GT	8	83	No Significant Output	
INTER GT	9	83	No Significant Output	
INTER GT	10	83	No Significant Output	
INTER GT	11	143	No Significant Output	
INTER GT	12	76	12,568	69.17
INTER GT	13	76	12,583	69.28
INTER GT	14	76	12,567	69.23
IVEY IC	1	4	9,300	50.59
IVEY IC	2	5	9,300	50.60
IVEY IC	3	9	12,280	64.70
IVEY IC	4	6	No Significant Output	
IVEY IC	5	4	9,300	50.58
IVEY IC	6	18	9,300	50.58
KELLY	7	23	16,878	81.75
KELLY GT	1	14	No Significant Output	
KELLY GT	2	14	No Significant Output	
KELLY GT	3	14	No Significant Output	
KENEDYGT	3	54	No Significant Output	

KENEDYGT	4	54		No Significant Output
KENEDYGT	5	54		No Significant Output
KENEDYGT	7	153	11,306	65.11
KING	5	8	10,479	49.55
KING	6	17	12,844	60.53
KING	7	32	12,942	64.15
KING	8	50	12,728	61.06
KING DSL	1	5		No Significant Output
KING GT	9	23	10,500	59.26
LARSEN	8	102	10,610	49.95
LARSENGT	2	10		No Significant Output
LARSENGT	3	10		No Significant Output
LAUDER T	1	36		No Significant Output
LAUDER T	2	35		No Significant Output
LAUDER T	3	35		No Significant Output
LAUDER T	4	35		No Significant Output
LAUDER T	5	35		No Significant Output
LAUDER T	6	35		No Significant Output
LAUDER T	7	35		No Significant Output
LAUDER T	8	35		No Significant Output
LAUDER T	9	35		No Significant Output
LAUDER T	10	35		No Significant Output
LAUDER T	11	35		No Significant Output
LAUDER T	12	35		No Significant Output
LAUDER T	13	35		No Significant Output
LAUDER T	14	35		No Significant Output
LAUDER T	15	35		No Significant Output
LAUDER T	16	35		No Significant Output
LAUDER T	17	35		No Significant Output
LAUDER T	18	35		No Significant Output
LAUDER T	19	35		No Significant Output
LAUDER T	20	35		No Significant Output
LAUDER T	21	35		No Significant Output
LAUDER T	22	32		No Significant Output
LAUDER T	23	32		No Significant Output
LAUDER T	24	35		No Significant Output
LAUDERCC	4	440	7,667	38.21
LAUDERCC	5	440	7,680	38.95
MANATEE	1	819	9,857	46.72
MANATEE	2	819	9,695	45.92
MARATHON	1	8		No Significant Output
MARATHON	2	5	9,300	50.59
MARATHON	3	8	12,280	64.24
MARTIN	1	814	8,941	42.10
MARTIN	2	816	8,970	42.34
MARTINCC	3	445	7,263	36.26
MARTINCC	4	445	7,265	36.26

MARTINCT	1	153	11,327	61.28
MARTINCT	2	153	11,335	61.29
MCINT GT	1	17	No Significant Output	
MCINT IC	1	5	No Significant Output	
MCINTOSH	1	87	10,814	50.91
MCINTOSH	2	103	10,282	47.50
MCINTOSH	5	310	7,460	35.57
NORTH GT	3	52	No Significant Output	
NORTH GT	4	52	No Significant Output	
NORTH GT	5	52	No Significant Output	
NORTH GT	6	52	No Significant Output	
NORTHSID	3	505	9,653	50.48
OLEAN GT	1	153	11,364	61.32
OLEAN GT	2	153	11,345	61.24
OLEAN GT	3	153	11,352	61.25
OLEAN GT	4	153	11,367	61.24
OLEAN GT	5	153	11,366	61.31
PHILLIPS	1	17	13,500	65.92
PHILLIPS	2	17	13,500	65.92
POLK CT	2	153	11,353	63.94
POLK CT	3	153	11,368	63.99
POLK CT	4	153	11,393	64.00
POLK CT	5	153	11,345	63.89
POLK CT	6	153	11,336	63.85
POLKIGCC	1	250	10,267	35.35
PURDOM	7	48	18,726	87.68
PURDOMGT	1	0	No Significant Output	
PURDOMGT	2	12	No Significant Output	
PUTNAMCC	1	249	9,114	45.67
PUTNAMCC	2	249	9,110	45.70
REEDYCRK	1	35	10,400	53.12
RIVIERA	3	290	9,728	43.93
RIVIERA	4	290	9,738	44.25
SANFORD	3	153	8,877	47.44
SEM CT	1	153	11,383	64.07
SEM CT	2	153	11,422	64.21
SEM CT	3	153	11,375	64.01
SMITH	1	7	No Significant Output	
SMITH	2	7	No Significant Output	
SMITH	3	22	16,685	82.15
SMITH	4	32	16,495	81.24
SMITH D	1	9	No Significant Output	
SMITH CC	1	32	10,400	56.17
SMITH GT	1	26	No Significant Output	
SMITH ST	1	3	No Significant Output	
SMITH ST	2	2	No Significant Output	
SMITH ST	3	6	No Significant Output	

ST CLOUD	1	4	No Significant Output	
ST CLOUD	2	6	No Significant Output	
ST CLOUD	3	6	No Significant Output	
ST CLOUD	4	12	No Significant Output	
STOCK DS	1	9	No Significant Output	
STOCK DS	2	9	No Significant Output	
STOCK GT	1	21	No Significant Output	
STOCK GT	2	16	No Significant Output	
STOCK GT	3	16	No Significant Output	
STOCK IC	1	6	No Significant Output	
SUWAN GT	1	54	No Significant Output	
SUWAN GT	2	54	No Significant Output	
SUWAN GT	3	54	No Significant Output	
SWOOPEIC	1	5	No Significant Output	
TIGERBAY	1	194	7,577	37.45
TURKEYIC	1	14	No Significant Output	
TURKEYPT	1	410	9,406	46.87
TURKEYPT	2	400	9,420	46.90
TURNERGT	3	65	No Significant Output	
TURNERGT	4	65	No Significant Output	
UNIV FLA	1	36	11,166	58.41
VERO BCH	1	13	13,115	61.76
VERO BCH	2	13	8,931	42.62
VERO BCH	3	33	13,164	63.46
VERO BCH	4	56	11,785	56.74
VERO BCH	5	35	11,183	53.25

NUGs

AS-AVAIL	1	63
BAY CTY	1	11
BROWARDS	1	54
BROWARDS	2	56
CARGILL	2	15
CEDARBAY	1	250
CFRBIIGN	1	74
DADE CTY	1	43
ELDORADO	1	114
HILLSBOR	1	26
INDIANTN	1	330
LAKE CTY	1	13
LAKECOGN	1	110
LFC JEFF	1	9
LFC MADS	1	9
MULB-FPC	1	79
ORANGE	1	22
ORLANDO	1	79

PALMBCH	1	44
PASCO	1	109
PASCOCTY	1	23
PINELLAS	1	40
PINELLAS	2	15
RIDGE	1	40
ROYSTER	1	31
TAMPACTY	1	19
JEA-QFs		17

External Purchases

ENTERGY	1	23
SOUTHERN CO.		1615

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

all but approximately 1,900 MW of the fossil-fueled generating capacity projected to be serving Peninsular Florida in 2008.

Table II-14 presents data from the PROMOD IV® analyses that show the energy efficiency gains that the Project will provide if it is added into the Peninsular Florida power supply system and operated on an economic dispatch basis. In this scenario, the Project would reduce the average heat rate of all Peninsular Florida power supply by approximately 24 to 44 Btu per kWh over the 2004-2012 period. The Project would thus result in a net saving of 6 to 9 trillion Btu (6,000,000 to 9,000,000 MMBtu) of primary energy that would have been used to provide electricity in Peninsular Florida. Tables II-15.A and II-15.B present data showing the impacts of adding the Osprey Project into the Peninsular Florida power supply system on the total consumption of each major generating fuel type--coal, natural gas, No. 2 oil, and No. 6 oil.⁹

Directly associated with these reductions in primary fuel consumption are reductions in total SO₂ and NO_x emissions. Using data from the PROMOD IV® analyses, Table II-16 shows the impacts of

⁹Tables II-13.A, II-13.B, II-14, II-15.A, II-15.B, and II.16 were prepared by Slater Consulting before Calpine and Seminole executed the MOU. Accordingly, they are based on a scenario in which the Osprey Project was added into a system that included Seminole's planned 2004 combined cycle capacity, which, of course, is now being replaced by the Osprey Project. Accordingly, the results shown in these tables will slightly understate the benefits provided by the Osprey Project, as the Osprey Project will now be operating within a slightly less efficient power supply system.

TABLE II-14

**PENINSULAR FLORIDA, IMPACTS OF OSPREY ENERGY CENTER
ON AVERAGE ELECTRICITY GENERATION HEAT RATES AND
TOTAL FUEL CONSUMPTION, 2003-2012**

<u>Year</u>	<u>Average Heat Rate (btu/kwh)</u>			<u>Total Primary Energy (1000*mmbtu)</u>		<u>Osprey Net Energy</u>
	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Difference</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Savings (1000*mmbtu)</u>
2003	8,864.4	8,837.4	27.0	1,850,893	1,845,257	5,636
2004	8,781.6	8,737.8	43.7	1,874,198	1,864,864	9,334
2005	8,747.8	8,707.6	40.2	1,905,197	1,896,431	8,766
2006	8,662.8	8,626.6	36.2	1,925,724	1,917,686	8,038
2007	8,606.0	8,567.4	38.7	1,949,829	1,941,069	8,760
2008	8,576.2	8,540.5	35.7	1,976,351	1,968,125	8,226
2009	8,536.7	8,512.4	24.3	2,003,095	1,997,395	5,700
2010	8,546.1	8,518.9	27.3	2,041,883	2,035,372	6,511
2011	8,553.6	8,517.0	36.6	2,081,005	2,072,094	8,911
2012	8,575.3	8,540.2	35.1	2,124,464	2,115,761	8,703

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

TABLE II-15.A

**PENINSULAR FLORIDA FUEL CONSUMPTION
IMPACTS OF OSPREY ENERGY CENTER, 2003-2012**

(All Values in 1,000 x MMBtu)

Year	<u>Nuclear</u>			<u>Coal and Other Solid Fuels</u>			<u>Natural Gas</u>			<u>No. 6 Oil</u>			<u>No. 2 Oil</u>		
	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>
2003	295,404	295,404	0	769,940	766,231	3,709	663,815	669,766	(5,951)	118,105	110,713	7,392	3,629	3,143	486
2004	321,616	321,616	0	754,909	740,695	14,214	704,970	723,490	(18,520)	89,530	76,408	13,122	3,173	2,655	518
2005	316,996	316,996	0	751,478	743,067	8,411	745,061	755,649	(10,588)	88,372	77,868	10,504	3,290	2,851	439
2006	303,928	303,928	0	743,161	733,395	9,766	791,044	801,777	(10,733)	84,927	76,126	8,801	2,864	2,460	204
2007	312,117	312,117	0	716,668	705,680	10,988	829,301	846,518	(17,217)	89,310	74,427	14,883	2,433	2,327	106
2008	326,697	326,697	0	711,361	703,313	8,048	863,388	874,371	(10,983)	72,295	61,396	10,899	2,610	2,348	262
2009	294,962	294,962	0	716,748	712,157	4,591	897,024	905,427	(8,403)	91,584	82,485	9,099	2,777	2,364	413
2010	321,069	321,069	0	716,779	708,527	8,252	917,233	927,076	(9,843)	84,616	76,538	8,078	2,186	2,162	24
2011	316,945	316,945	0	723,043	709,318	13,725	937,705	952,935	(15,230)	100,807	90,683	10,124	2,505	2,213	292
2012	331,247	331,247	0	734,896	723,896	11,000	946,332	957,427	(11,095)	108,899	100,566	8,333	3,090	2,625	465

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

TABLE II-15.B

**PENINSULAR FLORIDA, FUEL CONSUMPTION
IMPACTS OF OSPREY ENERGY CENTER, 2003-2012**

(All Values in GWh)

<u>Year</u>	<u>Nuclear</u>			<u>Coal and Other Solid Fuels</u>			<u>Natural Gas</u>			<u>No. 6 Oil</u>			<u>No. 2 Oil</u>		
	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Differ- ence</u>
2003	28,539	28,539	0	79,879	79,444	435	87,441	88,664	(1,223)	12,061	11,331	730	357	311	46
2004	31,071	31,071	0	78,413	76,929	1,484	94,014	96,914	(2,900)	9,169	7,831	1,338	310	263	47
2005	30,625	30,625	0	78,211	77,290	921	99,111	101,185	(2,074)	9,076	7,995	1,081	318	278	40
2006	29,362	29,362	0	77,429	76,407	1,022	106,125	108,042	(1,917)	8,702	7,840	862	262	243	19
2007	30,153	30,153	0	74,651	73,490	1,161	111,992	114,720	(2,728)	9,139	7,641	1,498	242	231	11
2008	31,562	31,562	0	74,029	73,254	775	116,868	118,757	(1,889)	7,394	6,328	1,066	256	232	24
2009	28,496	28,496	0	74,744	74,131	613	121,351	122,947	(1,596)	9,385	8,471	914	271	234	37
2010	31,018	31,018	0	74,622	73,742	880	124,057	125,815	(1,758)	8,652	7,832	820	209	204	5
2011	30,620	30,620	0	75,216	73,803	1,413	126,515	129,017	(2,502)	10,292	9,271	1,021	235	207	28
2012	32,001	32,001	0	76,502	75,472	1,030	127,443	129,382	(1,939)	11,093	10,254	839	291	247	44

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

TABLE II-16

**PENINSULAR FLORIDA EMISSIONS IMPACTS
OF OSPREY ENERGY CENTER, 2003-2012**

(All Values in 1000's lbs)

<u>Year</u>	<u>Sulfur Dioxide</u>		<u>Nitrogen Oxides</u>	
	<u>Without Osprey</u>	<u>With Osprey</u>	<u>Without Osprey</u>	<u>With Osprey</u>
2003	759,691	767,350	458,702	452,861
2004	702,289	669,806	426,740	412,805
2005	695,946	674,697	423,137	413,850
2006	677,817	654,902	417,541	405,467
2007	658,449	632,952	405,652	392,771
2008	639,130	611,603	391,615	382,230
2009	669,806	660,623	408,957	401,142
2010	679,140	657,030	410,514	400,657
2011	702,883	677,446	418,612	407,683
2012	743,653	720,617	437,591	426,875

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

the Osprey Project on the emissions of these two major pollutants from electricity generation in Florida. Generally, over the study period, the Project is expected to reduce total SO₂ emissions from the generation of Peninsular Florida's electricity supply by 4,600 to 16,000 tons per year and reduce total NO_x emissions by 3,900 to 7,000 tons per year.

D. Strategic Considerations.

The Project is also consistent with strategic factors that may be considered in developing power plants from Calpine's perspective and in evaluating proposed power plants from the Commission's perspective considering the State as a whole. The Project will be fueled by domestically produced natural gas, rather than by an imported fuel that is subject to delivery interruption due to political or other events. The Project will also provide a significant impetus to the construction of a second major trans-Florida natural gas pipeline. The Project has a low installed cost relative to similar projects and a highly efficient heat rate, assuring its long-term economic viability. As a wholesale power plant, constructed solely at the expense of Calpine, the Osprey Project will provide power with limited risk to Seminole or other Florida utilities and their customers (only the risk for any firm capacity payments that might be required under a power purchase agreement) and will impose little or no obligation on either Seminole, its Member systems, other Florida utilities, or their customers (again, only the risk associated with fixed firm capacity

payments, if any). The Project's gas-fired combined cycle technology is exceptionally clean environmentally, protecting against risks associated with future changes in environmental regulations while improving the overall environmental profile of electricity generation in Florida.

V. COST-EFFECTIVENESS OF THE OSPREY ENERGY CENTER

The Osprey Energy Center is the most cost-effective alternative available to Seminole¹⁰ to meet its needs and the needs of its Member cooperatives. The Project is also the most cost-effective alternative available to Peninsular Florida for meeting its future power supply needs. The Osprey Project is also the most cost-effective alternative available to Calpine for meeting its contractual obligations to Seminole. Moreover, based on its highly efficient heat rate and low direct construction cost, the Project is demonstrably cost-effective relative to virtually all other gas-fired combined cycle power plants proposed for Florida over the next ten years. Accordingly, the Project is expected to provide cost-effective power to Peninsular Florida.

A. Cost-Effectiveness to Peninsular Florida Electric Customers.

Calpine is committed to providing the Project's output to Florida utilities, such as Seminole, for the benefit of those utilities' retail customers in Florida. For the reasons set forth in Volume I of these Exhibits, the Project will be cost-effective to Seminole's Member utility systems and those systems' member-consumers.

Additionally, the Project's costs and efficiency compare favorably to other gas-fired combined cycle generating units planned or proposed by other utilities in Peninsular Florida.

¹⁰A discussion of the Project's cost-effectiveness to Seminole is included in Volume I of these Exhibits.

Table II-12, which presents data from the utilities' 2000 ten-year site plans and other published sources, shows that of all the new gas-fired combined cycle power plants proposed by Peninsular Florida utilities, only the Cane Island 3 unit, a joint project of the Florida Municipal Power Agency and the Kissimmee Utilities Authority, is expected to have direct construction costs comparable to those of the Osprey Energy Center. The other combined cycle plants with generally comparable heat rates reflect direct construction costs, on a dollars-per-kW basis, significantly greater than those of the Osprey Project.

Finally, the presence and operation of the Osprey Energy Center will suppress wholesale power prices in Peninsular Florida. Analyses performed for Calpine by Slater Consulting, Inc. using the PROMOD IV® model indicate that the Project, if operated on an economic dispatch basis within Peninsular Florida, will generally reduce average Peninsular Florida production costs by about \$0.54 to \$0.84 per MWH, for each year of the analysis period, yielding total estimated power supply cost reductions of approximately \$794 million (NPV at a 10 percent discount rate) over the first ten years of the Project's operation. See Table II-17 of these Exhibits. The estimated wholesale price suppression effects and production cost savings from the Osprey Energy Center under fuel price and load growth sensitivity cases are shown in Tables II-18.A, II-18.B, and II-18.C.

TABLE II-17

**PENINSULAR FLORIDA, SUMMARY OF PROJECTED WHOLESALE ENERGY
COST SAVINGS DUE TO OSPREY ENERGY CENTER,
BASE CASE, 2003-2012**

<u>YEAR</u>	FRCC	AVERAGE ANNUAL	AVERAGE ANNUAL	WHOLESALE	ESTIMATED	CUMULATIVE
	NET ENERGY FOR LOAD (GWH)	MARGINAL ENERGY COST WITH OSPREY (\$/MWH)	MARGINAL ENERGY COST WITHOUT OSPREY (\$/MWH)	PRICE SUPPRESSION (\$/MWH)	SAVINGS FROM OSPREY (\$MILLION)	NPV @ 10% 2000 DOLLARS (\$MILLION)
2003	208,800	32.83	33.37	0.54	113	85
2004	213,424	31.81	32.55	0.74	158	193
2005	217,791	32.92	33.67	0.75	163	294
2006	222,299	33.36	33.96	0.60	133	369
2007	226,565	33.75	34.48	0.73	165	454
2008	230,447	34.34	34.96	0.62	143	521
2009	234,645	35.85	36.60	0.75	176	595
2010	238,924	36.77	37.51	0.74	177	664
2011	243,289	38.81	39.65	0.84	204	735
2012	247,742	40.27	41.02	0.75	186	794

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

TABLE II-18.A

**PENINSULAR FLORIDA, SUMMARY OF PROJECTED WHOLESALE ENERGY
COST SAVINGS DUE TO OSPREY ENERGY CENTER,
HIGHER FUEL PRICE SENSITIVITY CASE, 2003-2012**

<u>YEAR</u>	<u>FRCC NET ENERGY FOR LOAD (GWH)</u>	<u>AVERAGE ANNUAL MARGINAL ENERGY COST WITH OSPREY (\$/MWH)</u>	<u>AVERAGE ANNUAL MARGINAL ENERGY COST WITHOUT OSPREY (\$/MWH)</u>	<u>WHOLESALE PRICE SUPPRESSION (\$/MWH)</u>	<u>ESTIMATED SAVINGS FROM OSPREY (\$MILLION)</u>	<u>CUMULATIVE NPV @ 10% 2000 DOLLARS (\$MILLION)</u>
2003	208,800	32.88	33.43	0.55	115	86
2004	213,424	31.92	32.59	0.67	143	184
2005	217,791	33.06	33.81	0.75	163	285
2006	222,299	33.71	34.35	0.64	142	366
2007	226,565	34.49	35.22	0.73	165	451
2008	230,447	35.43	36.09	0.66	152	522
2009	234,645	37.29	38.03	0.74	174	595
2010	238,924	38.76	39.53	0.77	184	666
2011	243,289	41.04	41.87	0.83	202	737
2012	247,742	42.63	43.51	0.88	218	806

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Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Note: The Base Case fuel price projections were developed by Slater Consulting based on actual data and the U. S. Energy Information Administration's 2000 Annual Energy Outlook Reference Case Forecast, but with the natural gas price escalations moderated to be more in keeping with the Standard & Poor's DRI forecast, which was included in the EIA's publication as a comparison forecast. The fuel prices for this sensitivity case were the same as for the Base Case except that the prices of natural gas were projected to escalate at the growth rates projected in the EIA's Reference Case Forecast.

TABLE II-18.B

PENINSULAR FLORIDA, SUMMARY OF PROJECTED WHOLESALE ENERGY COST SAVINGS DUE TO OSPREY ENERGY CENTER, LOW LOAD GROWTH SENSITIVITY CASE, 2003-2012

YEAR	FRCC NET ENERGY FOR LOAD (GWH)	AVERAGE ANNUAL MARGINAL ENERGY COST WITH OSPREY (\$/MWH)	AVERAGE ANNUAL MARGINAL ENERGY COST WITHOUT OSPREY (\$/MWH)	WHOLESALE PRICE SUPPRESSION (\$/MWH)	ESTIMATED SAVINGS FROM OSPREY (\$MILLION)	CUMULATIVE NPV @ 10% 2000 DOLLARS (\$MILLION)
2003	205,684	32.46	32.69	0.23	47	36
2004	209,187	30.97	31.62	0.65	136	128
2005	212,400	32.10	32.84	0.74	157	226
2006	215,713	32.26	32.85	0.59	127	298
2007	218,754	32.58	33.14	0.56	123	361
2008	221,389	33.09	33.56	0.47	104	409
2009	224,295	34.12	34.75	0.63	141	469
2010	227,242	34.96	35.56	0.60	136	522
2011	230,238	36.64	37.08	0.44	101	557
2012	233,280	37.46	38.40	0.94	219	627

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Note: This Low Load Growth scenario reflects growth rates 0.5 percent per year less than in the Base Case.

TABLE II-18.C

**PENINSULAR FLORIDA, SUMMARY OF PROJECTED WHOLESALE ENERGY
COST SAVINGS DUE TO OSPREY ENERGY CENTER,
HIGH LOAD GROWTH SENSITIVITY CASE, 2003-2012**

YEAR	FRCC NET ENERGY FOR LOAD (GWH)	AVERAGE ANNUAL MARGINAL ENERGY COST WITH OSPREY (\$/MWH)	AVERAGE ANNUAL MARGINAL ENERGY COST WITHOUT OSPREY (\$/MWH)	WHOLESALE PRICE SUPPRESSION (\$/MWH)	ESTIMATED SAVINGS FROM OSPREY (\$MILLION)	CUMULATIVE NPV @ 10% 2000 DOLLARS (\$MILLION)
2003	215,127	34.16	34.57	0.41	88	66
2004	222,089	33.44	34.29	0.85	189	195
2005	228,900	35.07	35.99	0.92	211	326
2006	235,976	35.94	36.75	0.81	191	434
2007	242,907	36.59	37.43	0.84	204	539
2008	249,539	38.02	39.04	1.02	255	657
2009	256,627	40.26	41.26	1.00	257	766
2010	263,921	42.51	43.51	1.00	264	868
2011	271,429	46.36	47.63	1.27	345	989
2012	279,162	49.17	50.64	1.47	410	1,119

Source: PROMOD IV(R) analyses prepared by Slater Consulting.

Note: This High Load Growth scenario reflects growth rates 1.0 percent per year greater than in the Base Case.

B. Cost-Effectiveness to Calpine Construction Finance Company, L.P.

The Osprey Energy Center also represents the most cost-effective alternative available to Calpine Construction Finance Company, L.P. for meeting its contractual obligations to Seminole. Table II-19 shows the generating alternatives evaluated by Calpine. Screening analyses conducted for Calpine by R.W. Beck & Associates considered gas-fired and oil-fired combustion turbines, gas-fired and oil-fired combined cycle units, gas-fired steam generation units, conventional pulverized coal steam units, nuclear steam units, renewable energy, and integrated coal gasification combined cycle units.

Table II-20 presents the results of cost screening analyses for these various technologies. These evaluations clearly indicate that the best choice for Calpine and Peninsular Florida, considering economics, cost-effectiveness, reliability, long-term flexibility, and strategic factors is gas-fired combined cycle capacity. This is borne out by the fact that other Florida utilities are planning to add similar capacity, and by the fact that this type of unit is the technology of choice, for base-load applications, for the majority of new power plant capacity planned in the United States.

TABLE II-19

**OSPREY ENERGY CENTER
GENERATING ALTERNATIVES
EVALUATED BY CALPINE**

GENERATING TECHNOLOGIES CONSIDERED

COMBUSTION TURBINE-OIL

COMBUSTION TURBINE-GAS

COMBINED CYCLE-GAS

COMBINED CYCLE-OIL

PULVERIZED COAL STEAM

CONVENTIONAL GAS STEAM

COAL GASIFICATION-COMBINED CYCLE

NUCLEAR STEAM

RENEWABLE ENERGY

TABLE II-20

OSPREY ENERGY CENTER, CALPINE'S
COST-EFFECTIVENESS OF ALTERNATE
GENERATION TECHNOLOGIES

Comparison of Generation Alternatives

Technology Type	Levelized Life-Cycle Cost at Assumed Capacity Factor (2000 \$/MWh)		
	Peaking Operation (10% CF)	Intermediate Oper. (50% CF)	Base Load Oper. (90% CF)
Combined Cycle - Gas Fired	\$ 98 - 118	\$ 37 - 45	\$ 30 - 37
Combined Cycle - Oil Fired	111 - 134	50 - 61	43 - 53
Simple Cycle - Gas Fired	85 - 116	52 - 73	45 - 68
Simple Cycle - Oil Fired	110 - 144	71 - 101	64 - 97
Steam - Coal	200 - 220	52 - 59	35 - 42
Steam - Gas	124	53	45
Steam - Nuclear	283	61	36
IGCC Technology	196 - 245	49 - 61	32 - 40
Renewable Energy	121 - 1072	67 - 240	47 - 147

Source: R.W. Beck and Associates.

VI. CONSEQUENCES OF DELAY

Delaying the construction and operation of the Osprey Energy Center will adversely affect Seminole,¹¹ will adversely affect the reliability of the Peninsular Florida bulk power supply system, will adversely affect the availability in Peninsular Florida of adequate electricity at a reasonable cost, will adversely affect the cost-effectiveness of electricity generation in Peninsular Florida, and will adversely affect the environment of Florida.

A. Reliability Consequences of Delay.

The Osprey Energy Center will be a highly reliable and highly efficient gas-fired combined cycle power plant. It will use proven, state-of-the-art technology. The Project's high reliability--an Equivalent Availability Factor greater than 94 percent--assures its contributions to improving the reserve margins and reliability of the Peninsular Florida power supply system.

Tables II-7 and II-8 demonstrate that the Project will improve Peninsular Florida's summer and winter reserve margins by approximately 1.1 to 1.3 percent in each year beginning with the Project's in-service date in the second quarter of 2003 and continuing throughout the period covered in the FRCC 2000 Resource Plan.

The presence of this additional capacity -- 496 MW at summer peak, 578 MW at winter peak -- will improve reliability and reduce

¹¹Volume I of the Exhibits discusses the consequences of delaying the construction and operation of the Project to Seminole.

Peninsular Florida's exposure to outages due to extreme weather or unanticipated events such as major generation outages. The presence of this capacity will mean that, in an extreme cold weather event, approximately 578 MW (32° F. ambient conditions without duct-firing) of load will be served that would not otherwise be served. This means that the Project would enable Florida's retail-serving utilities, including Seminole's Member cooperatives, to maintain service to approximately 115,000 to 165,000 residential customers (or equivalent load), assuming a coincident peak demand of 3.5 kW to 5 kW per household) during such conditions. The Project's enhanced capacity from duct-firing and power augmentation would enable Florida retail-serving utilities, including Seminole's Member cooperatives, to maintain service to another 17,000 to 25,000 households.

If the Osprey Energy Center is not constructed and brought into commercial operation in 2003 as proposed, these reliability benefits will be lost, and Florida electric customers will be exposed to a greater probability of service interruption than they would experience if the Project were built as proposed by Calpine.

B. Power Supply Cost Consequences of Delay.

The Osprey Energy Center will be a highly reliable and highly efficient gas-fired combined cycle power plant using proven technology. The Project's high efficiency assures its contributions to reducing wholesale power supply costs in Peninsular Florida. If operated on an economic dispatch basis, the

Project would be expected to reduce the total cost of electricity generation in Peninsular Florida and will reduce power supply costs to those specific utilities, such as Seminole, that purchase the Project's output, thereby reducing the retail electric rates paid by those utilities' customers.

The presence of the Osprey Energy Center will reduce generation costs and will also suppress wholesale power prices, to at least some degree, in Peninsular Florida. This is the simple economic result of an increase in supply, i.e., an outward shift in the supply curve for bulk power. Even at nominal differences in the wholesale cost of power with and without the Project, the savings can be expected to be substantial. Moreover, the Project will provide real, tangible economic benefits--real reductions in the amount of primary fuels used to generate the same amounts of electricity--to Florida and to society in general by virtue of the Project's more efficient use of fuel.

If the Osprey Energy Center is not constructed and brought into commercial operation in 2003 as planned and sought, these economic benefits will be lost, and Florida electric customers will pay more for their power service than they would otherwise, and more for their power service than they have to.

C. Environmental Consequences of Delay.

The Osprey Energy Center will be a highly efficient state-of-the-art, natural gas-fired combined cycle electric generating facility. Because of its high efficiency and the use of clean-

burning natural gas as its fuel, the Project will bring net air emissions benefits to Florida. The Project will displace production from older, less efficient and less environmentally desirable power plants, e.g., less efficient oil-fired steam generating plants, less efficient gas-fired steam generating units, and combustion turbine plants fired by oil or gas. This displacement will result in substantial savings in primary fuel consumption for electricity generation (see Tables II-15.A and II-15.B), thus resulting in reduced air emissions from power production in Florida. See Table II-16.

The projections prepared for Calpine indicate that the Project's generation will generally displace production from older steam generating units fired by heavy fuel oil and natural gas, which generally have heat rates in the range of 10,000 to 11,000 Btu per kWh. Regardless of the type of primary fuel displaced, the Project's operations will result in significant fuel savings; because of its better heat rate, the Project uses approximately 35 percent less primary fuel energy (measured in Btus) than conventional steam generation units to produce the same amount of electricity.

In addition, under reasonable assumptions regarding the types of marginal fuels displaced by the Osprey Energy Center's operations, and reasonably assuming that the displaced oil-fired and gas-fired generation will not be sold outside Florida, the Project's operations are expected to improve the overall

environmental profile of electricity generation in Florida. When the Project's output displaces generation using heavy fuel oil, there should be significant reductions in emissions of SO₂, NO_x, and CO, and measurable reductions in CO₂ emissions. Even when the Project displaces gas-fired steam generation, there should be reductions in emissions due to the Project's better heat rate, newer turbine design, and emissions controls, resulting in lower emissions of NO_x, SO₂, and CO, and measurable reductions in CO₂ emissions. If the Project is not constructed and brought into commercial operation in 2003 as planned and sought, these environmental benefits will be lost, and pollution from electric generation in Florida will be significantly greater than it would otherwise be.

APPENDICES

APPENDIX II-A

FERC ORDER GRANTING MARKET-BASED RATE AUTHORITY
TO CALPINE CONSTRUCTION FINANCE COMPANY, L.P.

90 FERCT 61.164

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

February 23, 2000

Docket Nos. ER00-939-000
ER00-1049-000
ER00-1115-000

Skadden, Arps, Slate, Meagher & Flom LLP
ATTN: Victor A. Contract, Esq.
Attorney for Lake Worth Generation L.L.C.
1440 New York Avenue, N.W.
Washington, D.C. 20005

Dynegy Inc.
ATTN: Daniel A. King, Esq
Attorney for Calcasieu Power, LLC
Suite 510-A
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Davis Wright Tremaine LLP
ATTN: Steven F. Greenwald, Esq.
Attorney for Calpine Construction Finance Company, L.P.
Suite 600
One Embarcadero Center
San Francisco, California 94111-3834

Dear Sirs:

You submitted for filing with the Commission rate schedules under which applicants will engage in wholesale electric power and energy transactions at market-based rates. Your submittals, as modified below, comply with the Commission's requirements for market-based rates and are accepted for filing. They are designated and made effective as indicated in Appendix A to this order.

Calpine Construction Finance Company, L.P. (Calpine) requests authority to engage in the sale of certain ancillary services (listed in its proposed rate schedule) at market-based rates into the markets administered by the California ISO, the New England Power Pool markets administered by ISO New England, Inc., the New York Power Pool markets administered by the New York Independent System Operator, and into the

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Pennsylvania-New Jersey-Maryland Interchange Energy Market. ¹ We will grant this request. ²

Any waivers or authorizations requested by the applicants are granted to the extent specified in Appendix B to this order. Waiver of the prior or advance notice requirements, if requested, is granted to the extent specified in Appendix A. The applicants must comply with the reporting requirements and other requirements specified in Appendix B to this order. ³

The codes of conduct submitted by the applicants are accepted if consistent with Appendix C, which reflects requirements adopted in previous Commission orders. Any code of conduct inconsistent with Appendix C is rejected and in such case Appendix C has been designated as the applicant's code of conduct. The codes of conduct submitted by the applicants covered by this order are consistent with Appendix C.

Calcasieu Power, L.L.C.'s (Calcasieu) proposed rate schedule fails to include a prohibition on power sales to affiliates, absent prior Commission approval under section

¹Calpine also proposes to provide Replacement Reserve service at market-based rates. The Commission has determined that Replacement Reserve service is not an ancillary service, and the granting of market-based rate authority for sales of energy and capacity includes the granting of market-based rate authority for Replacement Reserve service. See, e.g., AES Redondo Beach, L.L.C., et al., 85 FERC ¶ 61,123 at 61,452, 61,464 (1998), order on reh'g, 87 FERC ¶ 61,208 (1999) (AES).

²See AES; New England Power Pool, 85 FERC ¶ 61,379 (1998), reh'g pending; Central Hudson Gas & Electric Corporation, et al., 86 FERC ¶ 61,062, order on reh'g, 88 FERC ¶ 61,138 (1999); Atlantic City Electric Company, et al., 86 FERC ¶ 61,248, clarified, 86 FERC ¶ 61,310 (1999).

³On May 27, 1999, the Commission issued an order in which it modified the reporting requirements for long-term transactions applicable to public utilities without ownership or control over generation or transmission facilities that are authorized to sell power at market-based rates (power marketers). Southern Company Services, et al., 87 FERC ¶ 61,214 (1999), reh'g pending (Southern). Specifically, with respect to any long-term transaction agreed to by a power marketer after 30 days from the date of issuance of a final order in the Southern case, the power marketer must file a service agreement with the Commission within 30 days after service commences, rather than reporting transactions thereunder in its quarterly transaction summaries.

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205 of the Federal Power Act (FPA), 16 U.S.C. § 824d (1994). Calcasieu is directed, within 30 days of the date of this order, to revise its rate schedule accordingly.

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (1999), an entity's filing of a timely notice of intervention or a timely, unopposed motion to intervene in a proceeding makes it a party to that proceeding.

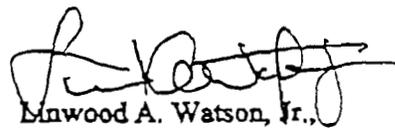
Should an applicant or any of its affiliates deny, delay, or require unreasonable terms, conditions, or rates for natural gas fuel or services to a potential electric competitor in bulk power markets, then that electric competitor may file a complaint with the Commission that could result in the applicant's or its affiliate's authority to sell power at market-based rates being suspended.⁴

Sales of accounts receivable are not dispositions of jurisdictional facilities and are not within the scope of section 203 of the FPA. To the extent an applicant seeks a case-specific finding on this or any related point, it may file a petition for a declaratory order with the Commission.

Calcasien and Lake Worth Generation L.L.C. (Lake Worth) seek Commission approval to reassign transmission capacity. We find their requests to be consistent with our requirements.

Lake Worth and Calcasieu must inform the Commission of the dates service commences.

By direction of the Commission.


Linwood A. Watson, Jr.,
Acting Secretary.

⁴See, e.g., Louisville Gas & Electric Co., 62 FERC ¶ 61,016 at 61,148 (1993).

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APPENDIX A

Applicants are hereby informed of the following rate schedule designations:

Lake Worth Generation L.L.C.

Docket No. ER00-939-000

Rate Schedule Designation

Effective Date: Date Service Commences

Designation

Description

FERC Electric Tariff,
Original Volume No. 1,
Original Sheet No. 1

Market-Based Rate Tariff

Calcasieu Power, LLC

Docket No. ER00-1049-000

Rate Schedule Designations

Effective Date: Date Service Commences

Designation

Description

FERC Electric Tariff,
Original Volume No. 1
Original Sheet Nos. 1-2

Market-Based Rate Tariff
and Code of Conduct

Calpine Construction Finance Company, L.P.

Docket No. ER00-1115-000

Rate Schedule Designation

Effective Date: March 14, 2000

Designation

Description

FERC Electric Tariff,
Original Volume No. 1
Original Sheet Nos. 1-2

Market-Based Rate Tariff

Docket No. ER00-939-000, et al.

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APPENDIX B

(1) If requested, waiver of Parts 41, 101, and 141 of the Commission's regulations, with the exception of 18 C.F.R. §§ 141.14, .15 (1999), is granted. Licensees remain obligated to file the Form No. 80 and the Annual Conveyance Report.

(2) Within 30 days of the date of this order, any person desiring to be heard or to protest the Commission's blanket approval of issuances of securities or assumptions of liabilities by those applicants who have sought such approval should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214.

(3) Absent a request to be heard within the period set forth in Paragraph (2) above, if the applicants have requested such authorization, the applicants are hereby authorized to issue securities and assume obligations or liabilities as guarantor, indorser, surety, or otherwise in respect of any security of another person; provided that such issue or assumption is for some lawful object within the corporate purposes of the applicants, compatible with the public interest, and reasonably necessary or appropriate for such purposes.

(4) If requested, until further order of this Commission, the full requirements of Part 45 of the Commission's regulations, except as noted below, are hereby waived with respect to any person now holding or who may hold an otherwise proscribed interlocking directorate involving the applicants. Any such person instead shall file a sworn application providing the following information:

- (a) full name and business address; and
- (b) all jurisdictional interlocks, identifying the affected companies and the positions held by that person.

(5) The Commission reserves the right to modify this order to require a further showing that neither the public nor private interests will be adversely affected by continued Commission approval of the applicants' issuances of securities or assumptions of liabilities, or by the continued holding of any affected interlocks.

(6) If requested, waiver of the provisions of Subparts B and C of Part 35 of the Commission's regulations, with the exception of sections 35.12(a), 35.13(b), 35.15 and 35.16, is granted for transactions under the rate schedules at issue here.

Docket No. ER00-939-000, et al.

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(7) (a) Applicants who own generating facilities may file umbrella service agreements for short-term power sales (one year or less) within 30 days of the date of commencement of short-term service, to be followed by quarterly transaction summaries of specific sales (including risk management transactions if they result in actual delivery of electricity). For long-term transactions (longer than one year), applicants must submit the actual individual service agreement for each transaction within 30 days of the date of commencement of service. To ensure the clear identification of filings, and in order to facilitate the orderly maintenance of the Commission's files and public access to documents, long-term transaction service agreements should not be filed together with short-term transaction summaries. For applicants who own, control or operate facilities used for the transmission of electric energy in interstate commerce, prices for generation, transmission and ancillary services must be stated separately in the quarterly reports and long-term service agreements.

(b) Applicants who do not own generating facilities must file quarterly reports detailing the purchase and sale transactions undertaken in the prior quarter (including risk management transactions if they result in actual delivery of electricity). Applicants who are power marketers should include in their quarterly reports only those risk management transactions that result in the actual delivery of electricity.

(8) The first quarterly report filed by an applicant in response to Paragraph (7) above will be due within 30 days of the end of the quarter in which the rate schedule is made effective.

(9) Each applicant must file an updated market analysis within three years of the date of this order, and every three years thereafter. The Commission reserves the right to require such an analysis at any time. The applicants must also inform the Commission promptly of any change in status that would reflect a departure from the characteristics the Commission has relied upon in approving market-based pricing. These include, but are not limited to: (a) ownership of generation or transmission supplies; or (b) affiliation with any entity not disclosed in the applicants' filing that owns generation or transmission facilities or inputs to electric power production, or affiliation with any entity that has a franchised service area. Alternatively, the applicants may elect to report such changes in conjunction with the updated market analysis required above. Each applicant must notify the Commission of which option it elects in the first quarterly report filed pursuant to Paragraph (7) above.

Docket No. ER00-939-000, et al.

-7-

APPENDIX C

[APPLICANT]
SUPPLEMENT NO. TO RATE SCHEDULE NO. .STATEMENT OF POLICY
AND CODE OF CONDUCT
WITH RESPECT TO THE RELATIONSHIP BETWEEN
[POWER MARKETER] AND [PUBLIC UTILITY]Marketing of Power

1. To the maximum extent practical, the employees of [Power Marketer] will operate separately from the employees of [Public Utility].
2. All market information shared between [Public Utility] and [Power Marketer] will be disclosed simultaneously to the public. This includes all market information, including but not limited to, any communication concerning power or transmission business, present or future, positive or negative, concrete or potential. Shared employees in a support role are not bound by this provision, but they may not serve as an improper conduit of information to non-support personnel.
3. Sales of any non-power goods or services by [Public Utility], including sales made through its affiliated EWG's or QF's, to [Power Marketer] will be at the higher of cost or market price.
4. Sales of any non-power goods or services by the [Power Marketer] to [Public Utility] will not be at a price above market.

Brokering of Power

To the extent [Power Marketer] seeks to broker power for [Public Utility]:

5. [Power Marketer] will offer [Public Utility's] power first.
6. The arrangement between [Power Marketer] and [Public Utility] is non-exclusive.
7. [Power Marketer] will not accept any fees in conjunction with any Brokering services it performs for [Public Utility].

APPENDIX II-B

PRECEDENT AGREEMENT BETWEEN CALPINE EAST FUELS, L.L.C.
AND
GULFSTREAM NATURAL GAS SYSTEM, L.L.C.

PRECEDENT AGREEMENT

This Precedent Agreement ("Agreement"), is made and entered into as of this 8th day of October, 1999, by and between Calpine East Fuels, 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 and southeastern Mississippi 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 Polk County, Florida ("Plant") which Shipper plans to have in-service on or before _____ and 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. Within a reasonable time following execution and delivery of this Agreement by Shipper, Gulfstream will proceed with the filing and prosecution of such application(s) with respect to the Gulfstream Project. To facilitate Gulfstream's ability to develop the Gulfstream Project, Shipper will refrain from 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. 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 to support and cooperate in 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, at the sole discretion of Shipper, the filing of an intervention or other pleading in support of the Gulfstream Project. 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 information in a timely manner to enable Gulfstream to respond within the time required by

FERC; provided that Gulfstream will use reasonable best efforts to obtain a protective order from the FERC for any commercially sensitive or confidential information identified by Shipper.

3. Shipper's Regulatory Authorizations.

Subject to the other terms and conditions of this Agreement, Shipper shall 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 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; provided, however, that Shipper shall prosecute such applications (and any supplements and amendments thereto or court appeals) in a timely manner and in no event shall Shipper take any action that would obstruct, interfere with or delay the receipt by Gulfstream of the authorizations described in Paragraph 2 above. 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. Subject to its receipt of all such necessary authorizations and subject to

the 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), Shipper agrees 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.

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 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 _____ months prior to such date (the "Plant In-Service Date"); provided that Shipper shall give Gulfstream timely written notice thereafter of any change(s) to the Plant In-Service Date which change(s) shall not delay the Plant In-Service Date by more than _____ months and, if such written notice is provided, the date specified therein shall become

the new Plant In-Service Date; and further provided that the Plant In-Service Date shall be no later than .

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. 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. Nothing in this Subparagraph 4(b) shall modify or otherwise change Shipper's right, as set forth in Subparagraph 5(b), to terminate this Agreement or the Service Agreement, as the case may be, if Gulfstream does not commence service on or before

(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 be the later to occur of (1) June 1, 2002 or (2) the Plant In-Service Date (the "Commencement Date"). As of the 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.

(d) Test Gas

5. Construction of Facilities.

(a) Design and Construction. Upon execution and delivery of this Agreement by Shipper, 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, and subject to the continuing commitments of Shipper and all of the other shippers who have executed precedent agreements for transportation service(s) to be provided utilizing the Gulfstream Project, 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. 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.

(b) Limitation of Liability. Gulfstream will neither be liable to Shipper nor will this Agreement or the Service Agreement be subject to cancellation (except as hereinafter provided) if 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; provided, however, 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. If Gulfstream is unable to commence the transportation service(s) for Shipper as contemplated herein by the Plant In-Service Date which shall not be earlier than . Shipper, in its sole discretion, will have the option not to commence the transportation service(s) until and, in that event, applicable charges under the Service Agreement will not commence until .

If Gulfstream is unable to commence the transportation service(s) for Shipper by four (4) months prior to the Plant In Service Date, Shipper, in its sole discretion, will have the option to terminate this Agreement and will have no further liability to Gulfstream.

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. Shippers electing a negotiated rate agree to pay such rate without regard to any action or determination of the FERC with respect to Gulfstream's FERC-approved, filed rates. Shippers electing recourse rates agree to pay such rates, subject to changes determined by the 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.

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 corporate 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 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 5(b) or Paragraph 9(a) above, then this Agreement will terminate by its express terms on the Commencement Date, 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 Gulfstream from pledging, mortgaging or assigning its rights as security for its indebtedness and Gulfstream may assign 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. Subject

to the provision of adequate credit support in Gulfstream's and, if required, Gulfstream's Lenders, reasonable judgment, Shipper may assign this Agreement to any direct or indirect subsidiary or affiliate of Shipper. Shipper may also assign this Agreement as security for financing to any person or persons providing debt or equity financing to Shipper to provide funds for the development, design, construction and operation of the Plant.

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:

Calpine East Fuels, L.L.C.
Michael D. Petit
Director of Fuels Management - Eastern Region

The Pilot House, 2nd Floor
Lewis Wharf
Boston, Massachusetts 02110
Telephone: 617-723-7200 ext. 106
Facsimile: 617-723-7635

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 Shipper or any of its affiliates) or require any Member of Gulfstream or any of its affiliates (or Shipper or any of its affiliates) to undertake any obligation in connection with this Agreement. Accordingly, each Party waives its rights to proceed against, in the case of Shipper, the Members of Gulfstream or any of their respective affiliates or in the case of Gulfstream, any of Shipper's 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. As used in this

Paragraph 13, the term "affiliates" means with respect to a Party, a person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with such Party.

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 the terms and conditions of this Agreement, or any confidential or proprietary information, whether written or verbal, disclosed by either Party at any time in connection with the transaction contemplated herein and clearly designated at the time of disclosure as confidential or proprietary, without the other Party's prior written consent to such disclosure. 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 every reasonable effort to maintain the confidentiality of this Agreement, including, without limitation, seeking a protective order). The provisions of this Paragraph 18 shall not apply to any bank, lender or financial institution providing funds to Gulfstream in connection with the financing of the Gulfstream Project or to Shipper in connection with the financing of Shipper's Plant (in which case, the Party making the disclosure shall advise the other

Party prior to such disclosure and, if requested by the other Party, shall use every reasonable effort to maintain the confidentiality of this Agreement). 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.

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. Babiuk 5/9
Name: Stanley A. Babiuk
Title: Senior Vice President

CALPINE EAST FUELS, L.L.C.

By: Robert K. Alff
Name: Robert K. Alff
Title: Vice President
East Coast Region MP

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 Calpine East Fuels, 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:

This Agreement shall be effective on the Plant In-Service Date.

Transporter will stand ready to provide firm transportation service(s) to Shipper pursuant to the provisions of this Agreement, and Shipper will pay to Transporter all applicable charges provided for in this Agreement. If Gulfstream is unable to commence the transportation service(s) for Shipper as contemplated herein by the Plant In-Service Date which shall not be earlier than November 1, 2002, Shipper, in its sole discretion, will have the option not to commence the transportation service(s) until November 1, 2003, and, in that event, applicable charges under the Service Agreement will not commence until November 1, 2003.

1. This Agreement shall remain in force and effect for a primary term of 20 years

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:

Calpine East Fuels, L.L.C.
Michael D. Petit
Director of Fuels Management - Eastern Region
The Pilot House, 2nd Floor
Lewis Wharf
Boston, Massachusetts 02110
Telephone: 617-723-7200 ext 106
Facsimile: 616-723-7635

INVOICES AND STATEMENTS:

Same as above

NOMINATIONS:

Same as above

8. FURTHER AGREEMENT:

This Agreement shall be binding upon Transporter, 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 Transporter's lenders if required, and any necessary governmental and regulatory authorizations. Nothing contained herein shall prevent Transporter from pledging, mortgaging or assigning its rights as security for its indebtedness and Transporter may assign to the pledgee or mortgagee (or to a trustee for a holder of such indebtedness) any monies due or to become due under this Agreement. Subject to the provision of adequate credit support in Transporter's and, if required, Transporter's Lenders, reasonable judgment, Shipper may assign this Agreement to any direct or indirect subsidiary or affiliate of Shipper. Shipper may also assign this Agreement as security for financing to any person or persons providing debt or equity financing to Shipper to provide funds for the development, design, construction and operation of the Plant (as such term is defined in the Precedent Agreement).

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.

Calpine East Fuels, L.L.C. SHIPPER: _____

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

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT A

FORM OF AGREEMENT
Transporter's Rate Schedule FTS
(Continued)

BETWEEN GULFSTREAM NATURAL GAS SYSTEM AND CALPINE EAST FUELS,
L.L.C.

CONTRACT NUMBERS: _____

CONTRACTED CAPACITY: _____ Dth/d

ORIGINAL CONTRACT DATE: _____

AMENDMENT DATE: _____

Primary Delivery Points: Shipper's _____
_____ when constructed and placed in-service or
other plants that Calpine or its affiliates own or operate along
the primary path.

Total Delivery Point MDQ: _____ Dth/d

MHQ at Primary Delivery Point: _____ of MDQ . Shipper may vary the flow rate at any of
the Primary Delivery Points from _____ per hour to _____ Dth per hour, as long as the
cumulative hourly flow rate at _____ Primary Delivery Points does not exceed (1)
Dth per hour and (2) the quantities nominated and scheduled for the day under this
Agreement. In addition, the cumulative hourly flow rate under _____ the firm Service
Agreements between Shipper and Transporter may not exceed _____ per hour at _____

Minimum Delivery Pressure: _____ 650 psig

<u>Contract</u> <u>Number/</u> <u>Primary</u> <u>Route</u>	<u>Primary</u> <u>Receipt</u> <u>Point</u>	<u>Primary</u> <u>Receipt</u> <u>Point</u> <u>MDQ</u>
	(1)	

(1) All receipt points added in the Mobile Bay, Alabama area will be available to
Shipper. Gulfstream will use reasonable best efforts to obtain interconnections with
DIGS Process Plant, Mobil's Maryann Plant, Williams Process Plant, Mobile Bay Pipeline,
Destin Pipeline and WGP-Transco.

EXHIBIT B

STATEMENT OF NEGOTIATED RATES

<u>Shipper</u>	<u>Contract Number</u>	<u>Contract Term</u> 20yrs	<u>Rate Schedule</u>	<u>Reservation Charge</u>	<u>Commodity Charge</u>	<u>Receipt Points</u> See	<u>Delivery Points</u> See	<u>Quantity</u>	
						Ex .A	Ex.A	Ex.A	Dth/d

Clean Energy For Florida's Future



July 21, 2000

Mr. Michael D. Petit
Director of Fuels Management
Calpine Eastern
The Pilot House, 2nd Floor
Lewis Wharf
Boston, MA 02110

Dear Mr. Petit:

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.

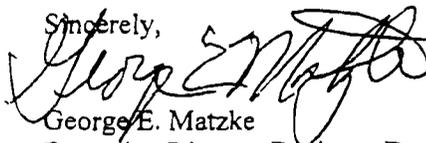
As required by the FERC, the filing includes a comprehensive environmental report that reflects extensive research and field activities relating to Gulfstream's route. This includes surveys for endangered species, cultural resources, wetlands, and other land features. Gulfstream is determined to develop a project that respects, protects, and where possible, enhances 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 the landowners, government agencies, environmental groups and others with respect to the best possible route for the pipeline. Gulfstream narrowed the route from an original study corridor of ten miles, to a three mile study corridor, and later, to a 1000 foot study corridor. The corridor was finally narrowed to 300 feet for the filing and has been further refined. Since the filing Gulfstream has worked with affected landowners and communities on refining the route. The original route has been slightly modified to accommodate the wishes of those affected. 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.

Gulfstream obtained a preliminary determination, on its application to build the Gulfstream project, from the FERC on April 28, 2000. The preliminary determination covers all non-environmental aspects of Gulfstream's application, such as rates and other business issues. A draft environmental impact statement is expected to be issued by FERC staff this summer.

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 (813) 288-1811.

Sincerely,


George E. Matzke
Executive Director Business Development

Gulfstream Natural Gas System, L. L. C.

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

APPENDIX II-C

DESCRIPTION OF PROMOD IV®

DESCRIPTION OF PROMOD IV®

The Projected operations of the Osprey Energy Center in the Peninsular Florida power supply system were analyzed using the PROMOD IV® computer model. PROMOD IV® is a widely known and widely used probabilistic computer model that simulates the operations of electric power systems. PROMOD IV® is primarily used as a production costing model and can also be used to evaluate electric system reliability. PROMOD IV® can be used to prepare utility fuel budget forecasts, evaluate the economics and operations of proposed generating capacity additions, project utility operating costs, estimate the prices of firm power and energy in defined markets, project hourly marginal energy costs, and calculate avoided energy and capacity costs.

The inputs to PROMOD IV® include generating unit data for existing and planned power plants in a defined power supply system (in this case Peninsular Florida), fuel consumption and fuel cost data, load and other utility system data, and data regarding transactions within the system. The primary outputs are individual utility or system production costs, generation by unit, fuel usage, other unit characteristics, and reliability information. PROMOD IV® utilizes computationally efficient algorithms that yield results identical to those that would be produced with direct specification of values for all availability states of all units in a power supply system.