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Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Ten-Year Site Plan for Calpine Construction Finance Company, L.P.

Dear Ms. Bayo:

As required by Commission Rule 25-22.071(1), F.A.C., enclosed for filing are twenty-five (25) copies of the 2000-2009 Ten-Year Site Plan of Calpine Construction Finance Company, L.P. I will appreciate your confirming receipt of these materials by stamping the attached filing copy.

As always, thanks to you and your Staff for your considerate and professional assistance.

If you have any questions, please do not hesitate to give me a call.

Cordially yours,

John T. LaVia, III

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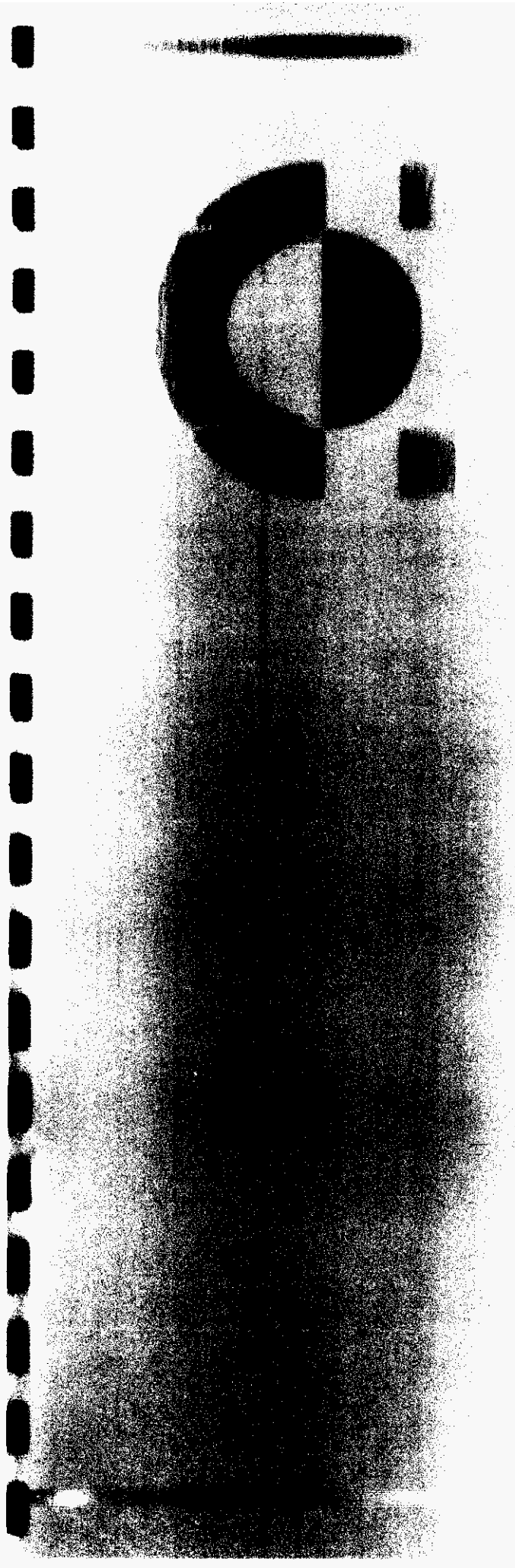

CALPINE

CONSTRUCTION FINANCE COMPANY, L.P.

Ten Year Site Plan

2000-2009

CALPINE CONSTRUCTION FINANCE COMPANY, L.P.

TEN-YEAR SITE PLAN
FOR ELECTRICAL GENERATING FACILITIES
AND ASSOCIATED TRANSMISSION LINES,
2000-2009

Submitted to:

STATE OF FLORIDA
PUBLIC SERVICE COMMISSION

2000

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EXECUTIVE SUMMARY

Pursuant to Rule 25-22.071, Florida Administrative Code, ("F.A.C.") Calpine Construction Finance Company, L.P. ("Calpine"), an electric utility under Section 366.02(2), Florida Statutes, hereby submits its Ten-Year Site Plan for Electrical Generating Facilities and Associated Transmission Lines, 2000-2009.

Calpine will develop, own, and operate two natural gas-fired combined cycle generating plants in Florida. The two electrical power plants are the Osprey Energy Center ("Osprey Project") and the Blue Heron Energy Center ("Blue Heron Project"). Calpine has identified additional potential power plant sites which may be located in central Florida and southwest Florida, respectively. (All four projects are collectively referred to as the "Calpine Projects".) Based on Calpine's current resource needs, the company is developing the Osprey Energy Center, a 527 megawatt ("MW")(manufacturer's guarantee at average ambient conditions) natural gas-fired combined cycle generating unit to be located in the City of Auburndale in Polk County, Florida, and the Blue Heron Energy Center, a 1,054 MW (manufacturer's guarantee at average ambient conditions) natural gas-fired combined cycle generating unit to be located in Indian River County, Florida. Based upon Calpine's future resource needs, the company has identified two potential sites, as defined in Rule 25-22.070, F.A.C., for future generation planning purposes. Calpine tentatively plans to develop a 500 MW (nominal) natural gas-fired combined cycle generating plant at each of the two potential sites, one in central Florida

and the other in southwest Florida.

Natural gas will be provided to the Osprey Project and Blue Heron Project by Gulfstream Natural Gas System, L.L.C. ("Gulfstream"), which is developing a new trans-Florida natural gas pipeline to be permitted and constructed by Gulfstream. The Osprey Project and Blue Heron Project will be significant customers of this second, major, trans-Florida natural gas pipeline. Natural gas will be provided to Gulfstream receipt points in the Mobile Bay area by natural gas producers or marketing companies (or both) for delivery on a firm transportation basis through the Gulfstream pipeline to the Osprey Project and the Blue Heron Project. Calpine will procure the needed gas supplies for its Projects through an optimized combination of short-term contract purchases, long-term contract purchases, and spot market purchases.

Calpine's planned combined cycle generating units utilize high efficiency generation technology with high reliability and availability rates. In addition, the Calpine Projects will have environmentally responsible profiles with the use of clean-burning natural gas, good combustion practice, and additional emissions control technologies that will minimize sulfur dioxide, nitrogen oxides, carbon monoxide, and volatile organic compound emissions. The Calpine Projects' exceptionally clean technology will protect against risks associated with future changes in environmental regulations while improving the overall environmental profile of electricity generation in Florida.

Power produced from the Calpine Projects will be sold in the

wholesale market to other utilities and power marketers for use in Peninsular Florida. Calpine expects that virtually all of the sales from the Calpine Projects will be made to other utilities and power marketers for use in Peninsular Florida--that is, within the Florida Reliability Coordinating Council region. As such, the Calpine Projects will significantly and substantially enhance Peninsular Florida's generation reserve margins.

CHAPTER 1

CALPINE CONSTRUCTION FINANCE COMPANY, L.P.

Calpine Construction Finance Company, L.P., a Delaware limited partnership, will be the developer and owner of the Calpine Projects. As the developer and owner of the Calpine Projects, Calpine either is currently or will be arranging for the permitting, engineering, procurement and construction of the Calpine Projects and for any other services necessary to bring the Calpine Projects into commercial operation.

Calpine is an "electric utility" within the meaning of Section 366.02(2), Florida Statutes. Calpine is also a "public utility" subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC") under Section 201 of the Federal Power Act. 16 USCA §824(b)(1) & (e) (1994). By order issued on February 23, 2000, the FERC approved Calpine's Rate Schedule No. 1, which permits Calpine to enter into negotiated wholesale power sales agreements with willing purchasers. Calpine Construction Finance Company, L.P., 90 FERC ¶61,164.

CHAPTER 2

DESCRIPTION OF EXISTING FACILITIES

Calpine Construction Finance Company, L.P. has no existing electric generation or transmission facilities located in Florida. (See Schedule 1.) However, Calpine Corporation, Calpine's parent company, has a 50 percent ownership interest in the Auburndale Power Plant, a 150 MW natural gas and oil-fired qualifying cogeneration facility located in the City of Auburndale, Polk County, Florida.

CHAPTER 3

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

At the time of filing this Ten-Year Site Plan, preliminary electric power demand and energy analyses have been completed for the Osprey Project and the Blue Heron Project.

Over the planning horizon covered in this Ten-Year Site Plan, the Osprey Project is projected to operate approximately 8,275 hours per year, with projected generation of approximately 4,300,000 megawatt-hours ("MWH") per year, reflecting a total capacity factor of approximately 94.5 percent.

Over the planning horizon covered in this Ten-Year Site Plan, the Blue Heron Project is projected to operate approximately 8,275 hours per year, with projected generation of approximately 8,600,000 MWH per year, reflecting a total capacity factor of approximately 94.5 percent.

As noted elsewhere in this Ten-Year Site Plan, all of the electricity sales from the Osprey and Blue Heron Projects will be made at wholesale to other utilities. Thus, Schedules 2.1 and 2.2, which require data for retail power sales, are not applicable. Schedule 2.3 presents the total forecasted number of wholesale customers and sales for resale. Schedules 3.1, 3.2, and 3.3 present total forecasted summer peak demand, winter peak demand, and net energy for load for both the Osprey Project and the Blue Heron Project. Because of the high efficiency and relatively low-cost position in the overall supply stack for Peninsular Florida, Calpine anticipates that the electricity sales from the Osprey

Project and Blue Heron Project, at the times of the summer and winter peaks (both the system peak experienced by Calpine and the Peninsular Florida coincident system peak), will be at the respective Projects' full rated output, i.e., 486 MW at the time of the summer peak and 585 MW at the time of the winter peak for the Osprey Project, and 972 MW at the time of the summer peak and 1170 MW at the time of the winter peak for the Blue Heron Project. (These projections do not include the additional output that may be available from duct-firing and power augmentation.)

Schedule 4 is not applicable to Calpine because it calls for retail sales and peak demand data.

Schedules 5, 6.1, and 6.2 present information regarding fuel requirements and energy sources for Calpine. Schedules 7.1 and 7.2 present information regarding forecasts of capacity, demand, and scheduled maintenance at the time of summer and winter peaks. Due to their high efficiency and relative low-cost position within the available generation resources in Peninsular Florida, Calpine expects that in both summer and winter peak conditions, all of the capacity of both the Osprey Project and Blue Heron Project will be committed on a firm basis to other Peninsular Florida utilities, even if only on a week-ahead, day-ahead, or hourly basis. Accordingly, Calpine forecasts that its firm summer and winter peak demands will in fact be the sum of the full rated outputs of the Osprey Project and the Blue Heron Project, for each respective season.

CHAPTER 4

FORECASTING METHODS AND PROCEDURES

Analyses of the projected operations of the Osprey Energy Center and the Blue Heron Energy Center were prepared using the PROMOD IV® computer model. PROMOD IV® is a 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. It can be used to prepare utility fuel budget forecasts, evaluate the economics and operations of proposed 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, 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.

CHAPTER 5

FORECAST OF FACILITIES REQUIREMENTS

Schedules 7.1 and 7.2 present information regarding forecasts of capacity, demand, and scheduled maintenance at the time of summer and winter peaks. Because of their high efficiency and relatively low-cost position within the available generation resources in Peninsular Florida, Calpine expects that in both summer and winter peak conditions, all of the capacity of the Calpine Projects will be committed on a firm basis to other Peninsular Florida utilities, even if only on a day-ahead or hourly basis. Accordingly, Calpine projects that its firm summer and winter peak demands will in fact be the full rated output of the Projects for each respective season. Calpine believes that this information will be representative of Calpine's peak demands at the time that peak seasonal demands are imposed on it and also at the time of the Peninsular Florida summer and winter coincident peaks. Schedule 8 presents information regarding planned and prospective generating facility additions and changes.

I. Osprey Energy Center

The Osprey Energy Center will be a natural gas-fired, combined cycle electrical power plant located in the City of Auburndale, Polk County, Florida. Expected to achieve commercial in-service status in the first quarter of 2003, the Osprey Energy Center will supply capacity and associated energy for sale, at wholesale, to Peninsular Florida utilities.

A. Description of the Osprey Energy Center

The Osprey Energy Center will be a natural gas-fired, combined cycle electrical power plant. The Osprey Project will consist of two advanced technology Siemens-Westinghouse Model 501F combustion turbine generators, two heat recovery steam generators that include the capability to duct-fire, and one steam turbine generator. The Osprey Project will have a heat rate of approximately 6,800 Btu per kWh at average ambient conditions based on the Higher Heating Value ("HHV") of natural gas. The Osprey Project's process and make-up water to the cooling towers will be supplied by reclaimed water from the City of Auburndale and on-site groundwater wells.

Calpine's current projections indicate that the Osprey Project will operate approximately 8,275 hours per year, with projected generation of approximately 4,300,000 MWH per year, all of which will be sold at wholesale to other utilities.

B. Osprey Energy Center Site and Location

The Osprey Energy Center site ("Osprey Site") will be located in the City of Auburndale, Polk County, Florida. (See Figure 2.) The Osprey Site consists of approximately 19.5 acres situated approximately 1.5 miles south of downtown Auburndale and approximately 37 miles east of Tampa Bay. The Osprey Site was formerly a citrus grove and is currently unused. Land uses adjacent to the Osprey Site include the TECO Recker Substation and existing TECO 230 kV transmission line, the existing Auburndale Power Plant, a 150 MW cogeneration plant, the Auburndale Memorial

Park cemetery, commercial and industrial businesses, and two small residential enclaves. (See Figure 3.) The Osprey 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.

C. Osprey Energy Center Directly Associated Transmission Facilities

The Osprey Energy Center will be electrically interconnected to the Peninsular Florida transmission grid at the TECO Recker Substation and associated 230 kV transmission line located adjacent to the southeast boundary of the Osprey Site. (See Figure 1.) Transmission system impact studies prepared for Calpine included load flow analyses, short circuit studies, and transient stability studies. The transmission system impact studies indicate that under normal operating conditions, i.e., with all facilities in service, the Osprey Project will not materially burden the transmission system or violate any transmission constraints.

D. Osprey Energy Center Gas Supply Arrangements and Facilities

A firm delivered supply of natural gas will be provided to the Osprey Project via firm transportation service through the Gulfstream pipeline. The natural gas pipeline is planned to traverse the southern portion of Polk County. Gas will be supplied via a 16-inch lateral diameter pipeline that will connect the Osprey Project to the Gulfstream pipeline. Natural gas transportation will be pursuant to a Precedent Agreement between Calpine and Gulfstream. Pursuant to the Precedent Agreement,

Gulfstream has committed to provide firm gas transportation service to operate the Osprey Project for a term of 20 years with renewal provisions beyond the initial term.

E. Osprey Energy Center Water Supply Arrangements and Associated Facilities

Reclaimed water will be provided to the Project from the City of Auburndale's Allred Municipal Wastewater Treatment Plant. Reclaimed water pipelines will be required by the Osprey Project to intertie with the City of Auburndale wastewater treatment facilities. The pipelines to the Allred Municipal Wastewater Treatment Plant will be approximately one mile in length and will be constructed in existing public right-of-way. Additionally, other minor pipeline modifications will be made to enhance discharge capability. The water and wastewater pipelines will be permitted separately by the City of Auburndale and paid for by Calpine.

F. Osprey Energy Center Regulatory and Permitting Schedules

Calpine has filed a complete site certification application ("SCA") for the Osprey Energy Center with the Florida Department of Environmental Protection. The land use and site certification hearings are currently planned for the second half of 2000. However, the Osprey Project certification activities, including the filing of Calpine's petition for determination of need, are presently being held in abeyance while Calpine evaluates the ramifications of the Florida Supreme Court's recent reversal of the Commission's Order granting its determination of need for the New

Smyrna Beach Power Project.

II. Blue Heron Energy Center

The Blue Heron Energy Center will be a natural gas-fired, combined cycle electrical power plant located west of Vero Beach in Indian River County. Expected to achieve commercial in-service status in the second quarter of 2003, the Blue Heron Project will supply capacity and energy for sale, at wholesale, to Peninsular Florida utilities.

A. Description of the Blue Heron Energy Center

The Blue Heron Energy Center will be a natural gas-fired, combined cycle electrical power plant. The Blue Heron Project will consist of four advanced technology Siemens-Westinghouse Model 501F combustion turbine generators, four heat recovery steam generators that include the capability to duct-fire, and two steam turbine generators. The Blue Heron Project is anticipated to have a heat rate of approximately 6,800 Btu per kWh at average ambient conditions based on the HHV of natural gas. The source of the Blue Heron Project's process and make-up water to the cooling towers is currently under development. It is anticipated that the water will be supplied by Indian River County and the Indian River Farms Water Control District with back-up water supplied from on-site wells.

Calpine's current projections indicate that the Blue Heron Project will operate approximately 8,275 hours per year, with projected generation of approximately 8,600,000 MWH per year, all of which will be sold at wholesale to other Peninsular Florida utilities.

B. Blue Heron Energy Center Site and Location

The Blue Heron Project site ("Blue Heron Site") will be located west of the City of Vero Beach in Indian River County, Florida. (See Figure 4.) The Blue Heron Site consists of approximately 47 acres situated approximately 4.5 miles southwest of Vero Beach, east of Interstate 95. The Blue Heron Site is primarily undeveloped and is currently unused. Land uses adjacent to the Blue Heron Site include the OceanSpray spray field, Interstate 95, agricultural uses, a correctional institution, a landfill and low density residential areas. (See Figure 5.) The Blue Heron Project will be planned and designed to be consistent with the Indian River County zoning category and comprehensive plan future land use designation applicable to utility uses.

C. Blue Heron Energy Center Directly Associated Transmission Facilities

The Blue Heron Project is tentatively planned to be electrically tied to the Peninsular Florida transmission grid by interconnecting to two of Florida Power & Light Company's ("FPL") 230 kV transmission lines, specifically those running from Malabar to Midway and from Malabar to Emerson. Preliminary fatal flaw load flow studies have been prepared for the Blue Heron Project for the summer peak of 2004. These preliminary load flow studies indicate that some upgrade of transmission facilities (probably increasing the gauge of conductor on one or more segments of transmission line) may be needed to accommodate power deliveries from the Blue Heron Project to other utilities in Peninsular Florida. The actual

upgrades will be paid for by Calpine pursuant to FPL's open access transmission tariff.

D. Blue Heron Energy Center Gas Supply Arrangements and Facilities

A firm delivered supply of natural gas will be provided to the Blue Heron Site through the Gulfstream pipeline. The natural gas pipeline is planned to run north from St. Lucie County to the Blue Heron Site. Gas will be supplied through an approximately 15-mile, 16-inch lateral pipeline that will connect the Blue Heron Project to the Gulfstream pipeline. Natural gas transportation will be pursuant to a Precedent Agreement between Calpine and Gulfstream. Pursuant to the Precedent Agreement, Gulfstream has committed to provide firm gas transportation service to operate the Blue Heron Project for a term of 20 years with renewal provisions beyond the initial term.

E. Blue Heron Energy Center Water Supply Arrangements and Associated Facilities

It is anticipated that stormwater and reuse water will be provided to the Blue Heron Project from the Indian River Farms Water Control District and Indian River County, respectively. Water pipelines will be required by the Blue Heron Project to interconnect with the Indian River Farms Water Control District and Indian River County water source locations. The design of the interconnection locations and facilities is currently under way.

F. Blue Heron Energy Center Regulatory and Permitting Schedules

Calpine is currently preparing the site certification

application ("SCA") for the Blue Heron Project. It is anticipated that the SCA will be filed in the third quarter of 2000. The land use and site certification hearings are currently planned for 2001. However, the Blue Heron Project certification activities, including the filing of Calpine's petition for determination of need, are presently being held in abeyance while Calpine evaluates the ramifications of the Florida Supreme Court's recent reversal of the Commission's Order granting its determination of need for the New Smyrna Beach Power Project.

III. Potential Sites

A. Central Florida Site

Based upon its future resource needs, Calpine has identified a potential site in Central Florida ("Central Florida Project") for a nominal 500 MW natural gas-fired combined cycle generating unit.

The Central Florida Project site was identified as a potential site due to its close proximity to transmission resources and natural gas supply, and the industrial/reclaimed phosphate mining nature of the land. The potential site is primarily agricultural and surrounded by industrial uses. Due to the preliminary and confidential nature of the Central Florida Project, Calpine is unable to disclose the location of the Central Florida Project site. However, general information relating to the Central Florida Project may be disclosed at this time.

The power plant will consist of two Siemens-Westinghouse Model 501F advanced technology dry, low-NO_x combustion turbine generators, two matched heat recovery steam generators that may

include duct-firing capability, and one steam turbine generator that has the ability to utilize steam for power augmentation to increase output. The combustion turbines are extremely efficient and extremely reliable. In addition, the gas-fired combined cycle technology is exceptionally clean and will contribute to improving the overall environmental profile of electricity generation in Florida.

B. Southwest Florida Site

Based upon its future resource needs, Calpine has identified an additional potential site in Southwest Florida ("Southwest Florida Project") for a nominal 500 MW natural gas-fired combined cycle generating unit.

The Southwest Florida Project site was identified due to its close proximity to a major load center and transmission resources. The Southwest Florida Project site is primarily agricultural. Due to the preliminary and confidential nature of the Southwest Florida Project, Calpine is unable to disclose the location of the Southwest Florida Project. However, general information relating to the Southwest Florida Project may be disclosed at this time.

The power plant will consist of two Siemens-Westinghouse Model 501F advanced technology dry, low-NO_x combustion turbine generators, two matched heat recovery steam generators that may include duct-firing capability, and one steam turbine generator that has the ability to utilize steam for power augmentation to increase output. The combustion turbines are extremely efficient and extremely reliable. In addition, the gas-fired combined cycle

technology is exceptionally clean and will contribute to improving the overall environmental profile of electricity generation in Florida.

CHAPTER 6

OTHER PLANNING ASSUMPTIONS AND INFORMATION

This chapter addresses the twelve discussion items identified as other planning assumptions and information in Form FPSC/EAG 43.

Modeling Transmission Constraints

Transmission constraints and contingencies for the Osprey Energy Center were modeled using the General Electric MAPPS transmission system modeling software. The transmission system impact study for the Osprey Project included load flow analyses, transient stability analyses, and short circuit analyses. The transmission system impact studies indicate that, with certain planned 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. The studies also indicate that, under normal operating conditions, that is, with all facilities in service, the Osprey Project will not materially burden the transmission system or violate any transmission constraints or contingencies in Peninsular Florida. The planned transmission upgrades include: (1) upgrading the conductor (to accommodate more power) and poles (to accommodate the heavier conductor) on a 1.4 mile section of the Recker to Crews Lake transmission line; (2) upgrading all conductor on the 6.3-mile Crews Lake to Pebbledale line, and upgrading the poles on approximately 3.2 miles of that line; and (3) upgrading the transformation capacity at TECO's Ariana Substation. The Ariana

upgrades, which will be negotiated and implemented pursuant to TECO's transmission tariffs, may include adding cooling capacity to the existing 150 MVA transformer at the substation, adding another 150 MVA transformer, or other measures.

The contingency lists for both the power flow and stability analyses were developed in compliance with the FRCC Planning Principles and Guides, dated September 25, 1996. The primary data for the transmission system impact study were obtained from the FRCC 1999 series summer and winter power flow cases for the year 2003, which were downloaded from the FERC Form 715 data site.

Transmission constraints and contingencies for the Blue Heron Energy Center as well and the potential sites referenced herein have not been modeled.

Analysis of Overall Project Economics

Calpine's Ten-Year Site Plan provides for the construction and operation of the Osprey Energy Center and Blue Heron Energy Center as well as consideration of two potential sites. At this time, the overall economics of the Osprey Project and Blue Heron Project has been evaluated by estimating how much energy the Projects will generate within the Peninsular Florida power supply system based on economic dispatch modeling using the PROMOD IV® computer model. Because the Osprey Project and Blue Heron Project are significantly cost-effective both operationally and in terms of the Projects' installed cost, no sensitivity cases with respect to variations in the load forecast were analyzed for this Ten-Year Site Plan.

Derivation of Base Case Fuel Price Forecast

The projected operations of the Osprey Project and Blue Heron Project reported in this Ten-Year Site Plan were based on representative fuel prices paid historically for electric fuels in Florida.

Sensitivity Analyses of Fuel Price Differentials

No sensitivity analyses were performed with respect to fuel price differentials.

Generating Unit Performance Modeling

Performance of both the Osprey Project and the Blue Heron Project was modeled at an estimated equivalent availability factor of approximately 94.5 percent. Both Projects were modeled with a forced outage rate of approximately 2.0 percent and a maintenance outage rate of approximately 3.5 percent on an annual average basis. The Calpine Projects were modeled as part of an integrated least-cost dispatch of the Peninsular Florida power supply system using the PROMOD IV® model. These analyses yielded projected capacity factors of approximately 92% to 95% for each Project over the 2003-2012 analysis period.

Financial Assumptions

The financial analyses prepared using the PROMOD IV® model assumed a total installed project cost of $333 per kilowatt for both the Osprey Project and the Blue Heron Project.

Integrated Resource Planning Process

Calpine generally considered all reasonably feasible and

available supply-side alternatives in selecting the generation technology for the Project. Several technologies, such as waste-to-energy, were eliminated from consideration because they are not cost-effective. Screening analyses were prepared for the following technologies: gas-fired and oil-fired combustion turbines, gas-fired and oil-fired combined cycle units, gas-fired steam generation units, integrated coal gasification combined cycle units, and conventional pulverized coal-fired steam units, nuclear units, and renewable energy.

Generation and Transmission Reliability Criteria

Calpine selected gas-fired combined cycle generating technology on the basis of its overall efficiency and reliability, and plans to operate its plants to maximize their availability for supplying power into the Peninsular Florida wholesale power market. Calpine did not apply a specific minimum availability criterion to its selection of the generation technology.

Durability of Demand Side Management Energy Savings

This item is not applicable to Calpine because as a wholesale-only utility, Calpine does not engage directly in end-use demand side management programs.

Strategic Concerns

Calpine considered relevant strategic factors in evaluating alternatives for the Project. Among other factors, Calpine considered that:

1. the Osprey and Blue Heron Projects will be fueled by

domestically produced natural gas, which is not subject to interruption due to political or other events;

2. the Osprey and Blue Heron Projects' use of natural gas and advanced emissions control technology will protect Florida's environment while reducing Calpine's exposure to possible future changes in environmental regulations; and

3. the Osprey and Blue Heron Projects' high efficiencies will ensure their long-term viability.

Procurement Process for Supply-Side Resources

Calpine evaluated various gas-fired combined cycle generators based on generally available industry information. Based on various considerations, including manufacturers' guarantees, operational flexibility, experience with the vendor, and overall efficiency, at this time, Calpine plans to utilize Siemens-Westinghouse Model 501F combustion turbines for its units. The combustion turbines have been secured for both the Osprey Project and the Blue Heron Project by deposit. Full release of the combustion turbines has already occurred and these components are in a delivery queue. Full release of the heat recovery steam generators and the steam turbine generators is projected to be issued before construction begins.

Transmission Construction and Upgrade Plans

Calpine has no plans to construct or upgrade any electric utility system transmission lines that would require certification under the Transmission Line Siting Act.

CHAPTER 7

ENVIRONMENTAL AND LAND USE INFORMATION

This chapter provides brief descriptions of the Osprey Project and Blue Heron Project, as well as discussions of respective land and environmental features, water supply, and projected air and noise emissions information.

I. Osprey Energy Center

A. Site Description

The Osprey Project is located in the City of Auburndale, Polk County, Florida. (See Figure 2.) The site consists of approximately 19.5 acres situated approximately 1.5 miles southwest of downtown Auburndale and approximately 37 miles east of Tampa Bay. Access to the site will be from Derby Avenue, a two-lane county collector road that runs along the north boundary of the site.

B. Land and Environmental Features

The Osprey Project site is a non-producing citrus grove and is currently unused. There are no sensitive natural resources, scenic or cultural lands, or archaeological or historic resources on the site. There are no sensitive human receptors, such as hospitals, near the site. Land uses adjacent to the site include the TECO Recker Substation and 230 kV transmission line, the existing 150 MW Auburndale Power Plant, two small residential enclaves, a cemetery, and commercial and industrial operations, as shown in Figure 3. The Osprey Project Site was selected because it has no

environmentally sensitive features (e.g., wetlands or surface water bodies), because it is adjacent to existing, required infrastructure (e.g., access road, substation and transmission lines), and because it is predominantly surrounded by commercial and industrial development and non-residential uses. Further, the Osprey Project Site's terrain is favorable for power plant siting and is of sufficient size to accommodate the Osprey Project. Locating the Osprey Project at the proposed site takes advantage of the existing adjacent electrical infrastructure (TECO's Recker Substation) and nearby reclaimed water supply/wastewater disposal facilities (Auburndale's Allred Wastewater Treatment Plant). Development of this land minimizes potential environmental impacts that might otherwise be associated with the construction of a power plant at a previously undeveloped site. On a MW per acre basis, the Osprey Project maximizes the land use while simultaneously minimizing environmental impacts.

C. Water Supply

Plant make-up water for the cooling tower and process water requirements, as well as wastewater generation have been estimated. The Osprey Project will utilize a combination of reclaimed water and well water for its supply. Reclaimed water will be supplied from the City of Auburndale's Allred Wastewater Treatment Plant. Reclaimed water pipelines will be required by the Osprey Project to intertie with the City of Auburndale 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 right-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 water and wastewater pipelines will be permitted separately by the City of Auburndale. The balance of the Osprey Project's water supply will be provided by new on-site wells withdrawing water from the Upper Floridian aquifer.

D. Air and Noise Emissions

With its state-of-the-art combined cycle technology and natural gas fuel, the Osprey Project is projected to have relatively low air emissions. Estimates of the Project's air emissions are presented in Table 1.

The City of Auburndale has adopted noise standards and criteria for both industrial and other-than-industrial districts (e.g., residential). The City's noise ordinance allows more noise in non-industrial areas than in industrial areas. The City has recognized this inconsistency and is in the process of revising the noise ordinance. A noise impact evaluation of the Osprey Project was performed, incorporating a comprehensive noise-monitoring program to assess the existing ambient noise levels in the proposed Osprey Project area. Based on monitoring results, current background noise levels exceed Auburndale's industrial noise standards at the 2,000 and 4,000 Hz octave bands. With the Osprey Project's noise calculated into the background L_{eq} noise levels, the predicted impacts are also above the City ordinance for industrial

districts at several noise frequencies as in the background case. However, when the total noise is considered, the noise from the Osprey Project is within the sound (dB) level described by the City ordinance for non-industrial districts.

II. Blue Heron Energy Center

A. Site Description

The Blue Heron Project is located southwest of the City of Vero Beach in Indian River County, Florida. (See Figure 4.) The site consists of approximately 47 acres situated approximately 4.5 miles southwest of Vero Beach and east of Interstate 95. Access to the site will be from Range Line Road or 74th Avenue.

B. Land and Environmental Features

The Blue Heron Site is vacant, undeveloped property. There are no scenic or cultural lands, or archaeological or historic resources on the site. Vegetation on the Blue Heron Site consists of dry flatwoods dominated by slash pine. Gallberry and saw palmetto dominate the understory. Two small wetlands are located on the site. A small herbaceous marsh is located on the central portion of the site and a larger shrub swamp is located on the northern portion. The site is bordered on the north and east by drainage/irrigation canals. In addition to past logging activities on the site, existing disturbances adjacent to the Blue Heron Project site include Interstate 95, which borders the west side of the site, and sprayfield operations to the east. The site's wetlands appear to be isolated.

Wildlife on the site consists of species typical for the south Florida flatwoods. Only two listed species were observed on-site, the gopher tortoise and little blue heron, both common to the region. The site does not represent unique habitat for any listed species.

Land uses adjacent to or near the Blue Heron Site include the OceanSpray wastewater spray field, Interstate 95, agricultural uses, a correctional institution, a landfill and low density residential areas. (Refer to Figure 4.) The Blue Heron Site is adjacent to or near existing, required infrastructure (e.g. access roads and transmission lines), and is predominantly surrounded by industrial development and agricultural uses. Further, the terrain is favorable for power plant siting and is of sufficient size to accommodate the Blue Heron Project. On a MW per acre basis, the Blue Heron Project has been designed to minimize the amount of land used and simultaneously minimize the environmental impacts.

C. Water Supply

Plant make-up water for the cooling tower and process water requirements, as well as wastewater generation have been estimated. The Blue Heron Project will utilize reuse water and stormwater, provided by the Indian River Farms Water Control District and Indian River County, for its water supplies. Water pipelines will be required by the Blue Heron Project to interconnect with the Indian River Farms Water Control District and Indian River County water source locations. The design of the interconnection locations and facilities is currently under way. New on-site wells

will be utilized as an emergency water source.

D. Air and Noise Emissions

With its state-of-the-art combined cycle technology and natural gas fuel, the Blue Heron Project is projected to have relatively low air emissions. Estimates of the Project's air emissions are presented in Table 2.

Based on the adjacent land uses, the Blue Heron Project is not expected to have a significant impact on the existing noise levels at the Blue Heron Site. The Blue Heron Project will be in compliance with all local noise ordinances.

Calpine Construction Finance Company, L.P.
Schedule 1
Existing Generating Facilities
As of December 31, 1999

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Fuel		Fuel Transport		Alt. Fuel Days	Commercial In-Service	Expected Retirement	Gen. Max. Nameplate	Net Capability Summer	Net Capability Winter
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Use	Month/Year	Month/Year	KW	MW	MW
None													

Calpine Construction Finance Company, L.P.
Schedule 2.1
History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Rural and Residential					Commercial		
Year	Population	Members Per Household	GWH	Average No. of Customers	Agerage KWH Consumption Per Customer	GWH	Average Number of Customers	Average KWH Consumption Per Customer
Not Applicable								

Calpine Construction Finance Company, L.P.
Schedule 2.2
History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Industrial						
Year	GWH	Average Number of Customers	Average KWH Consumption Per Customer	Railroads and Railways GWH	Street & Highway Lighting GWH	Other Sales to Public Authorities GWH	Total Sales to Ultimate Consumers GWH

Not Applicable

Calpine Construction Finance Company, L.P.
Schedule 2.3
History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)
Year	Sales For Resale GWH	Utility Use & Losses GWH	Net Energy For Load GWH	Estimated Wholesale Customers (Average No.)	Total Estimated Number Of Customers
2002	0		0	0	0
2003	9,027		9,027	15	15
2004	13,185		13,185	15	15
2005	13,018		13,018	15	15
2006	13,107		13,107	15	15
2007	13,174		13,174	15	15
2008	12,937		12,937	15	15
2009	12,947		12,947	15	15
2010	13,172		13,172	15	15
2011	13,065		13,065	15	15
2012	13,156		13,156	15	15

Calpine Construction Finance Company, L.P.
Schedule 3.1
History and Forecast of Summer Peak Demand in MW

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm./Ind. Load Management	Comm./Ind. Conservation	Net Firm Demand
2002	0	0	0						0
2003	1,458	1,458	0						1,458
2004	1,458	1,458	0						1,458
2005	1,458	1,458	0						1,458
2006	1,458	1,458	0						1,458
2007	1,458	1,458	0						1,458
2008	1,458	1,458	0						1,458
2009	1,458	1,458	0						1,458
2010	1,458	1,458	0						1,458
2011	1,458	1,458	0						1,458
2012	1,458	1,458	0						1,458

Calpine Construction Finance Company, L.P.
Schedule 3.2
History and Forecast of Winter Peak Demand in MW

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm./Ind. Load Management	Comm./Ind. Conservation	Net Firm Demand
2002/03	0	0	0						0
2003/04	1,755	1,755	0						1,755
2004/05	1,755	1,755	0						1,755
2005/06	1,755	1,755	0						1,755
2006/07	1,755	1,755	0						1,755
2007/08	1,755	1,755	0						1,755
2008/09	1,755	1,755	0						1,755
2009/10	1,755	1,755	0						1,755
2010/11	1,755	1,755	0						1,755
2011/12	1,755	1,755	0						1,755
2012/13	1,755	1,755	0						1,755

Calpine Construction Finance Company, L.P.
Schedule 3.3
History and Forecast of Annual Net Energy for Load - GWH

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Total	Residential Conservation	Comm./Ind. Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load *	Load ** Factor %
2002	0				0		0	0.0
2003	9,027				9,027		9,027	83.1
2004	13,185				13,185		13,185	83.1
2005	13,018				13,018		13,018	83.1
2006	13,107				13,107		13,107	83.1
2007	13,174				13,174		13,174	83.1
2008	12,937				12,937		12,937	83.1
2009	12,947				12,947		12,947	83.1
2009	13,172				13,172		13,172	83.1
2009	13,065				13,065		13,065	83.1
2009	13,156				13,156		13,156	83.1

Notes:

* Net Energy for Load for 2003 is based on a projected 1st Quarter 2003 in-service for Osprey Energy Center, and a projected 2nd Quarter 2003 in-service for the Blue Heron Energy Center.

** Load Factor calculations are based on projected annual peak demands of 1755 MW (winter peaks).

Calpine Construction Finance Company, L.P.

Schedule 4

Previous Year and 2-Year Forecast of Retail Peak Demand and Net Energy For Load by Month

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Actual		Forecast		Forecast	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
Month	MW	GWH	MW	GWH	MW	GWH
January	Not Applicable					
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

Calpine Construction Finance Company, L.P.
Schedule 5
Fuel Requirements

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Fuel Requirements		Units	Actual	Actual	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Nuclear		Trillion BTU													
(2)	Coal		1000 Ton													
(3)	Residual	Total	1000 BBL													
(4)		Steam	1000 BBL													
(5)		CC	1000 BBL													
(6)		CT	1000 BBL													
(7)		Diesel	1000 BBL													
(8)	Distillate	Total	1000 BBL													
(9)		Steam	1000 BBL													
(10)		CC	1000 BBL													
(11)		CT	1000 BBL													
(12)		Diesel	1000 BBL													
(13)	Natural Ga	Total	1000 MCF	N/A	N/A	0	43,481	89,659	88,528	89,132	89,583	87,976	88,044	89,574	88,845	89,464
(14)		Steam	1000 MCF													
(15)		CC	1000 MCF	N/A	N/A	0	43,481	89,659	88,528	89,132	89,583	87,976	88,044	89,574	88,845	89,464
(16)		CT	1000 MCF													
(17)	Other (Specify)		Trillion BTU													

Calpine Construction Finance Company, L.P.
Schedule 6.1
Energy Sources (Units)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Energy Sources		Units	Actual	Actual	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Annual Firm Interchange		GWH													
(2)	Nuclear		GWH													
(3)	Residual	Total	GWH													
(4)		Steam	GWH													
(5)		CC	GWH													
(6)		CT	GWH													
(7)		Diesel	GWH													
(8)	Distillate	Total	GWH													
(9)		Steam	GWH													
(10)		CC	GWH													
(11)		CT	GWH													
(12)		Diesel	GWH													
(13)	Natural Gas	Total	GWH	N/A	N/A	0	9,027	13,185	13,018	13,107	13,174	12,937	12,947	13,172	13,065	13,156
(14)		Steam	GWH													
(15)		CC	GWH	N/A	N/A	0	9,027	13,185	13,018	13,107	13,174	12,937	12,947	13,172	13,065	13,156
(16)		CT	GWH													
(17)	Other (Specify)		GWH													
(18)	Net Energy for Load		GWH	N/A	N/A	0	9,027	13,185	13,018	13,107	13,174	12,937	12,947	13,172	13,065	13,156

Calpine Construction Finance Company, L.P.
Schedule 6.2
Energy Sources (Percent)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Energy Sources		Units	Actual	Actual	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Annual Firm Interchange		%													
(2)	Nuclear		%													
(3)	Residual	Total	%													
(4)		Steam	%													
(5)		CC	%													
(6)		CT	%													
(7)		Diesel	%													
(8)	Distillate	Total	%													
(9)		Steam	%													
(10)		CC	%													
(11)		CT	%													
(12)		Diesel	%													
(13)	Natural Gas	Total	%	NA	NA	N/A	100	100	100	100	100	100	100	100	100	100
(14)		Steam	%													
(15)		CC	%	NA	NA	N/A	100	100	100	100	100	100	100	100	100	100
(16)		CT	%													
(17)	Other (Specify)		%													
(18)	Net Energy for Load		%	NA	NA	N/A	100	100	100	100	100	100	100	100	100	100

Calpine Construction Finance Company, L.P.
Schedule 7.1
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Summer Peak Demand MW	Reserve Margin before Maintenance MW	Reserve Margin before Maintenance % of Peak	Scheduled Maintenance MW	Reserve Margin after Maintenance MW	Reserve Margin after Maintenance % of Peak
2002	0	0	0	0	0	0	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2003	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2004	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2005	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2006	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2007	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2008	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2009	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2010	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2011	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2012	1,458	0	0	0	1,458	1,458	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)

Notes:
(1) As base load plants with low planned outage rates, Calpine expects to deliver the full rated output of the Calpine Projects at the time of summer peak.

Calpine Construction Finance Company, L.P.
Schedule 7.2
Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Year	Total Installed Capacity MW	Firm Capacity Import MW	Firm Capacity Export MW	QF MW	Total Capacity Available MW	System Firm Winter Peak Demand MW	Reserve Margin before Maintenance MW	Reserve Margin before Maintenance % of Peak	Scheduled Maintenance MW	Reserve Margin after Maintenance MW	Reserve Margin after Maintenance % of Peak
2002	0	0	0	0	0	0	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2003	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2004	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2005	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2006	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2007	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2008	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2009	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2010	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2011	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)
2012	1,755	0	0	0	1,755	1,755	N/A (1)	N/A (1)	0	N/A (1)	N/A (1)

Notes:
(1) As base load plants with low planned outage rates, Calpine expects to deliver the full rated output of the Calpine Projects at the time of summer peak.

Calpine Construction Finance Company, L.P.
Schedule 8
Planned and Prospective Generating Facility Additions and Changes

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Plant Name	Unit No.	Location	Unit Type	Fuel Pri	Fuel Alt	Fuel Transport Pri	Fuel Transport Alt	Const. Start Date	Commercial In-Service Mo/Yr	Expected Retirement Mo/Yr	Gen. Max. Nameplate KW	Net Capability Summer MW	Net Capability Winter MW	Status
Osprey	1	Polk	CC	NG	N/A	PL	N/A	1Q/2001	1Q/2003	unknown	527,000	486	585	Planned
Blue Heron	1	Indian River	CC	NG	N/A	PL	N/A	4Q/2001	2Q/2003	unknown	1,054,000	972	1,170	Planned
Central Fla.	1	Confidential	CC	NG	N/A	PL	N/A	–	–	–	500,000	–	–	Potential
Southwest Florida	1	Confidential	CC	NG	N/A	PL	N/A	–	–	–	500,000	–	–	Potential

Calpine Construction Finance Company, L.P.
Schedule 9
Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name and Unit Number	Osprey Energy Center
(2)	Capacity	
	a. Summer:	486 MW
	b. Winter:	585 MW
(3)	Technology Type:	Combined Cycle
(4)	Anticipated Construction Timing	
	a. Field construction start - date:	3rd Quarter 2001
	b. Commercial in service - date:	1st Quarter 2003
(5)	Fuel	
	a. Primary fuel:	Natural Gas
	b. Alternate fuel:	N/A
(6)	Air Pollution Control Strategy:	Dry Low-NOx Burners, Selective Catalytic Reduction (SCR) and Good Combustion Practices
(7)	Cooling Method:	Wet Cooling Tower
(8)	Total Site Area:	19.5 acres
(9)	Construction Status:	Planned
(10)	Certification Status:	Need Determination Petition will be filed in 2000 Site Certification Application filed in March 2000
(11)	Status With Federal Agencies:	Calpine has obtained Market Based Rate Authority from the FERC
(12)	Projected Unit Performance Data	
	Planned Outage Factor (POF):	3.5%
	Forced Outage Factor (FOF):	2.0%
	Equivalent Availability Factor (EAF):	94.5%
	Estimated Capacity Factor (%):	94.5%
	Average Net Operating Heat Rate (ANOR):	6800 BTU/kWH (HHV)
(13)	Projected Unit Financial Data	
	Book Life (Years):	30
	Total Installed Cost (In-Service Year $/kW):	N/A
	Estimated Direct Construction Cost ($/kW):	333/kW (Based on ISO Capacity)
	AFUDC Amount ($/kW):	N/A
	Escalation ($/kW):	N/A

Calpine Construction Finance Company, L.P.
Schedule 9
Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name and Unit Number	Blue Heron Energy Center
(2)	Capacity	
	a. Summer:	972 MW
	b. Winter:	1,170 MW
(3)	Technology Type:	Combined Cycle
(4)	Anticipated Construction Timing	
	a. Field construction start - date:	4th Quarter 2001
	b. Commercial in service - date:	2nd Quarter 2003
(5)	Fuel	
	a. Primary fuel:	Natural Gas
	b. Alternate fuel:	N/A
(6)	Air Pollution Control Strategy:	Dry Low-NOx Burners, Selective Catalytic Reduction (SCR) and Good Combustion Practices
(7)	Cooling Method:	Wet Cooling Tower
(8)	Total Site Area:	47 acres
(9)	Construction Status:	Planned
(10)	Certification Status:	Need Determination Petition targeted for 3rd quarter 2000 Site Certification Application targeted for 4th quarter 2000
(11)	Status With Federal Agencies:	Calpine has obtained Market Based Rate Authority from the FERC
(12)	Projected Unit Performance Data	
	Planned Outage Factor (POF):	3.5%
	Forced Outage Factor (FOF):	2.0%
	Equivalent Availability Factor (EAF):	94.5%
	Estimated Capacity Factor (%):	94.5%
	Average Net Operating Heat Rate (ANOR):	6800 BTU/kWH (HHV)
(13)	Projected Unit Financial Data	
	Book Life (Years):	30
	Total Installed Cost (In-Service Year $/kW):	N/A
	Estimated Direct Construction Cost ($/kW):	333/kW (Based on ISO Capacity)
	AFUDC Amount ($/kW):	N/A
	Escalation ($/kW):	N/A

Calpine Construction Finance Company, L.P.
Schedule 10 - Osprey Energy Center
Status Report and Specifications of Proposed Directly Associated Transmission Lines

(1) Point of Origin and Termination: N/A

(2) Number of Lines: (Loop existing 230 kV line)

(3) Right-of-Way: None required, all interconnection facilities will be located at the Project site.

(4) Line Length: Approximately 1000 feet.

(5) Voltage: 230 kV.

(6) Anticipated Construction Time: 12 months.

(7) Anticipated Capital Investment: $2 million to $3 million, depending on specific upgrade options selected.

(8) Substations: System impact studies prepared for Calpine indicate that transmission line upgrades Recker to Ariana, and increased transformer capacity at the Ariana 230/69 kV station may be necessary, and advancing by one year the upgrade to the Recker to Lake Agnes in 2003.

(9) Participation with Other Utilities: Possible participation with Tampa Electric to advance the upgrade of Lake Agnes.

Calpine Construction Finance Company, L.P.
Schedule 10 - Blue Heron Energy Center
Status Report and Specifications of Proposed Directly Associated Transmission Lines

(1) Point of Origin and Termination: N/A

(2) Number of Lines: (Interconnection to adjacent existing 230 kV lines)

(3) Right-of-Way: The interconnection facilities will be located on the Project site, which abuts Interstate Highway 95, in the public right-of-way associated with I-95, and in the right-of-way for FPL's existing 230 kV lines, the right-of-way for which is adjacent to I-95 on the west side of the highway.

(4) Line Length: Less than 1000 feet.

(5) Voltage: 230 kV.

(6) Anticipated Construction Time: 12 months.

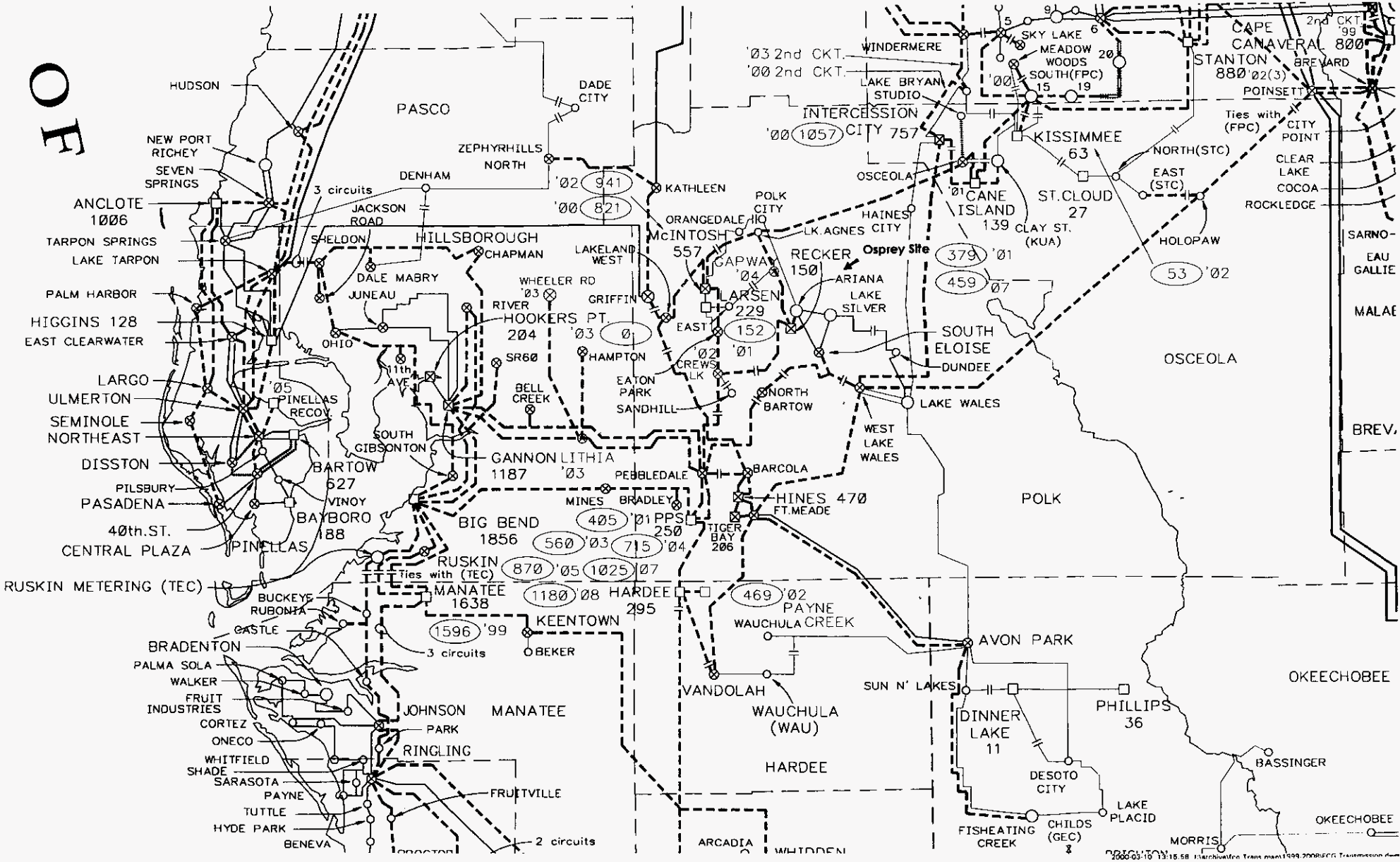
(7) Anticipated Capital Investment: Unknown at this time; will depend on actual interconnection made pursuant to FPL's open access transmission tariff.

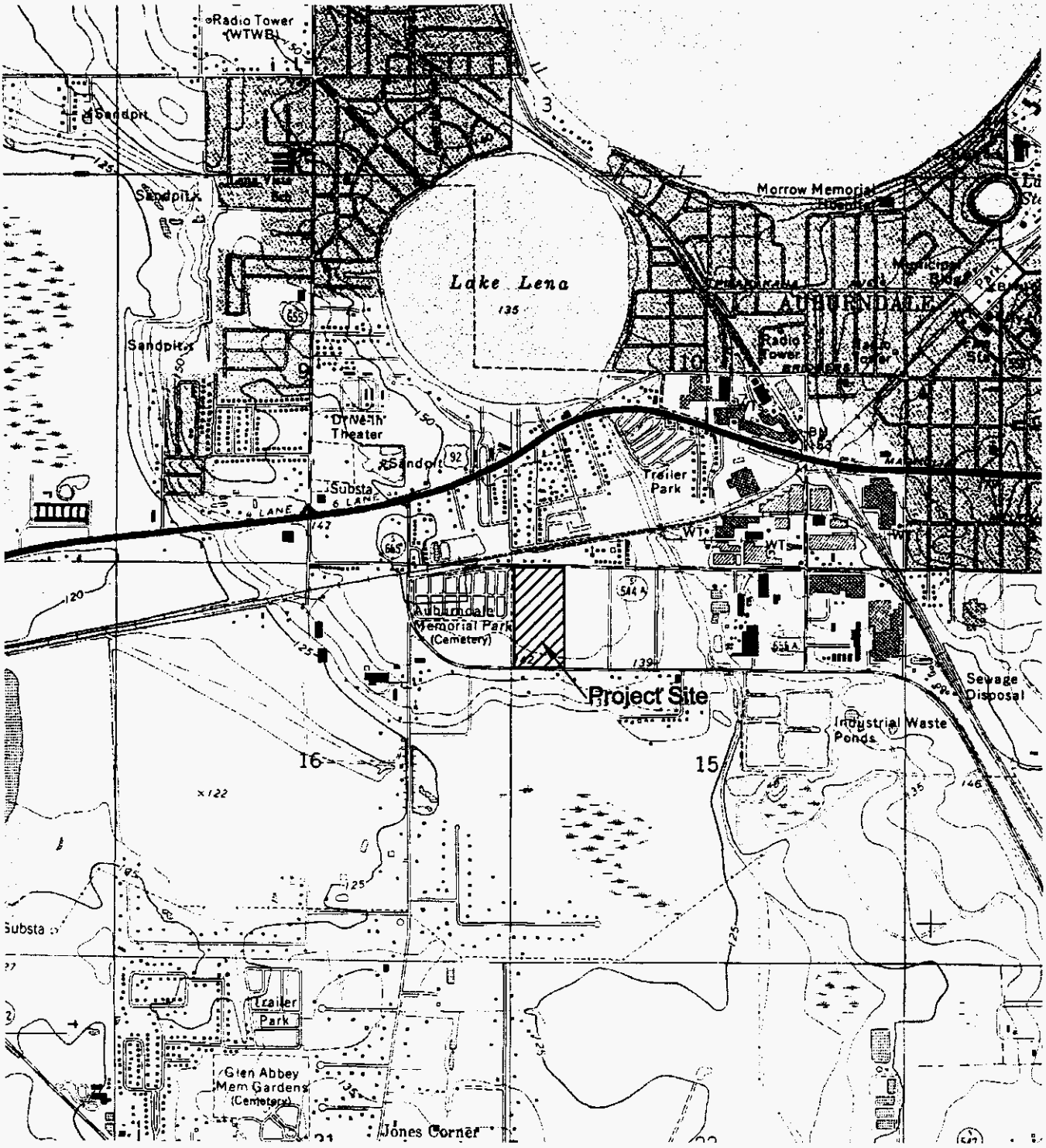
(8) Substations: Not applicable; direct interconnect to 230 kV lines.

(9) Participation with Other Utilities: The interconnection will be made pursuant to FPL's open access transmission tariff.

Figure 1

Osprey Energy Center
Regional Transmission Map





REFERENCE

USGS 7.5 Minute Topographical Quadrangle, Auburndale, Florida

Golder Associates

Tampa, Florida

Figure 2

Project Site Location

Client / Project

Calpine Construction Finance Company, L.P.

Osprey Energy Center

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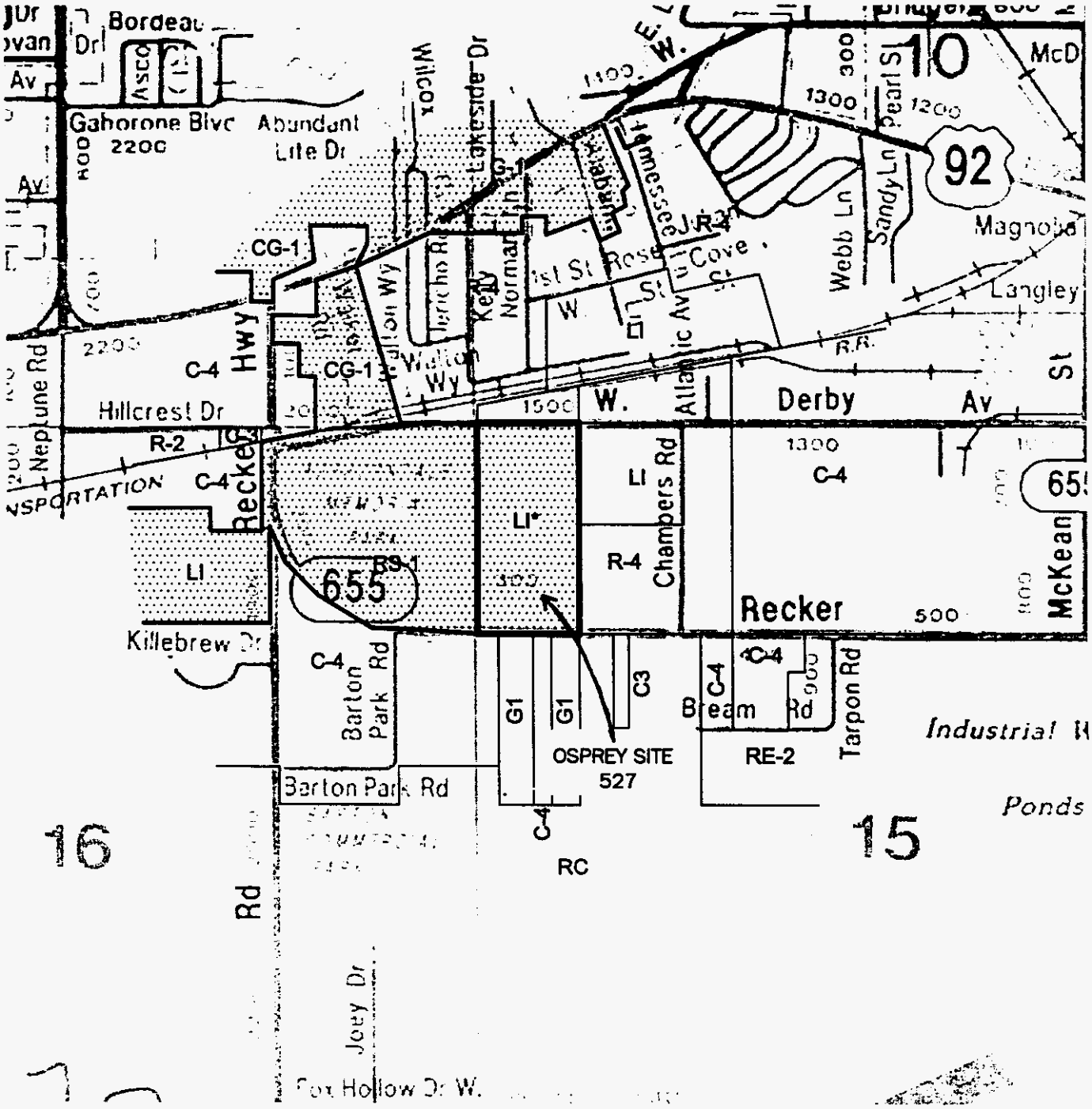
CAD BY:	CDT	SCALE:	1"=2000'	Job No.	993-9570
CHK BY:	RAZ	DATE:	02/04/00	FIGURE	
REV BY:	–	FILE No.:	fig1_3_2-2.dwg		



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

Polk County Zoning Distticts
- C-3 Regional Commercial
- C-4 Heavy Commercial
- GI General Industrial
- R-4 Residentual
- 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

N

0 500' 1000'
SCALE

Golder Associates

Figure 3

Tampa, Florida

Osprey Energy Center
Site Location and Surroundings

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

50

CAD BY: CDT	SCALE: 1"=1000'	Job No. 993-9570
CHK BY: CA	DATE: 02/08/00	FIGURE
REV BY: -	FILE No.: fig2_2_2-2.dwg	

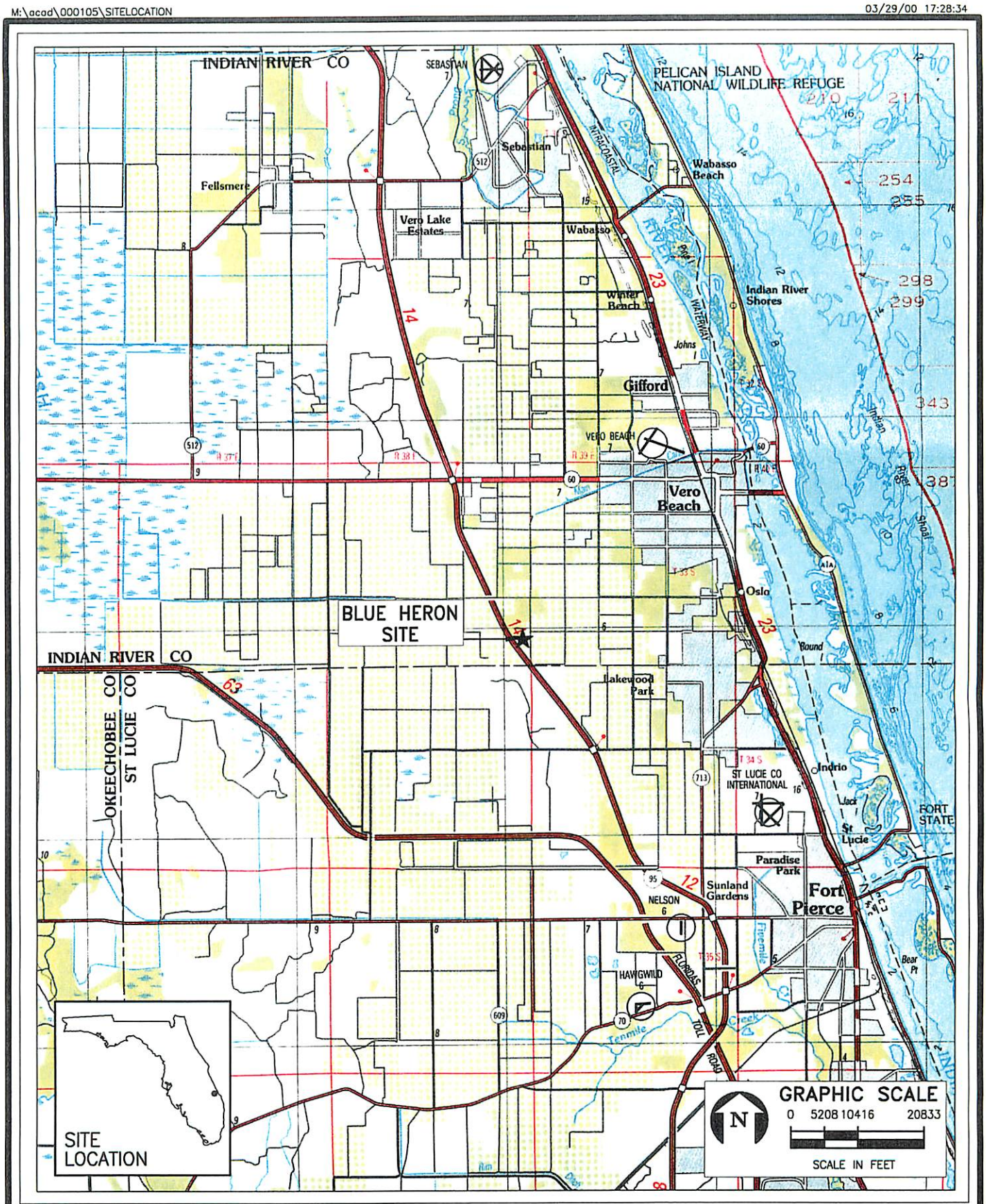


FIGURE 4.

BLUE HERON ENERGY CENTER SITE LOCATION

Source: USGS QUAD: FT. PIERCE, FL. 1988; ECT, 2000.

ECT

Environmental Consulting & Technology, Inc.

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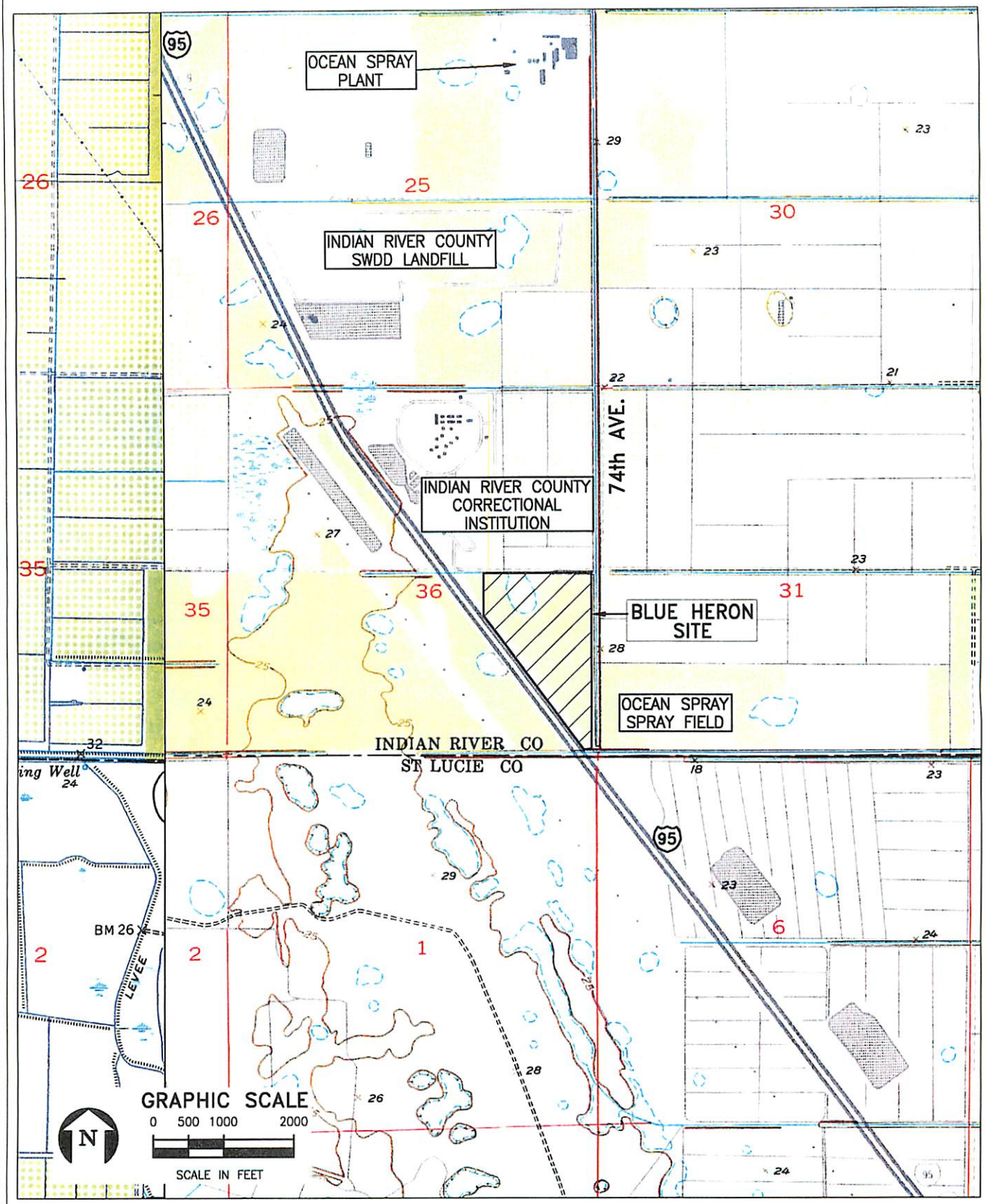

FIGURE 5.

BLUE HERON ENERGY CENTER SITE LOCATION AND SURROUNDINGS

Source: USGS Quad: Oslo, FL, & East of Gum Slough, FL, 1983; ECT, 2000.

ECT
Environmental Consulting & Technology, Inc.

Figure 6

Blue Heron Energy Center
Regional Transmission Map

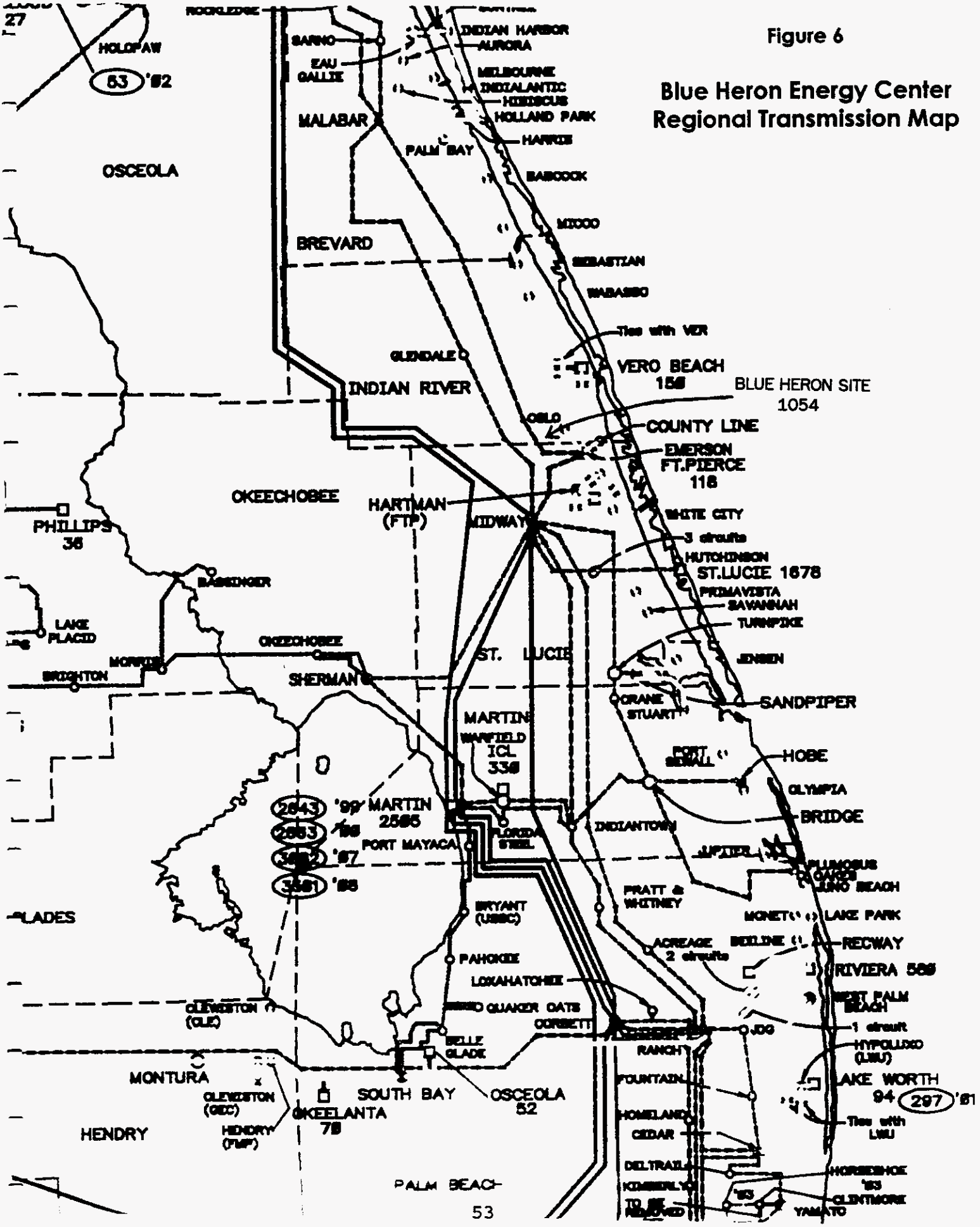

TABLE 1
OSPREY ENERGY CENTER
Estimated Plant Performance and Emissions Data

Percent Load		100%	100%	100%	100%	75%	75%	75%	75%	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%	50%	80%	80%	60%	60%	80%	80%	60%	60%	80%
Net Cycle Power	MW	506	527	548	587	369	390	411	442	302	329	356	375	568
Net Cycle LHV Heat Rate	BTU/kW-hr	6,139	6,100	6,089	6,042	6,565	6,465	6,365	6,225	6,900	6,675	6,449	6,368	6,501
Net Gas Turbine Power	MW	334	347	362	387	233	249	265	286	186	199	211	228	367
Net Steam Cycle Power	kW	172,252	180,050	186,434	197,551	135,440	140,236	145,032	156,478	115,959	130,196	144,432	147,173	220,400
Adjusted Cycle LHV Eff.	%	55.0	56.3	56.0	56.4	52.0	53	53.6	54.8	49.5	51	52.9	53.5	52.5
CTG fuel flow (lb/h)- total for two CTGs	lb/hr	144,560	151,830	159,100	168,920	115,920	122,200	128,480	131,660	99,780	104830	109,880	114,300	159,660
CTG heat input, LHV basis (mmBtu/h)- total for two CTGs	MMBtu/hr	3,034	3,186	3,338	3,544	2,432	2,526	2,619	2,762	2,093	2,199	2,306	2,398	3,350
Duct burner heat input, LHV basis (mmBtu/h)- each burner	MMBtu/hr													250
CTG exhaust gas flow (lb/h)- total for two CTGs (two duct burners when on)	lb/hr	6,575,899	6,896,966	7,218,233	7,578,580	5,997,900	6,182,046	6,366,192	6,617,298	5,081,835	5,218,053	5,354,272	5,539,920	6,995,275
CTG exhaust gas composition (% by volume)														
Nitrogen	%	72.64	73.50	74.37	74.82	72.97	73.82	74.68	75.13	72.93	73.75	74.56	75.04	68.31
Argon	%	0.91	0.92	0.93	0.94	0.92	0.93	0.94	0.94	0.92	0.93	0.94	0.94	0.86
Oxygen	%	12.13	12.32	12.51	12.53	13.10	13.25	13.41	13.42	12.99	13.03	13.07	13.15	9.85
Carbon dioxide	%	3.70	3.72	3.74	3.79	3.26	3.30	3.34	3.39	3.31	3.40	3.49	3.52	4.26
Water	%	10.62	9.53	8.44	7.92	9.76	8.70	7.64	7.12	9.86	8.90	7.94	7.36	16.73
NOx as NO2 (lb/h)- total for two stacks	lb/hr	50.4	53.0	55.5	58.9	40.4	41.9	43.5	45.9	34.8	36.5	38.3	39.8	62.9
based on ppmvd @ 15% O2	ppm	4	4	4	4	4	4	4	4	4	4	4	4	4
CO (lb/h)- total for two stacks	lb/hr	78	86	86	90	62	64	66	70	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	14.8	15.3	15.9	16.7	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	15.1	15.7	16.3	17.2	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	33.8	35.1	36.4	38.0	28.7	29.8	30.9	32.1	45.6
HRSG exit gas velocity (ft/s) based on 19 ft diameter stack	ft/s	55.2	57.6	60.0	62.9	50.2	51.5	52.8	54.8	42.5	43.5	44.5	45.9	60.0

Table 2
BLUE HERON ENERGY CENTER
Preliminary Estimated Plant Performance and Emissions Data

Percent Load		100%	100%	100%	100%	75%	75%	75%	75%	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%	50%	80%	80%	60%	60%	80%	80%	60%	60%	80%
Net Cycle Power	MW	1,012	1,054	1,096	1,174	738	780	822	884	604	658	712	750	1,176
Net Cycle HHV Heat Rate	BTU/kW-hr	6,753	6,710	6,698	6,646	7,222	7,112	7,002	6,848	7,590	7,342	7,094	7,005	7,151
Net Gas Turbine Power	MW	668	694	724	774	466	498	530	571	372	397	422	456	734
Net Steam Cycle Power	kW	344,504	360,100	372,868	395,102	270,880	280,472	290,084	312,956	231,918	260,391	288,864	294,346	440,800
Adjusted Cycle LHV Eff.	%	55.0	56.3	56.0	56.4	52.0	53	53.6	54.8	49.5	51	52.9	53.5	53
CTG fuel flow (lb/h)- total for two CTGs	lb/hr	289,120	303,660	318,200	337,840	231,840	244,400	256,960	263,320	199,560	209,660	219,760	228,800	319,320
CTG heat input, LHV basis (mmBtu/h)- total for two CTGs	MMBtu/hr	6,088	6,372	6,676	7,088	4,865	5,052	5,239	5,524	4,187	4,399	4,611	4,797	6,700
Duct burner heat input, LHV basis (mmBtu/h)- each burner	MMBtu/hr													500
CTG exhaust gas flow (lb/h)- total for two CTGs (two duct burners when on)	lb/hr	6,575,699	6,898,966	7,218,233	7,578,580	5,997,900	6,182,046	6,366,192	6,617,296	5,081,835	5,218,053	5,354,272	5,539,920	6,995,275
CTG exhaust gas composition (% by volume)														
Nitrogen	%	72.64	73.50	74.37	74.82	72.97	73.82	74.68	75.13	72.93	73.75	74.56	75.04	68.31
Argon	%	0.91	0.92	0.93	0.94	0.92	0.93	0.94	0.94	0.92	0.93	0.94	0.94	0.86
Oxygen	%	12.13	12.32	12.51	12.53	13.10	13.25	13.41	13.42	12.99	13.03	13.07	13.15	9.85
Carbon dioxide	%	3.70	3.72	3.74	3.79	3.26	3.30	3.34	3.39	3.31	3.40	3.49	3.52	4.26
Water	%	10.62	9.53	8.44	7.92	9.76	8.70	7.64	7.12	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	35.3	36.7	38.0	40.1	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	86	86	90	62	64	66	70	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	14.8	15.3	15.9	16.7	12.7	13.3	14.0	14.5	24.6
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	15.1	15.7	16.3	17.2	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	33.8	35.1	36.4	38.0	28.7	29.8	30.9	32.1	45.6
HRSG exit gas velocity (ft/s) based on 19 ft diameter stack	ft/s	55.2	57.8	60.0	62.9	50.2	51.5	52.8	54.8	42.5	43.5	44.5	45.9	60.0