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April 3, 2000

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#### VIA HAND DELIVERY

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 Okeechobee Generating Company, LLC

Dear Ms. Bayo:

AFA

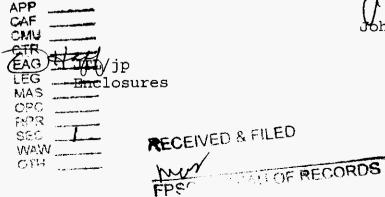
As required by Commission Rule 25-22.071(1), F.A.C., enclosed for filing are twenty-five (25) copies of the 2000-2009 Ten-Year Site Plan of Okeechobee Generating Company, LLC. I will appreciate your confirming receipt of these materials by stamping the attached filing copy.

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



04061 APR-38

FPSC-RECORDS/REPORTING



# OKEECHOBEE GENERATING COMPANY, LLC

# **TEN-YEAR SITE PLAN, 2000-2009**

April 2000

DOCUMENT NUMBER-DATE 04061 APR-38 FPSC-RECORDS/REPORTING

# OKEECHOBEE GENERATING COMPANY, LLC

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

Submitted to:

# STATE OF FLORIDA PUBLIC SERVICE COMMISSION

April 2000

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#### EXECUTIVE SUMMARY

Pursuant to Rule 25-22.071, Florida Administrative Code, Okeechobee Generating Company, LLC ("OGC"), 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.

OGC will own and operate the Okeechobee Generating Project ("the Project"), a nominal 540 megawatt ("MW") (at ISO temperature (59°F) and relative humidity (60% R.H.)) natural gas-fired combined cycle electrical generating unit that will be located in Okeechobee County, Florida. Expected to achieve commercial in-service status in April 2003, the Project will supply capacity and energy for sale, at wholesale, to other utilities. Virtually all of these wholesale sales are expected to be made to other Peninsular Florida utilities.

The Project will include two advanced technology combustion turbines, two heat recovery steam generators, and two steam turbine generators. The Project will have a heat rate of approximately 6,650 Btu per kWh (based on the Higher Heating Value (\*HHV") of natural gas) and will satisfy all applicable environmental requirements. The Project's primary source of process and make-up water will be supplied by surface water from the South Florida Water Management District channelized canal C-59 at Taylor Creek/Nubbin Slough.

OGC's current projections indicate that the Project will operate approximately 8,150 hours per year, with projected generation of approximately 4.3 million megawatt-hours ("MWH") per year, all of which will be sold at wholesale to other utilities.

The Project will be interconnected to the Peninsular Florida transmission grid by looping the 230 kV Florida Power & Light Company ("FPL") Sherman-Martin transmission line into the switchyard of the Project. The Project will be fueled primarily 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. The natural gas pipeline is planned to traverse the southern portion of the site.

The Project will be located north-northeast of Lake Okeechobee, in a rural area approximately five miles southeast of the City of Okeechobee in Okeechobee County, Florida. The facility will be located on approximately 40 acres of an approximately 771 acre site situated to the west of Nubbin Slough, approximately one half mile north of State Route 710. An access road will be constructed to the site from State Route 710. The property is zoned for power plant development and is consistent with the Okeechobee County Comprehensive Plan designation.

The Project's direct construction cost, including all engineering, procurement, and construction functions, is expected to be approximately \$190 million, reflecting a cost of

approximately 352 per kW of installed capacity (based on 540 MW). The Project will be constructed and brought into commercial service with a combination of equity and debt that will be used to pay construction and development costs.

#### OKEECHOBEE GENERATING COMPANY, LLC

OGC is the owner of, and has operational responsibility for, the Project. OGC is a Commission-regulated wholesale electric utility and a FERC-regulated wholesale public utility that will sell the Project's capacity and energy at wholesale directly to other utilities.

OGC, a Delaware Corporation, is a wholly-owned indirect subsidiary of PG&E Generating, a Delaware corporation. OGC is a public utility under Section 201 of the Federal Power Act. 16 USCA \$824(b)(1)&(e)(1994). By its letter issued on December 7, 1999, the Federal Energy Regulatory Commission ("FERC") approved OGC's revised tariff to sell wholesale power at market-based rates. 88 FERC ¶61,219 (amended by FERC letter dated December 7, 1999). Pursuant to a FERC order issued on December 14, 1999, OGC is also an Exempt Wholesale Generator ("EWG"). 89 FERC ¶62,204.

#### DESCRIPTION OF EXISTING FACILITIES

OGC has no existing electric generation or transmission facilities. (See Schedule 1.) As described elsewhere herein, OGC is in the process of obtaining the required determination of need for an electrical power plant for the Project pursuant to the Florida Electrical Power Plant Siting Act.

#### FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

Over the planning horizon covered in this Ten-Year Site Plan, the Project is projected to operate approximately 8,150 hours per year, with projected generation of approximately 4.3 million MWH per year, reflecting an average (or typical) annual load factor of approximately 88.9 percent (based on winter peak demand of 552 MW).

As noted elsewhere in this Ten-Year Site Plan, all of the Project's sales 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 forecasted number of wholesale customers and sales for resale. Schedules 3.1, 3.2, and 3.3 present forecasted summer peak demand, winter peak demand, and net energy for load for OGC. Because of the Project's high efficiency and relatively low-cost position among all Peninsular Florida generation resources, OGC believes that the Project's sales at the times of the summer and winter peaks (both the system peak experienced by OGC and the Peninsular Florida coincident system peak) will be at the Project's full rated output, i.e., 508.2 MW at the time of the summer peak and 552.3 MW at the time of the winter peak.

Schedule 4 is not applicable to OGC 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 OGC. Schedules 7.1 and 7.2 present information regarding forecasts of capacity, demand, and scheduled maintenance at the time of summer and winter peaks.

#### FORECASTING METHODS AND PROCEDURES

Forecasts of the Project's operations were prepared using the Altos North American Regional Electricity Model (the "NARE Model") and the Altos North American Regional Gas Model (the "NARG Model") developed by Altos Management Partners, Inc., an economic and management consulting firm with offices in San Jose, California and Dallas, Texas. The NARE Model is a 32-region integrated model of the North American electricity system that includes generation, transmission, consumption, fuels, and fuel competition. The NARE Model includes all of the generation regions, all of the existing and prospective transmission interconnections, and all of the demand regions of North America. Generally speaking, the NARE Model includes all of the reliability coordinating regions in the U.S., Canada, and Mexico, plus numerous sub-regions. For example, the NARE Model treats the Southern Electric Reliability Council region ("SERC") as four separate sub-regions: the Southern Company system, TVA, VCR (Virginia and the Carolinas), and Entergy, which was formerly designated as the southeastern component of the Southwestern Power Pool.

The NARE Model includes transmission system integration and interconnection, consideration of multiple fuels and energy products, existing capacity and its cost structure, future changes in the cost structure of existing plants, retirements and

decommissioning, new generation plant entry, inbound and outbound transmission capabilities, transmission entry, and demands and load shapes that vary over time within each region. In evaluating future capacity and energy needs, the NARE Model considers the following generating technologies: gas/oil combustion turbine, gas combined cycle, oil combined cycle, pulverized coal, coal gasification combined cycle, nuclear, gas/oil steam, and waste-toenergy. (The specific evaluations for the Project examined gas combustion turbines, gas combined cycle, pulverized coal, coal

The NARG Model includes all gas supply basins, all existing and prospective interconnecting pipelines, and all of the gas demand regions of North America. In the NARG Model, each category of resource in each supply region is characterized by a detailed supply sub-model, each pipeline is characterized by a detailed transportation sub-model, and each demand region is characterized by a detailed demand sub-model. The NARG Model estimates, over time, the set of regional prices that simultaneously clear the markets in every wellhead, wholesale, and other market in North America.

OGC did not evaluate sensitivities based on assumed variations in fuel costs or economic activity. Because of the Project's high efficiency and relatively low-cost position among the total generation resources available for Peninsular Florida, OGC projects that sales at the times of the summer and winter peaks (both the

system peak experienced by OGC and the Peninsular Florida coincident system peak) will be at the Project's full rated output, i.e., 508.2 MW at the time of the summer peak and 552.3 MW at the time of the winter peak. Accordingly, OGC does not believe that such sensitivity analyses are necessary or warranted for the Project.

OGC's long-term planning approach is to construct the Project and to operate it as efficiently as possible, in order to be a long-term participant in the Peninsular Florida wholesale bulk power market. OGC generally assumes that other Peninsular Florida utilities will construct and acquire generation and transmission resources in accordance with their stated plans. The analyses developed using the NARE Model and the NARG Model are based on appropriate assumptions regarding existing and future fuel costs, new generating capacity costs, and projected additions and retirements from the generation and transmission systems. OGC plans to operate the Project reliably and cost-effectively and to make mutually cost-effective sales to other Peninsular Florida utilities.

#### 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 its high efficiency and relatively low-cost position within the available generation resources in Peninsular Florida, OGC expects that in both summer and winter peak conditions, all of the Project's capacity will be committed on a firm basis to other Peninsular Florida utilities, even if only on a day-ahead or hourly basis. Accordingly, OGC projects that its firm summer and winter peak demands will in fact be the full rated output of the Project for each respective season. OGC believes that this information will be representative of OGC's peak demands both 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.

#### The Okeechobee Generating Project

The Project will be a natural gas-fired, combined cycle electrical power plant. The Project will consist of two advanced technology combustion turbine generators (ABB GT24 or equivalent) with two matched heat recovery steam generators and two steam turbine generators. The total electrical output of the plant will

be 540 MW at ISO temperature and humidity conditions. Additional information regarding the Project's characteristics and specifications is presented in Schedule 9.

### Directly Associated Transmission Facilities

The Project will be electrically interconnected to the Peninsular Florida transmission system by looping the 230 kV Sherman-Martin transmission line, which traverses the Project site, into the switchyard of the Project. (Figure 1 is an electrical one-line diagram for the Project and Figure 2 is a regional transmission map for the Project area.) System impact studies prepared for OGC indicate that no significant transmission additions or upgrades will be necessary to facilitate and support power deliveries from the Project to other Peninsular Florida utilities. Transmission impact studies prepared for OGC included power flow contingency studies, voltage instability studies, dynamic stability studies, and short circuit studies. These studies indicate that the proposed interconnection, and the existing Peninsular Florida transmission grid, will generally accommodate the delivery of the net output of the Project, regardless of which utilities purchase and receive the Project's output. The power system impact studies also indicate that, under normal conditions, the Project will not burden the transmission system or violate any transmission constraints or contingencies in Peninsular Florida. The transmission studies indicate that, under

two contingency conditions (outage of Project switchyard to Sherman, outage of Project switchyard to Martin), there are apparent marginal exceedences (approximately 8%) of the winter seasonal ratings of the 230 kV Sherman-Project switchyard and Project switchyard-Martin lines. In addition, there are three other apparent marginal exceedences (3-5%) of winter seasonal ratings on transmission lines operating at 138 kV. If these apparent marginal exceedences prove to represent significant concerns, they can be remedied. Additional information concerning transmission facilities is contained in Schedule 10.

#### Gas Supply Arrangements and Facilities

Natural gas will be provided to the Project through the Gulfstream pipeline. (The Gulfstream pipeline will be permitted by Gulfstream.) Gulfstream's main 30-inch pipeline is planned to traverse the southern portion of the site, and service to the Project will be through a metering station immediately adjacent to Gulfstream's main pipeline. The pipeline pressure at the Project site is guaranteed by Gulfstream to be a minimum of 725 psig. Gas transportation will be pursuant to a Precedent Agreement between OGC and Gulfstream. Pursuant to the Precedent Agreement, Gulfstream has committed to provide firm gas transportation service to operate the Project at full capacity for a term of 20 years; thereafter, the gas transportation service agreement may be renewed on a year-to-year basis.

A back-up supply of distillate fuel oil will be maintained at the Project site to ensure continued operation of the plant in the event that natural gas is not available. The Project will have onsite fuel oil storage capacity sufficient to provide the maximum daily fuel quantity required by the plant to generate at its maximum capacity for 24 hours without refilling storage. The onsite oil storage facility will be designed to hold approximately 650,000 gallons of fuel oil, equivalent to 90,000 MMBtu of natural gas, the maximum daily quantity of natural gas required for the Project. As the fuel oil storage starts to be drawn down, local suppliers will commence refilling the on-site oil storage facility. This arrangement provides a high level of assurance that the Project will be able to maintain its full output during any reasonably foreseeable gas supply interruption.

#### Regulatory and Permitting Schedules

The need determination application was filed with the Florida Public Service Commission on September 24, 1999, and the need determination hearing is expected to be held in July 2000. The Commission's order is expected by the middle of September 2000. OGC expects to file the Site Certification Application for the Project by June 2000. The land use hearing is expected to be held by fall 2000, and the site certification hearing is expected to be held by early 2001. Final certification by the Siting Board is expected by October 2001.

#### OTHER PLANNING ASSUMPTIONS AND INFORMATION

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

#### Modeling Transmission Constraints

Transmission constraints and contingencies were modeled using the General Electric MAPPS transmission system modeling software. The transmission system impact study for the Project included load flow analyses, transient stability analyses, short circuit analyses, and a power-voltage analysis. These analyses were prepared in conformance with the criteria specified in <u>Methodology</u> for Completing a System Impact Study, furnished by FPL. 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.

#### Analysis of Overall Project Economics

OGC's Ten-Year Site Plan provides for the construction and operation of one power plant, the Project. The overall economics of the Plan are thus the same as those for the Project. The overall economics of the Project were evaluated by estimating how much energy the Project would generate within the Peninsular

Florida power supply system, by estimating the prices that the Project would receive for its power, and by estimating the margins above operating costs that the Project would be expected to earn. These analyses were prepared using the NARE Model. An analysis of the Project's cost-effectiveness was also made on the basis of comparing the Project's estimated capital and operating costs, and projected margins, to those of alternate technologies. Because the Project was significantly cost-effective as compared to these other technologies, no sensitivity cases with respect to variations in the load forecast were analyzed.

#### Derivation of Base Case Fuel Price Forecast

The basic assumptions used to derive the fuel price forecast underlying the analyses of the Project's cost-effectiveness were the continued availability of gas transportation over the existing interstate pipeline network plus the addition of new pipeline capacity into Florida. Mid-1999 fuel prices were taken as the starting points for the projections, which were made using the NARG Model; different real fuel price escalation rates were assumed based on consideration of various publicly available fuel price forecasts and proprietary data.

The real price of natural gas was projected to decrease by between 0 and 8.0 percent per year between 2003 and 2008, and to increase by approximately 1.0 percent per year after 2008. The real price of distillate fuel oil was projected to decrease by

approximately 2.0 percent per year over the planning horizon. The real price of residual fuel oil was projected to decrease by about 4.0 percent per year through 2003, then to increase by about 3.0 to 4.0 percent per year through 2006, and then to remain constant (in real terms) thereafter. The real price of coal was projected to remain constant -- i.e., no real price escalation -- over the planning horizon.

#### Sensitivity Analyses of Fuel Price Differentials

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

#### Generating Unit Performance Modeling

Performance of the Project was modeled at an average annual availability factor of 93 percent. OGC believes that this is conservative (on the low side) based on the experience of some of its sister companies, which operate power plants based on similar gas-fired combined cycle technology that achieve availability factors in the 96 to 97 percent range.

#### Financial Assumptions

The financial analyses prepared using the NARE Model assumed a total installed project cost of \$450 per kilowatt. The overall cost of capital was assumed to be 10 percent in real terms.

#### Integrated Resource Planning Process

OGC generally considered all reasonably feasible and available supply-side alternatives in selecting the generation technology for

the Project. Several technologies (e.g., waste-to-energy) were screened out judgmentally. More detailed analyses were prepared for gas-fired combustion turbine, integrated coal gasification combined cycle, gas steam, and pulverized coal technologies, in addition to the gas/oil-fired combined cycle technology selected.

### Generation and Transmission Reliability Criteria

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

#### Durability of DSM Program Energy Savings

Not applicable.

#### Strategic Concerns

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

 the Project would be fueled primarily by domestically produced natural gas, which is not subject to interruption due to political or other events;

2. the Project's use of natural gas and advanced emissions control technology will protect Florida's environment while reducing OGC's exposure to possible future changes in

environmental regulations;

3. the Project's high efficiency -- a heat rate of 6,650 Btu per kWh -- will ensure its long-term viability; and

4. the Project's use of low-sulfur distillate fuel oil as back-up fuel will enable it to maintain output during unforeseen (and extremely unlikely) gas pipeline interruption events.

#### Procurement Process for Supply-Side Resources

OGC 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, OGC plans to utilize ABB GT24-based units for the Project. OGC has not finalized contracts for the major equipment, however, in order to maximize its opportunities to take advantage of any further technological advances or cost reductions in the market for combined cycle generating units.

#### Transmission Construction and Upgrade Plans

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

#### ENVIRONMENTAL AND LAND USE INFORMATION

This chapter provides a brief description of the site of the Project, as well as discussions of land and environmental features of the site, water supply for the Project, and projected air emissions from the Project.

#### Site Description

The Project will be located north-northeast of Lake Okeechobee, in a rural area approximately five miles southeast of the City of Okeechobee in Okeechobee County, Florida. The facility will be located on approximately 40 acres of an approximately 771 acre site situated to the west of Nubbin Slough, approximately onehalf mile north of State Route 710. The site is cleared and situated on fairly level ground. An access road will be constructed to the site from State Route 710. Figure 3 is a Project site plan and Figure 4 is a site location map for the Project.

#### Land and Environmental Features

The property is zoned specifically for power plant development and is consistent with the Okeechobee County Comprehensive Plan designation. Thus, the zoning and comprehensive plan designation authorize the construction and operation of an electrical power plant on the site. Agricultural land uses dominate the site region in the vicinity of the Project. The large size of the site will

provide substantial buffering potential for the Project. The Project will not be close to any residential areas and will be located on the site in a manner that minimizes impacts on the surrounding area. The site is traversed by existing electric transmission lines, a proposed major interstate natural gas pipeline, and reliable sources of process water. The Project footprint has been carefully sited to minimize impacts and encroachment on wetland areas.

The site has more than sufficient acreage to support the power plant and provide an adequate buffer. The site is traversed by a 230 kV transmission line, allowing on-site interconnection with the transmission grid. The site is easily accessible from the existing highway system and nearby rail service offers an opportunity to transport large equipment items by rail. The proposed new Gulfstream pipeline will traverse the site, facilitating interconnection with the natural gas system. The site is largely vacant and is not located adjacent to any residential areas or other sensitive land uses. The site has been zoned to accommodate power plant development, and the proposed Project is consistent with the development objectives set forth in the Okeechobee County Comprehensive Plan. Adequate upland area exists on the site to enable OGC to design, locate and construct the facility in a manner that will minimize impacts to wetland areas.

#### Water Supply

The site is proximate to Taylor Creek/Nubbin Slough, and preliminary analyses indicate that sufficient water supply exists to reliably support the Project's needs. The primary source of makeup water will be surface water from South Florida Water Management District Canal C-59 at the Taylor Creek/Nubbin Slough. On-site groundwater wells will provide backup water supply during extreme drought conditions, if necessary. OGC has prepared a preliminary water balance for the Project. The preliminary water balance shows that the Project's maximum water consumption will be approximately 5.0 MGD.

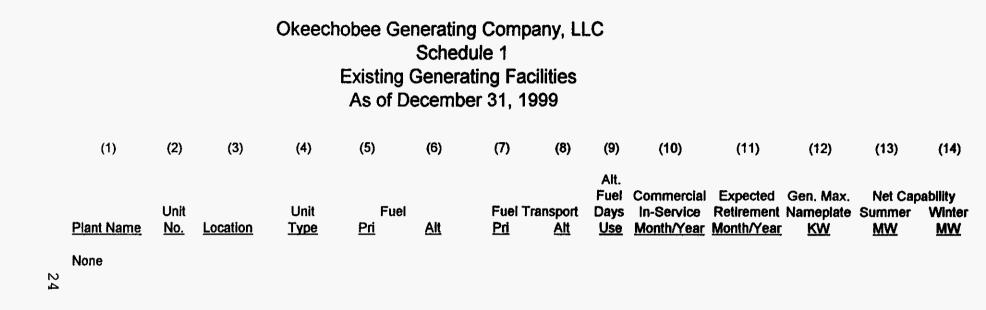
#### Air and Noise Emissions

The Project will incorporate state-of-the-art emissions control technology, including the use of Selective Catalytic Reduction to control emissions of nitrogen oxides  $(NO_x)$ . As such, the Project will be among the cleanest and most fuel-efficient fossil fueled power production facilities in the country. In addition, due to its high efficiency (6,650 BTU per kWh (HHV)), it is expected to economically displace generation by older, less efficient and higher emitting units. This should result in substantial reductions in regional emissions from power generation which, in turn, would result in a significant net air quality benefit to Florida. The lack of significant terrain features or nearby potentially interacting emission sources will help to

minimize local air quality impacts. Estimates of the Project's air emissions are presented in Table 1.

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The Project will be designed to comply with all applicable noise regulations.



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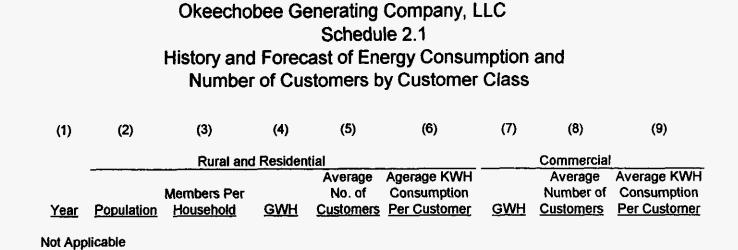
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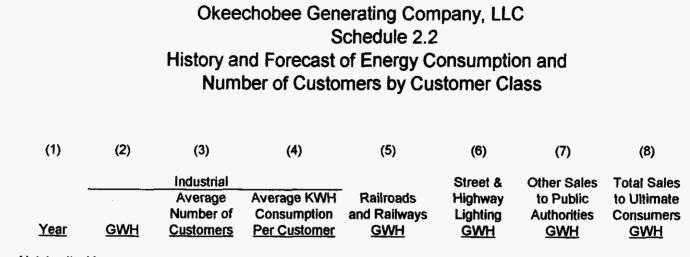


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## Okeechobee Generating Company, LLC Schedule 2.3 History and Forecast of Energy Consumption and Number of Customers by Customer Class

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(1) (2)		(3)	(4)	(5)	(6)
	Sales For	Utility Use	Net Energy	Estimated Wholesale	Total Estimated
	Resale	& Losses	For Load	Customers	Number Of
<u>Year</u>	<u>GWH</u>	<u>GWH</u>	GWH	(Average No.)	Customers
2002	0		0	0	0
2003	2,867		2,867	20	20
2004	4,301		4,301	20	20
2005	4,301		4,301	20	20
2006	4,301		4,301	20	20
2007	4,301		4,301	20	20
2008	4,301		4,301	20	20
2009	4,301		4,301	20	20

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				Schedule	3.1			
	His	story and	Forecast	of Summer	Peak Dem	and in MW	r	
		· · · ·						
) (2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ar <u>Total</u>	Wholesale	<u>Retail</u>	Interruptible	Residential Load <u>Management</u>	Residential Conservation	Comm./Ind. Load <u>Management</u>	Comm./Ind. Conservation	Net Firm <u>Demand</u>
02 0	0	0						0
3 508	508	Ō						508
4 508	508	0						508
508	508	0						508
6 508	508	0						508
7 508	508	0						508
8 508	508	0						508
9 508	508	0						508
	ar <u>Total</u> 2 0 3 508 4 508 5 508 5 508 6 508 7 508 8 508	) (2) (3) <u>ar Total Wholesale</u> 2 0 0 3 508 508 4 508 508 5 508 508 6 508 508 6 508 508 6 508 508 8 508 508	(2) (3) (4)   ar Total Wholesale Retail   02 0 0 0   03 508 508 0   04 508 508 0   05 508 508 0   06 508 508 0   07 508 508 0   08 508 508 0	(2) (3) (4) (5)   ar Total Wholesale Retail Interruptible   (2) 0 0 0   (3) 508 508 0   (3) 508 508 0   (4) 508 508 0   (5) 508 508 0   (5) 508 508 0   (6) 508 508 0   (7) 508 508 0   (8) 508 508 0	History and Forecast of Summer (2) (3) (4) (5) (6) Residential Load Ar Total Wholesale Retail Interruptible Management (2) 0 0 0 (3) 508 508 0 (4) 508 508 0 (5) 508 508 0 (6) 508 508 0 (6) 508 508 0 (7) 508 508 0 (8) 508 508 0 (8) 508 508 0 (7) 508 508 0 (8) 508 508 0 (7) 508 508 0 (8) 508 508 0 (7) 50	(2) (3) (4) (5) (6) (7)   Residential Load Residential Residential Residential Load Residential   ar Total Wholesale Retail Interruptible Management Conservation   92 0 <	History and Forecast of Summer Peak Demand in MW   (2) (3) (4) (5) (6) (7) (8)   (ar Total Wholesale Retail Interruptible Management Comm./Ind. Load Load Management   (2) 0 0 0 0 Management Conservation Management   (2) 0 0 0 Management Conservation Management   (2) 0 <td>History and Forecast of Summer Peak Demand in MW (2) (3) (4) (5) (6) (7) (8) (9) Residential Load Residential Load Residential Load Comm./Ind. Load Conservation Management Conservation Man</td>	History and Forecast of Summer Peak Demand in MW (2) (3) (4) (5) (6) (7) (8) (9) Residential Load Residential Load Residential Load Comm./Ind. Load Conservation Management Conservation Man

Okeechobee Generating Company, LLC

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## Okeechobee Generating Company, LLC Schedule 3.2 History and Forecast of Winter Peak Demand in MW

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(	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Y	<u>ear</u>	Total	<u>Wholesale</u>	<u>Retail</u>	Interruptible	Residential Load <u>Management</u>	Residential Conservation	Comm./Ind. Load <u>Management</u>	Comm./Ind. Conservation	Net Firm <u>Demand</u>
2002	/03	0	0	0						0
2003		552	552	Õ						552
2004		552	552	Ō						552
2005		552	552	Ō						552
2006	/07	552	552	0						552
2007	/08	552	552	0						552
2008	/09	552	552	0						552
2009	/10	552	552	0						552

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#### Okeechobee Generating Company, LLC Schedule 3.3 History and Forecast of Annual Net Energy for Load - GWH

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	<u>Total</u>	Residential Conservation	Comm./Ind. Conservation	<u>Retail</u>	Wholesale	Utility Use <u>&amp; Losses</u>	Net Energy for Load*	Load ** <u>Factor %</u>
<u></u>					<u></u>		<u></u>	<u></u>
2002	0				0		0	0.0
2003	2,867				2,867		2,867	88.9
2004	4,301				4,301		4,301	88.9
2005	4,301				4,301		4,301	88.9
2006	4,301				4,301		4,301	88.9
2007	4,301				4,301		4,301	88.9
2008	4,301				4,301		4,301	88.9
2009	4,301				4,301		4,301	88.9

\* Net Energy for Load for 2003 is based on a projected April 1, 2003 in-service date for the first power train and a projected June 1, 2003 in-service date for the second power train.

\*\* Load Factor calculations are based on projected annual peak demand of 552 MW (winter peak).

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## Okeechobee Generating Company, LLC Schedule 4 Previous Year and 2-Year Forecast of Retail Peak Demand and Net Energy For Load by Month

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

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## Okeechobee Generating Company, LLC Schedule 5 Fuel Requirements

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Fuel Requiren	nents	Units	Actual	Actual	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
(1)	Nuclear		Trillion BTU										
(2)	Coal		1000 Ton										
(3) (4) (5) (6) (7)	Residual	Total Steam CC CT Diesel	1000 BBL 1000 BBL 1000 BBL 1000 BBL 1000 BBL										
(8) (9)	Distillate *	Total Steam	1000 BBL 1000 BBL	N/A	N/A	0	0	0	0	0	0	0	0
(10) (11) (12)		CC CT Diesel	1000 BBL 1000 BBL 1000 BBL 1000 BBL	N/A	N/A	0	0	0	0	0	0	0	0
(13) (14)	Natural Gas	Total Steam	1000 MCF 1000 MCF	N/A	N/A	0	19,070	28,605	28,605	28,605	28,605	28,605	28,605
(15) (16)		CC CT	1000 MCF 1000 MCF	N/A	N/A	0	19,070	28,605	28,605	28,605	28,605	28,605	28,605
(17)	Other (Specify	)	<b>Trillion BTU</b>										

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\*OGC does not anticipate that it will utilize distillate fuel oil, although available.

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# Okeechobee Generating Company, LLC Schedule 6.1 Energy Sources (Units)

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Energy Sources		Units	Actual	Actual	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
(1)	Annual Firm Interchang	je	GWH										
(2)	Nuclear		GWH										
(3) (4) (5) (6) (7)	Residual	Total Steam CC CT Diesel	GWH GWH GWH GWH GWH										
(8) (9) (10) (11)	Distillate •	Total Steam CC CT	GWH GWH GWH GWH	N/A N/A	N/A N/A	0 0							
(12)		Diesel	GWH										
(13) (14)	Natural Gas	Totai Steam	GWH GWH	N/A	N/A	0	2,867	4,301	4,301	4,301	4,301	4,301	4,301
(15) (16)		CC CT	GWH GWH	N/A	N/A	0	2,867	4,301	4,301	4,301	4,301	4,301	4,301
(17)	Other (Specify)		GWH										
(18)	Net Energy for Load		GWH	N/A	N/A	0	2,509	4,301	4,301	4,301	4,301	4,301	4,301

• OGC does not anticipate that it will utilize fuel oil, although available.

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					Oke	echobee	Generat	ina Coi	mpany						
					01.0			dule 6.2							
						Ener	gy Sour	ces (Pe	ercent)						
	(1)	(2)	i	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
						Actual	Actual								
		Energy Source	æs 📃		Units	<u></u>		<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
	(1)	Annual Firm I	Intercha	inge	%										
	(2)	Nuclear			%										
	(3)	Residual		Total	%										
34	(4) (5)			Steam CC											
	(5) (6)			СС	% %										
	(7)			Diese											
	(8)	Distillate •		Totai	%	N/A	N/A	N/A	0	0	0	0	0	0	0
	(9)			Steam		<b></b>	<b>B</b> 1/A	<b>b</b> // A	0	•	•	•		•	•
	(10) (11)			CC CT	% %	N/A	N/A	N/A	0	0	0	0	0	0	0
	(12)			Diese											
	(13)	Natural Gas		Total	%	N/A	N/A	N/A	100	100	100	100	100	100	100
	(14)			Steam		<b>N1/A</b>		<b>N</b> 1/A		400	400	400			
	(15) (16)			CC CT	% %	N/A	N/A	N/A	100	100	100	100	100	100	100
		Other (Specif		•••											
	(17)	Other (Specif	<b>y</b> )		%										
	(18)	Net Energy fo	or Load		%	NA	NA	N/A	100	100	100	100	100	100	100

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• OGC does not anticipate that it will use fuel oil, although available.

#### Okeechobee Generating Company, LLC Schedule 7.1 Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Total Installed Capacity	Firm Capacity Import	Firm Capacity Export	QF	Total Capacity Available	System Firm Summer Peak Demand	before M	/e Margin aintenance	Scheduled Maintenance	after Mai	e Margin ntenance
Year	MW	MW	MW	MW	<u>MW</u>	MW	MW	% of Peak	MW	<u></u> MW	% of Peak
2002	0	0	0	0	0 508	0 508	N/A (1)	N/A (1) N/A (1)	N/A N/A	N/A (1) N/A (1)	N/A (1) N/A (1)
2003 2004	508 508	0 0	0 0	0	508	508	N/A (1) N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2005 2006	508 508	0 0	0 0	0 0	508 508	508 508	N/A (1) N/A (1)	N/A (1) N/A (1)	N/A N/A	N/A (1) N/A (1)	N/A (1) N/A (1)
2007	508	0	0	0	508	508	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2008 2009	508 508	0 0	0 0	0 0	508 508	508 508	N/A (1) N/A (1)	N/A (1) N/A (1)	N/A N/A	N/A (1) N/A (1)	N/A (1) N/A (1)

Notes:

(1) As a base load plant with a planned outage rate of 5%, OGC expects to deliver the full rated output of the Project at the time of summer peak.

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#### Okeechobee Generating Company, LLC Schedule 7.2 Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Winter Peak

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Total Installed Capacity	Firm Capacity Import	Firm Capacity Export	QF	Total Capacity Available	System Firm Winter Peak Demand	before M	ve Margin aintenance	Scheduled Maintenance		e Margin intenance
Year	MW	MW	MW	MW	<u></u> <u>MW</u>	<u>MW</u>	<u>MW</u>	% of Peak	MW	MW	% of Peak
2002	D	0	0	0	0	0	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2003	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2004	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2005	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2006	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2007	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2008	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)
2009	552	0	0	0	552	552	N/A (1)	N/A (1)	N/A	N/A (1)	N/A (1)

Notes:

(1) As a base load plant with a planned outage rate of 5%, OGC expects to deliver the full rated output of the Project at the time of winter peak.

1	1	1	1	1	)	I		1 1	1	1	}	1)	1	1	1	1
·										1.	·		-			
				0	keech	obee	Gene	erating (	Compa	ny, LLC						
							S	chedule	8	-						
			Planned	and P	rospe	ctive (	Gene	rating F	acility /	Additions a	and Chan	nes				
												geo				
(1	D	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			-	(13)	(14)	(15)	
(1	1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) Not Co	(14)	(15)	
(1	1)	(2) Unit	(3)	(4) Unit	(5) Fu			(8) Transport	(9) Const. Start		(11) Expected	-	Net Ca	pability	(15)	
(1 Plant I			(3) Location					Transport	Const.	(10) Commercial	(11) Expected	(12) Gen. Max.		pability	(15) Status	

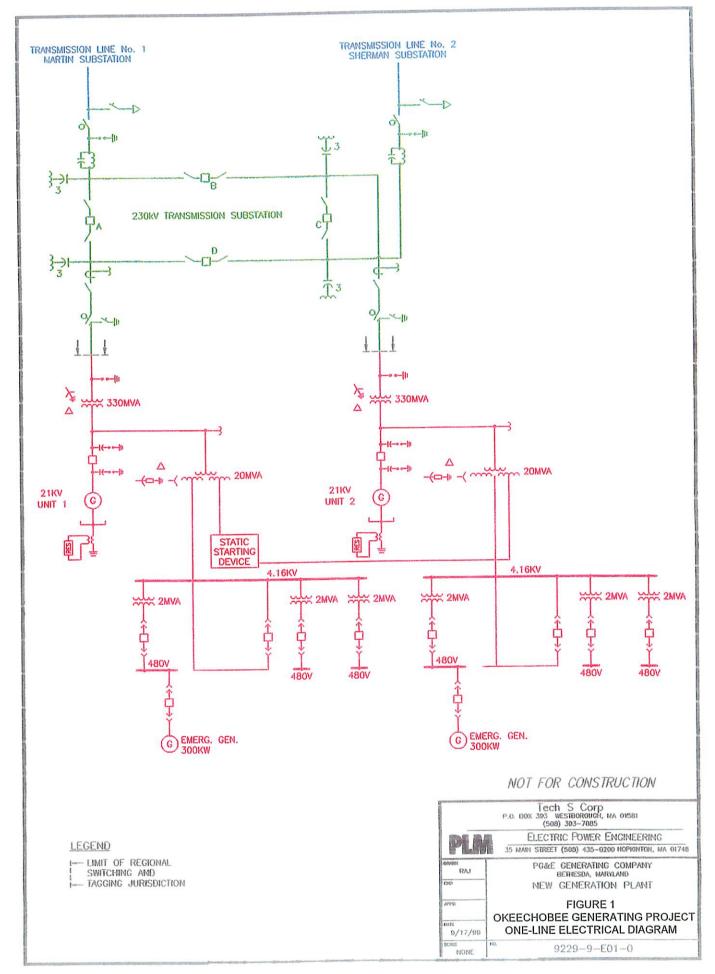
			Generating Company, LLC
			Schedule 9
-		Status Report and Specifications	of Proposed Generating Facilities
	(1)	Plant Name and Unit Number	Okeechobee Generating Project
	(2)	Capacity	
	~~	a. Summer:	508 MW
-		b. Winter:	552 MW
_	(3)	Technology Type:	Combined Cycle
	(4)	Anticipated Construction Timing	
		a. Field construction start - date:	10/2001
		b. Commercial in service - date:	2nd Quarter 2003
	(5)	Fuel	
	.,	a. Primary fuel:	Natural Gas
-		b. Alternate fuel:	Fuel Oil
_	(6)	Air Pollution Control Strategy:	Dry Low-NOx Burners and Selective Catalytic Reduction (SCR) for natural gas operation, and Water Injection and SCR for oil operation.
_	(7)	Cooling Method:	Wet Cooling Tower
	(8)	Total Site Area:	40 acres of 771 acre site (approximate)
_	(9)	Construction Status:	Planned
_	(10)	Certification Status:	Need Determination Petition filed September 24, 1999 Site Certification Application to be filed by June 2000.
<u>-</u>	(11)	Status With Federal Agencies:	Exempt Wholesale Generator Status certified by FERC; market-based rates authorized by FERC.
	(12)	Projected Unit Performance Data	
		Planned Outage Factor (POF):	5.0%
_		Forced Outage Factor (FOF):	2.0%
		Equivalent Availability Factor (EAF):	93.0%
		Estimated Capacity Factor (%):	93.0%
		Average Net Operating Heat Rate (ANOR):	6,650 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):	352/kW
		AFUDC Amount (\$/kW):	N/A
		Escalation (\$/kW):	N/A

## Okeechobee Generating Company, LLC Schedule 10 Status Report and Specifications of Proposed Directly Associated Transmission Lines

- (1) Point of Origin and Termination: N/A \*
- (2) Number of Lines: (Loop to existing 230 kV line)
- (3) Right-of-Way: None required; 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: Approximately \$3,800,000.\*\*
- (8) Substations: Step-up only.
- (9) Participation with Other Utilities: None.
- Notes:

\* No additional transmission lines required.

\*\* Anticipated capital investment includes costs of project switchyard and the loop to the existing 230 kV line.



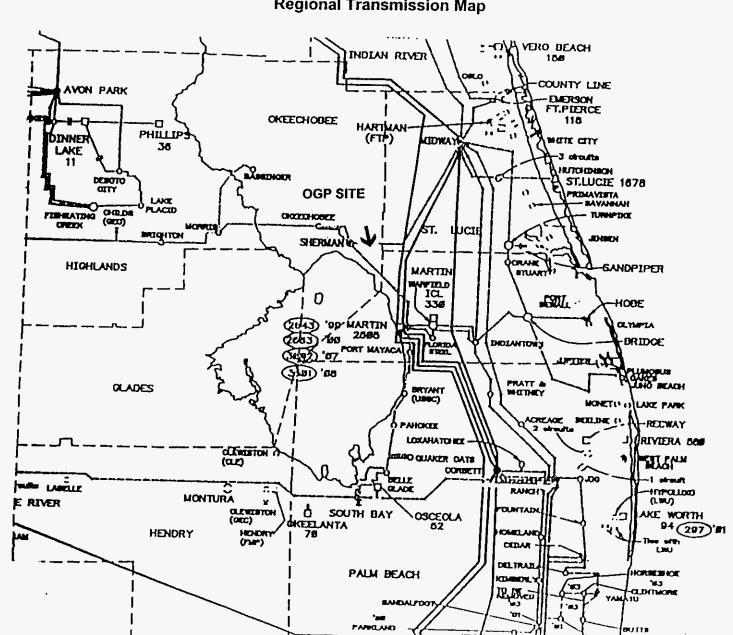


FIGURE 2 Okeechobee Generating Project Regional Transmission Map

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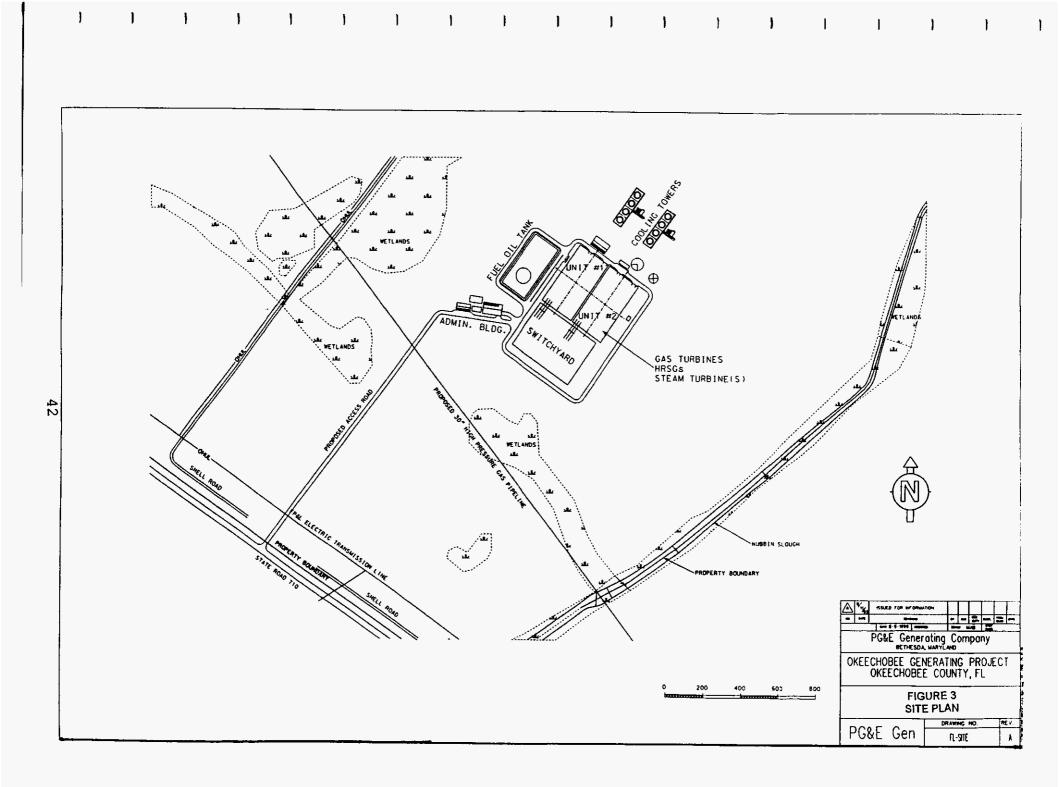
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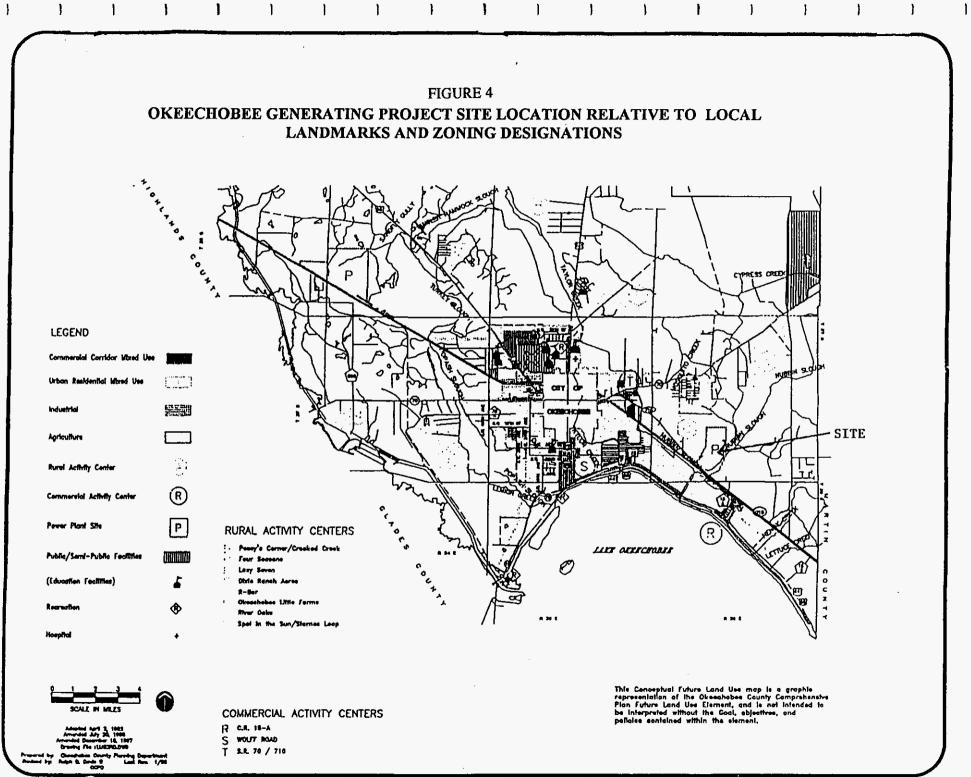
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#### Table 1

#### **Estimated Plant Performance and Emissions Data**

#### Okeechobee Generating Project

Two Engine Combined Cycle Generating Facility

**Two Combustion Turbines** 

Two Unfired Heat Recovery Steam Generators Two Condensing Steam Turbines

	Case 1	Case 2	Case 3
Conditions		1	
Load %	100%	100%	100%
Amb. Temp. (°F)	40	59	95
W.B. Temp.(°F)	32	51.5	77
Relative Humidity (%)	38%	60%	45%
Steam Inj.	Off	Off	Off
Evap. Cooler	Off	On	On
Location Cond.			
CIT (°F)	40.0	52.6	79.7
Elevation (ft above sea level)	25	25	25
Pressure (psia)	14.68	14.68	14.68
Unit Performance		1	
Exhaust Flow (kip/hr)	3,256	3,194	3,053
Steam Injection	0	0	0
Gross Output (kW)	283,210	277,104	260,606
Heat Input (MMBtu/hr HHV)	1,836	1,797	1,708
Gross Heat Rate (BTU/kWhr HHV)	6,482	6,484	6,554
Auxiliary Load (kW)	7,080	6,928	6,515
Net Output (kW)	276,129	270,176	254,091
Net Heat Rate (Btu/kWhr HHV)	6,648	6,650	6,722
Plant Output			
Net Plant Output (kW)	552259	540352	508181
Stack Emissions per Unit			
NOx, ppmvd @15% O2	2.5	2.5	2.5
NOx, lb/hr	18.9	18.5	17.4
SO2, lb/hr	9.9	9.7	9.1