BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

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DOCKET NO. 08_____-EI
FLORIDA POWER & LIGHT COMPANY

IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
CONVERSION OF CAPE CANAVERAL PLANT

IN RE: FLORIDA POWER & LIGHT COMPANY'S
PETITION TO DETERMINE NEED FOR
CONVERSION OF RIVIERA PLANT

DIRECT TESTIMONY & EXHIBITS OF:

CINDY TINDELL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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DIRECT TESTIMONY OF CINDY TINDELL

DOCKET NO. 08_____-EI

APRIL 30, 2008

Q. Please state your name and business address.

A. My name is Cindy Tindell. My business address is Florida Power & Light Company, 700 Universe Boulevard, Juno Beach, Florida, 33408.

Q. By who are you employed and what position do you hold?

A. I am employed by Florida Power & Light Company (FPL or the Company) as the Senior Director of Development, leading the Fossil Group.

Q. Please describe your duties and responsibilities in that position.

A. I lead FPL's efforts to develop non-nuclear generation including new plants and the conversion of older plants. I have overall responsibility for the conversion of our plants at Cape Canaveral and Riviera.

Q. Please describe your education and professional experience.

A. Prior to my current position, I served as Executive Director of Development in FPL Energy where I was responsible for acquisition and development activities, leading alternative energy investments, and asset and contract restructurings. Prior to joining FPL Energy, I served in investment and finance positions with Credit Suisse First Boston and GE Capital Corporation and as an official at the U.S. Department of State. I hold an undergraduate degree from Georgetown University, a master's degree from Columbia University and an MBA from Harvard Business School.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is twofold. First, I provide a summary of the generation alternatives that were evaluated in arriving at the decision to pursue the proposed conversions of the Cape Canaveral and Riviera plants and why the combined cycle technology and conversion processes were selected. Second, I describe the two conversion projects in detail including a description of the sites, the applied technology, water usage, air emissions, transmission tie-ins, certification and permit plans, construction schedules, and project costs.

Q. Please summarize your testimony.

A. FPL plans to convert the Cape Canaveral plant, with units dating from 1965 and 1969, respectively, and the Riviera plant, with units dating from 1962 and 1963, respectively, into modern, highly efficient, lower-emission Next Generation Energy Centers using the latest combined cycle (CC) technology. The conversions will result in increased power generation without using any additional land, water sources or transmission rights-of-way. The Cape Canaveral plant will be renamed the Cape Canaveral Energy Center (CCEC) and is expected to have an in-service date of June 2013. The Riviera plant will be renamed the Riviera Beach Energy Center (RBEC) and is expected to have an in-service date of June 2014.

The converted plants will deliver lower cost, more efficient, and cleaner energy to our customers. The plants will use at least 33% less fuel for an equivalent amount of energy production. Moreover, they will be capable of producing nearly 80% more power based on expected summer capacities. Each will be configured with three of the latest generation combustion turbines (CTs) and three heat recovery steam generators (HRSGs) combined with one steam turbine generator. By using natural gas as a primary fuel and technology recognized by the Florida Department of Environmental Protection (FDEP) as the Best Available Control Technology for controlling air emissions, the plants will minimize air emissions and will be among the cleanest power plants in Florida. The converted plants will continue to draw water from existing sources and will not exceed existing permitted water limits.

The conversions also have non-economic benefits. The aesthetics will improve significantly. At CCEC, the stacks will be lowered from approximately 400 feet to 150 feet, while at RBEC, the stacks will be lowered from approximately 300 feet to 150 feet. The projects will use natural gas as the primary fuel and will be capable of burning ultra low sulfur light oil as a backup fuel. Due to their location on the coast of Florida, both plants will be able to receive backup fuel from water borne deliveries, which is a significant advantage particularly in emergency situations compared to in-land plants.

FPL has a great deal of experience building and operating CC plants to achieve the best possible efficiencies. Further, FPL has proven its ability to modernize older plants through three recent examples. FPL is confident of the accuracy of its construction cost estimates and projected unit capabilities.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits CT-1 through CT-11, which are attached to my direct testimony.

Exhibit CT-1	FPL Operational Combined Cycle Plants & FPL Combined Cycle Construction Projects in Progress
Exhibit CT-2	CCEC Vicinity Map
Exhibit CT-3	CCEC Site Layout with Power Block
Exhibit CT-4	CCEC Fact Sheet
Exhibit CT-5	CCEC Expected Construction Schedule
Exhibit CT-6	CCEC Construction Cost Components
Exhibit CT-7	RBEC Vicinity Map
Exhibit CT-8	RBEC Site Layout with Power Block
Exhibit CT-9	RBEC Fact Sheet
Exhibit CT-10	RBEC Expected Construction Schedule
Exhibit CT-11	RBEC Construction Cost Components

I. SELECTION OF GENERATION TECHNOLOGY AND DECISION TO PURSUE PLANT CONVERSIONS

Q. Please describe the major available generating alternatives which were considered and evaluated by FPL in arriving at the decision to pursue the proposed projects.

A. Major generating alternatives include CC technology utilizing advanced CTs, simple cycle technology utilizing advanced CTs, pulverized coal, gas or oil fired steam generator technology, integrated gasification CC technology and nuclear steam generator technology.

Due to recent decisions rejecting new coal-based generation in Florida, as well as the longer project development and construction timeline for coal projects, the pulverized coal and integrated gasification CC technology options were ruled out as viable technology options. Nuclear based generation was ruled out based on the estimated time to license and construct the facilities, which is estimated to take at least 10 years. Traditional oil or gas fired steam generator technologies were also not considered due to the inherent efficiency advantages of the CC technology and the cost advantages compared to the simple cycle technology.

Based on these factors, FPL selected the CC technology as the most efficient and cost-effective for its capacity.

Q. Please describe the combined cycle technology that will be used for the Projects.

A. A CC unit is a combination of CTs, HRSGs, and a steam-driven turbine generator (STG). Each of the CTs compress outside air into a combustion area where fuel, typically natural gas or light oil, is burned. The hot gases from the burning fuel air mixture expand across the turbine section, which, in turn, provides mechanical energy to the generator for the production of electrical energy. The exhaust gas energy produced by each turbine, where the temperature is approximately 1,100°F, is passed through a HRSG before exiting the stack at approximately 200°F. The energy extracted by the HRSG produces steam, which is used in a conventional STG cycle. The utilization of waste heat from the combustion turbines provides an overall plant efficiency that is much better than that of the CT's cycle or the conventional STG cycle alone.

Each CT/HRSG combination is called a "train." The number of CT/HRSG trains used establishes the general size of the STG. For the proposed CCEC and RBEC projects, three CT/HRSG trains will be connected to one STG, giving rise to the characterization of the projects as "three on one" (3x1) CC units.

Q. What level of operating efficiency is anticipated for the Projects?

A. In general, modern CC plants can be expected to achieve a fuel to electrical energy conversion rate (heat rate) of less than 7,000 Btu/kWh, as opposed to values in the 10,000 Btu/kWh range for conventional steam-electric generating units. FPL anticipates that the converted units will achieve an average base heat rate of approximately 6,580 Btu/kWh for Cape Canaveral and 6,576 Btu/kWh for Riviera (based on an average ambient temperature of 75°F) over the lives of these projects. Each proposed 3x1 unit will therefore produce the same amount of energy as a similarly sized conventional steam plant using, on average, one third less fuel. The addition of this highly efficient unit to the FPL system would improve the system heat rate by 1.07 percent, as discussed in FPL witness Rene Silva's testimony.

Q. Are there other operational advantages to combined cycle technology?

A. Yes. Another advantage of the multi-train CC arrangement is that it allows for greater flexibility in matching unit output to system operating characteristics over time.

Q. Does FPL have experience in building combined cycle plants?

A. Yes. FPL has extensive experience in building CC plants. FPL's first CC plant (Putnam Units 1 & 2) went into service in 1976. As shown in Exhibit CT-1, FPL has 8,961 MW (net summer) of CC capacity in service and the addition of WCEC 1 & 2 are scheduled to be completed by June 2009 and June 2010, respectively, adding 2,438 MW. WCEC 3 is currently pending permitting and regulatory approval and is expected in service in 2011 adding 1,219 MW of CC capacity.

Q. Please describe FPL's history of operating combined cycle plants.

A. FPL has 8,961 MW (net summer) of CC equipment presently in-service which utilize combustion turbines from various manufacturers. These include 30 General Electric (GE) 7FA turbines, 4 Mitsubishi/Westinghouse 501F turbines and 4 Westinghouse 501B turbines.

In addition to its CC operating experience, FPL has extensive experience operating simple-cycle CTs, which comprise the "front end" of the CC technology. FPL has operated ten GE 7FA CTs in simple-cycle mode at its Fort Myers and Martin plant sites in Florida. FPL also has been operating 48 smaller simple-cycle CT units for approximately 35 years.

Q. **Please describe FPL's track record in building and operating combined cycle units.**

A. In meeting its obligation to serve its customers, FPL has demonstrated its ability to construct reliable and efficient plants. For example, in 1994 FPL began commercial operation of two new CC units at FPL's Martin plant and, just two years later, FPL was awarded Power Magazine's Power Plant of the Year Award for world-class performance in operation and maintenance (O&M) and availability for those units. In addition, other FPL projects have been recognized on numerous occasions. The Turkey Point Expansion Project (Turkey Point Unit 5) was recognized by Power Engineering magazine as the "Best of the Year" gas-fired project in 2007. Both the Fort Myers Repowering Project and Sanford Repowering Projects were recognized by Power magazine as "Top Plants" of the year in 2003 and 2004, respectively.

To ensure ongoing best-in-class performance in today's highly competitive electricity generating industry, FPL focuses on excellence in people, technology, business and operating processes. FPL promotes a shift team concept in its power plants that emphasizes empowerment, engagement and accountability, with an understanding that each employee has the necessary knowledge, skill and motivation to perform any required task. This multifunctional, team-driven and well-trained workforce is the key to FPL's ability to consistently meet and often exceed plant performance objectives.

With world-class operational skills from which to draw, FPL maximizes the value of its existing and new assets by employing the best practices that underlie its industry-leading positions. FPL's fossil-fueled fleet continues to achieve an above average availability compared with the U.S. industry average.

Q. Please describe how FPL monitors the operational performance of its power plants.

A. FPL optimizes plant operations, gains process efficiencies and leverages the deployment of technical skills through the use of technology as demand for services increases. For example, the Company's Fleet Performance and Diagnostics Center (FPDC) in Juno Beach, Florida, provides FPL with the capability to monitor every fossil-fueled plant in its system. FPL can compare the performance of like components on similar generating units, determine how it can make improvements, and prevent problems before they occur.

Live video links can be established between the FPDC and plant control rooms to immediately discuss, prevent, and solve problems. In 2001, FPL was presented with an Industry Excellence Award from the Southeast Electric Exchange for the FPDC. Both CCEC and RBEC will be connected to the FPDC.

Q. **Please describe FPL's record in the conversion of older power generation facilities to modern, state-of-the-art units.**

A. FPL has been recognized by the industry for its capabilities in modernizing older generation units to state-of-the-art high-capacity, high-efficiency CC units. FPL has a long-standing plant performance improvement program. Since 1993, FPL has modernized older generation units at Lauderdale (1993), Ft. Myers (2001), and Sanford (2003).

Q. **Please describe "conversion."**

A. A conversion involves the dismantlement of one or more existing generation units, while leaving intact, for example, certain components such as the cooling water intake and discharge infrastructure, and then the installation of a new CC generation unit.

Q. **What types of fuel will the converted projects be capable of using?**

A. The projects will use natural gas as the primary fuel and will be capable of using ultra low sulfur light oil as a back-up fuel. Due to their location on the coast of Florida, both plants will be able to receive backup fuel from water borne deliveries, which is a significant advantage particularly in emergency situations compared to in-land plants. In her direct testimony, FPL witness

Heather Stubblefield explains how fuel will be supplied.

II. CAPE CANAVERAL CONVERSION PROJECT

Q. Please describe the existing facilities at the Cape Canaveral site.

A. The Cape Canaveral plant is located on 42 acres of flat, sandy area between Cocoa and Titusville. The site is bounded on the east by the Indian River and on the west by US Hwy 1. The Kennedy Space Center is across the river from the plant. The plant currently consists of two nominal 400 MW conventional dual-fuel fired steam boilers. Each of these conventional steam boilers can burn #6 fuel oil and natural gas. Unit 1 entered service in 1965 and Unit 2 entered service in 1969. Cape Canaveral Plant has a summer rating of 792 MW and a winter rating of 796 MW. 2007 actual performance included an average heat rate (Btu/kWh) of 10,592 Btu/kWh and a capacity factor of 31.3%.

Q. Please describe the proposed Cape Canaveral conversion project in more detail.

A. As indicated previously, the generation facilities at Cape Canaveral will be renamed the Cape Canaveral Energy Center or CCEC. Upon conversion, CCEC will be a 3x1 CC plant consisting of three 250-MW Mitsubishi Power Systems (MPS) G Class advanced CTs (or CTs with improved characteristics should such technology become available), each with dry low-NO_x combustors, and three HRSGs, which will use the waste heat energy from the

CTs to produce steam to be utilized in a new steam turbine generator. The plant aesthetics will improve significantly. The stacks will be lowered from approximately 400 feet to 150 feet. The location and the general arrangement are shown for CCEC in Exhibit CT-2 and Exhibit CT-3.

Each CT unit will utilize inlet air evaporative cooling. Evaporative coolers achieve cooling using water evaporation to remove heat from the inlet air. This allows additional power to be produced during periods of high ambient temperature (or on hot days).

The evaporative coolers normally would be utilized when the ambient air temperature is greater than 60°F. Given an average annual temperature for the FPL system of approximately 75°F, the output and heat rate benefits of evaporative cooler operation are included in the base rating of 1,115 MW (net summer) for CCEC and a base operation heat rate of 6,580 Btu/kWh.

Each HRSG will include duct burners. The duct burners can be fired during peak demand periods to add an additional 104 MW of capacity to the unit at an incremental heat rate of 8,770 Btu/kWh.

CCEC, with a summer generating capacity of 1,219 MW (net) from combined base operations and duct burning capabilities, will be among the most efficient electric generators in Florida. The unit will have an estimated equivalent availability factor of approximately 97% and an estimated average forced outage rate of approximately 1%. The expected operating characteristics are shown in Exhibit CT-4.

Q. Please describe the projected air emissions of the Cape Canaveral conversion project.

A. The conversion will result in cleaner electricity production. The use of natural gas as a primary fuel and ultra-low sulfur light fuel oil as a backup fuel and combustion controls will minimize air emissions from the unit and ensure compliance with applicable emission limiting standards. Using these fuels minimizes emissions of sulfur dioxide (SO_2), particulate matter, and other fuel-bound contaminates. Combustion controls similarly minimize the formation of nitrogen oxides (NO_x) and the combustor design will limit the formation of carbon monoxide and volatile organic compounds. When firing natural gas, NO_x emissions will be controlled using dry-low NO_x combustion technology and selective catalytic reduction (SCR). Water injection and SCR will be used to reduce NO_x emissions during operations when using ultra-low sulfur light fuel oil as backup fuel. This design has been recognized by the FDEP as the Best Available Control Technology for air emissions, and minimizes such emissions while balancing economic, environmental, and energy impacts. Taken together, the design of CCEC will incorporate features that will make it among the most efficient and cleanest power plants in the State of Florida.

Q. What are the water requirements for the Cape Canaveral conversion project, and how will they be met?

A. There will be no additional water sources required as a result of this project. Under its permit issued by the FDEP, water from the Indian River Lagoon (Intracoastal Waterway) is and will continue to be used for once-through cooling water. After conversion, the amount of cooling water required will not exceed current permit limits. In addition, public water supply is used for service and process water.

Certain Federal water environmental regulations are being reviewed by the United States Environmental Protection Agency. While FPL does not expect material changes to the requirements applicable to the Cape Canaveral conversion, there is a possibility that changes do occur and that they will affect the plans and costs for cooling water at the plant as well as at other FPL generating facilities. However, changes in these requirements would affect the plant irrespective of the proposed conversion. FPL will continue to monitor the progress of these issues. In the event of any applicable changes, of course, FPL would assess the most cost-effective means of complying with the new requirements.

Q. How will the Cape Canaveral conversion project be interconnected to FPL's transmission network?

A. As a result of the conversion, CCEC will continue to be interconnected to the existing Cape Canaveral 230 kV system switchyard, which will remain in place.

Q. What is the current status of the certifications and permits required to begin construction?

A. FPL intends to pursue certification under the Power Plant Siting Act (PPSA). We will first need to obtain approvals from Brevard County including rezoning, site plan approval and conditional use authorization which we anticipate will take 6 months. Then, FPL will file for regulatory approvals through submittal of an air construction permit application, an application for modification of the existing Industrial Wastewater Facility permit and for site certification under the PPSA site certification process.

Q. What is the proposed construction schedule for the Cape Canaveral conversion project?

A. A summary of estimated construction milestone dates is shown on Exhibit CT-5. FPL will commence the conversion upon receipt of the necessary regulatory approvals. We anticipate this will occur by May 2010. FPL expects that the project will achieve commercial operation by June 2013. We anticipate that demolition and construction will require approximately 36 months.

Q. What does FPL estimate that the Cape Canaveral conversion project will cost?

A. A summary of estimated costs is shown on Exhibit CT-6. FPL estimates that the total cost will be $1,115 million. Principal components include the power block of $963 million, transmission, interconnection and integration of $33 million, and Allowance for Funds Used During Construction (AFUDC) of $119 million.

III. RIVIERA CONVERSION PROJECT

Q. Please describe the existing facilities at the Riviera plant site.

A. The Riviera plant is located on 21 acres, southwest of the Palm Beach Inlet and Peanut Island, and across the Intracoastal Waterway from Palm Beach. The plant currently consists of two nominal 280 MW conventional dual-fuel fired steam boilers. Each of these conventional steam boilers can burn #6 fuel oil and natural gas. One unit entered service in 1962 and the other unit entered service in 1963. The Riviera plant has a summer rating of 565 MW and a winter rating of 571 MW. 2007 actual performance included an average heat rate (Btu/kWh) of 10,645 Btu/kWh and a capacity factor of 38.0%.

Q. Please describe the proposed Riviera conversion project in more detail.

A. As previously indicated, the generation facilities at Riviera will be renamed the Riviera Beach Energy Center or RBEC. Upon conversion, RBEC will be a 3x1 CC plant consisting of three 250-MW MPS G Class advanced CTs (or CTs with improved characteristics should such technology become available), each with dry low-NO_x combustors, and three HRSGs, which will use the waste heat energy from the CTs to produce steam to be utilized in a new steam turbine generator. The plant aesthetics will improve significantly. The stacks will be lowered from 300 feet to 150 feet. The location and general arrangement of RBEC are shown on Exhibit CT-7 and Exhibit CT-8.

Each CT unit will utilize inlet air evaporative cooling. Evaporative coolers achieve cooling using water evaporation to remove heat from the inlet air. This allows additional power to be produced during periods of high ambient temperature (or on hot days).

The evaporative coolers normally would be utilized when the ambient air temperature is greater than 60°F. Given an average annual temperature for the FPL system of approximately 75°F, the output and heat rate benefits of evaporative cooler operation are included in the base rating of 1,117 MW (net summer) for RBEC and a base operation heat rate of 6,576 Btu/kWh.

Each HRSG will include duct burners. The duct burners can be fired during peak demand periods to add an additional 90 MW of capacity to the unit at an incremental heat rate of 8,770 Btu/kWh.

RBEC, with a summer generating capacity of 1,207 MW (net) from the base operations and duct burning capabilities, will be among the most efficient electric generators in Florida. The unit will have an estimated equivalent availability factor of approximately 97% and an estimated average forced outage rate of approximately 1%. The expected operating characteristics are shown in Exhibit CT-9.

Q. Please describe the potential air emissions of the Riviera conversion project.

A. The conversion will result in cleaner electricity production. The use of natural gas as a primary fuel and ultra-low sulfur light fuel oil as a backup fuel and combustion controls will minimize air emissions from the unit and ensure compliance with applicable emission limiting standards. Using these fuels minimizes emissions of SO_2, particulate matter, and other fuel-bound contaminates. Combustion controls similarly minimize the formation of NO_x and the combustor design will limit the formation of carbon monoxide and volatile organic compounds. When firing natural gas, NO_x emissions will be controlled using dry-low NO_x combustion technology and SCR. Water injection and SCR will be used to reduce NO_x emissions during operations when using ultra-low sulfur light fuel oil as backup fuel. These design alternatives have been recognized by the FDEP as the Best Available Control Technology for air emissions, and minimize such emissions while balancing economic, environmental, and energy impacts. Taken together, the design of the converted Riviera power plant will incorporate features that will make it among the most efficient and cleanest power plants in the State of Florida.

Q. What are the water requirements for the Riviera conversion project, and how will they be met?

A. There will be no additional water sources required as a result of this project. Under its current permit issued by the FDEP, water from the Lake Worth Lagoon (Intra-coastal waterway) is and will continue to be used for once-through cooling water. After conversion, the amount of cooling water required will not exceed current permit limits. In addition, the existing municipal water supply will be used for industrial processing water, service water, and potable water.

Certain federal water environmental regulations are being reviewed by the United States Environmental Protection Agency. While FPL does not expect material changes to the requirements applicable to the Riviera conversion, there is a possibility that changes do occur and that they will affect the plans and costs for cooling water at the plant as well as at other FPL generating facilities. However, changes in these requirements would affect the plant irrespective of the proposed conversion. FPL will continue to monitor the progress of these issues. In the event of any applicable changes, of course, FPL would assess the most cost-effective means of complying with the new requirements.

Q. How will the Riviera conversion project be interconnected to FPL's transmission network?

A. After the conversion, RBEC combustion turbines "A" and "B" will be connected to the Riviera 138 kV system switchyard. RBEC combustion turbine "C" and the steam turbine generator will be connected to the Riviera 230 kV system switchyard.

Q. What is the current status of the certifications and permits required to begin construction?

A. FPL intends to pursue certification under the PPSA. We will first need to obtain approvals from the City of Riviera Beach including site plan approval, which we anticipate will take up to 6 months. No rezoning is required. Then, FPL will file for regulatory approvals through submittal of an air construction permit application, an application for modification of the existing Industrial Wastewater Facility permit and for site certification under the PPSA site certification process.

Q. What is the proposed construction schedule for the Riviera conversion project?

A. A summary of estimated construction milestone dates is shown on Exhibit CT-10. FPL will commence the conversion upon receipt of the necessary regulatory approvals. We anticipate that this will occur by May 2010. FPL expects that the project will achieve commercial operation by June 2014. We anticipate that demolition and construction will require approximately 45 months.

Q. What does FPL estimate that the Riviera conversion project will cost?

A. A summary of estimated costs is shown on Exhibit CT-11. FPL estimates that the total cost will be $1,276 million. Principal components include the power block of $997 million, transmission, interconnection and integration of $132 million, and AFUDC of $147 million.

IV. CONSEQUENCES OF DELAY

Q. What are the likely consequences if the need determinations for the conversions are delayed?

A. FPL has set in-service dates of June 2013 for CCEC and June 2014 for RBEC. We anticipate commencing site work following the receipt of necessary approvals. We anticipate receiving a final order from the Commission by October 2008, local zoning and other approvals by March 2009 and anticipate commencing the PPSA process in early 2009. We anticipate completing all approvals by May 2010. We believe this is a realistic timetable. If the approvals are delayed, the introduction of efficient and cost-effective capacity and energy would be delayed to the detriment of FPL's customers. Approval without delay would result in customers receiving cost-savings benefits and emission reductions described in the testimonies of FPL witnesses Silva, Sim and Kennard Kosky.

Q. Does this conclude your testimony?

A. Yes.

FPL OPERATIONAL COMBINED CYCLE POWER PLANTS

Facility	Location	In-Service Year	Technology	Summer Capacity (MW)	Primary Fuel
Turkey Point Unit 5	FL	2007	4 x 1 combined cycle	1,144	Natural gas
Martin Unit 8	FL	2005	4 x 1 combined cycle	1,107	Natural gas
Manatee Unit 3	FL	2005	4 x 1 combined cycle	1,107	Natural gas
Sanford Unit 4	FL	2003	4 x 1 combined cycle	940	Natural gas
Fort Myers Unit 2	FL	2002	6x2 combined cycle	1,423	Natural gas
Sanford Unit 5	FL	2002	4 x 1 combined cycle	940	Natural gas
Martin Unit 3	FL	1994	2 x 1 combined cycle	471	Natural gas
Martin Unit 4	FL	1994	2 x 1 combined cycle	472	Natural gas
Lauderdale Unit 4	FL	1993	2 x 1 combined cycle	430	Natural gas
Lauderdale Unit 5	FL	1993	2 x 1 combined cycle	429	Natural gas
Putnam Unit 1	FL	1976	2 x 1 combined cycle	249	Natural gas
Putnam Unit 2	FL	1976	2 x 1 combined cycle	249	Natural gas
Total Combined Cycle Capacity In Operation - Summer (net) ➔				8,961	

FPL COMBINED CYCLE CONSTRUCTION PROJECTS IN PROGRESS

Project	Location	In-Service Year	Technology	Summer Capacity (MW)	Primary Fuel
West County Unit 1	FL	2009	3x1 combined cycle	1,219	Natural gas
West County Unit 2	FL	2010	3 x 1 combined cycle	1,219	Natural gas
West County Unit 3	FL	2011	3 x 1 combined cycle	1,219	Natural gas
			Total Combined Cycle Capacity In Construction - Summer (net) ➔	3,657	

Cape Canaveral Plant Vicinity Map

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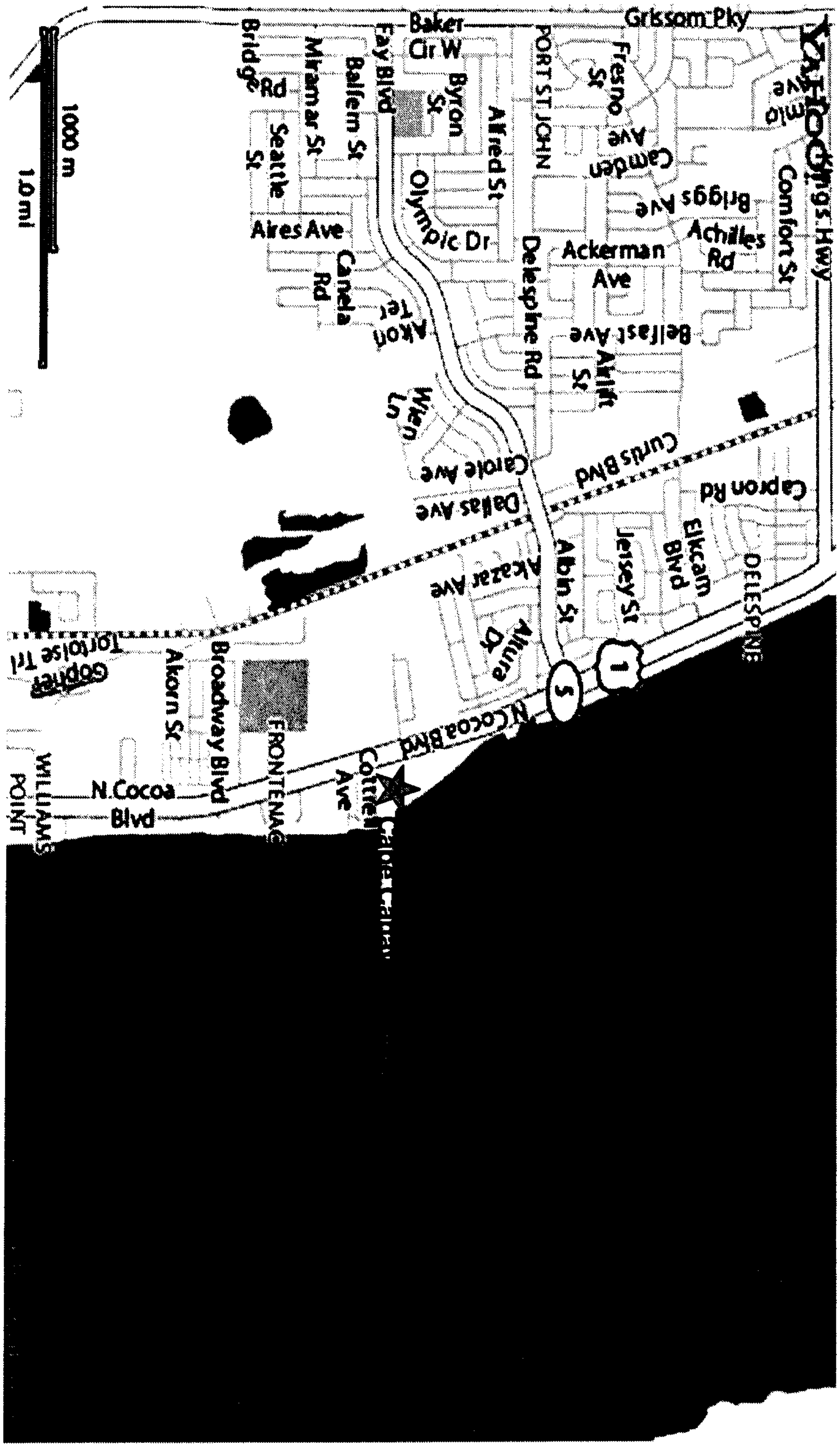
CCEC Vicinity Map
Exhibit CT-2, Page 1 of 1



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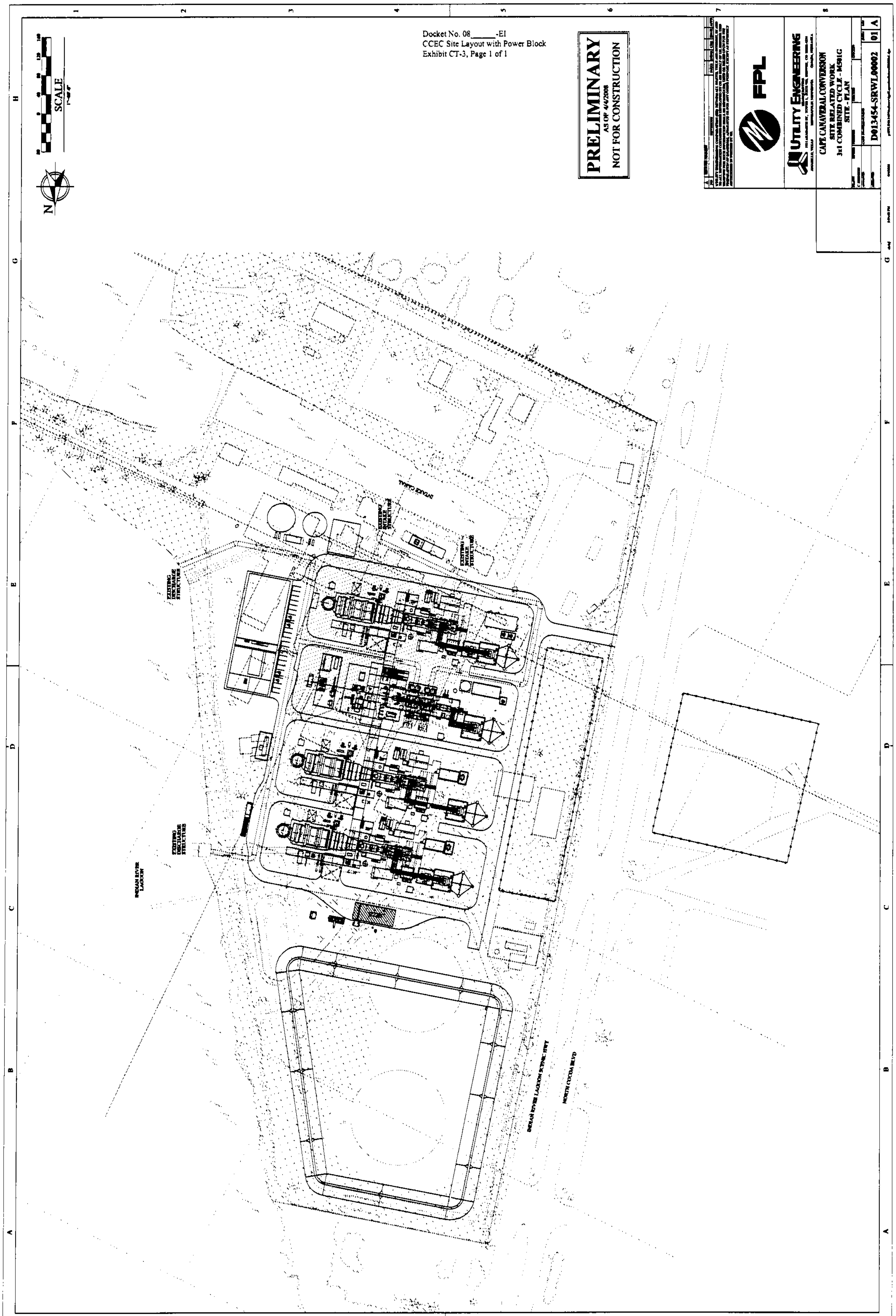
CCEC Site Layout with Power Block
Exhibit CT-3, Page 1 of 1



Cape Canaveral Energy Center Fact Sheet

Project Site

The Plant Site is located on forty-two acres of flat, sandy area between Cocoa and Titusville, Florida. The site is bounded on the east by the Indian River and on the west by U.S. 1. Across the river from the plant is the Kennedy Space Center. Unit 1 entered service in 1966. Unit 2 entered service in 1969.

Generation Technology

"Three on One" (3x1) Combined Cycle Configuration

- Three (3) MPS 501G Combustion Turbines
- Three (3) Heat Recovery Steam Generators with Duct Burners and Selective Catalytic Reduction System for NO_x Control
- One (1) Single-Reheat Steam Turbine

Expected Plant Peak Capacity

Summer (95°F / 50% RH)	1,219 MW
Winter (35°F / 60% RH)	1,343 MW

Projected Unit Performance Data

Average Forced Outage Rate (EFOR)	1.10%
Average Scheduled Maintenance Outages	1 wk/yr (2.1% POF)
Average Equivalent Availability Factor (EAF)	96.80%
Base Average Net Operating Heat Rate @ 75°F / 60% RH	6,580 Btu/kWh (HHV)

Fuel Type

Primary Fuel	Natural Gas
Backup Fuel	Ultra Low Sulphur Oil

Cooling Water

- Primary Water Source- Indian River Lagoon (Intra-coastal waterway)
- Existing intake and discharge infrastructure remains in place

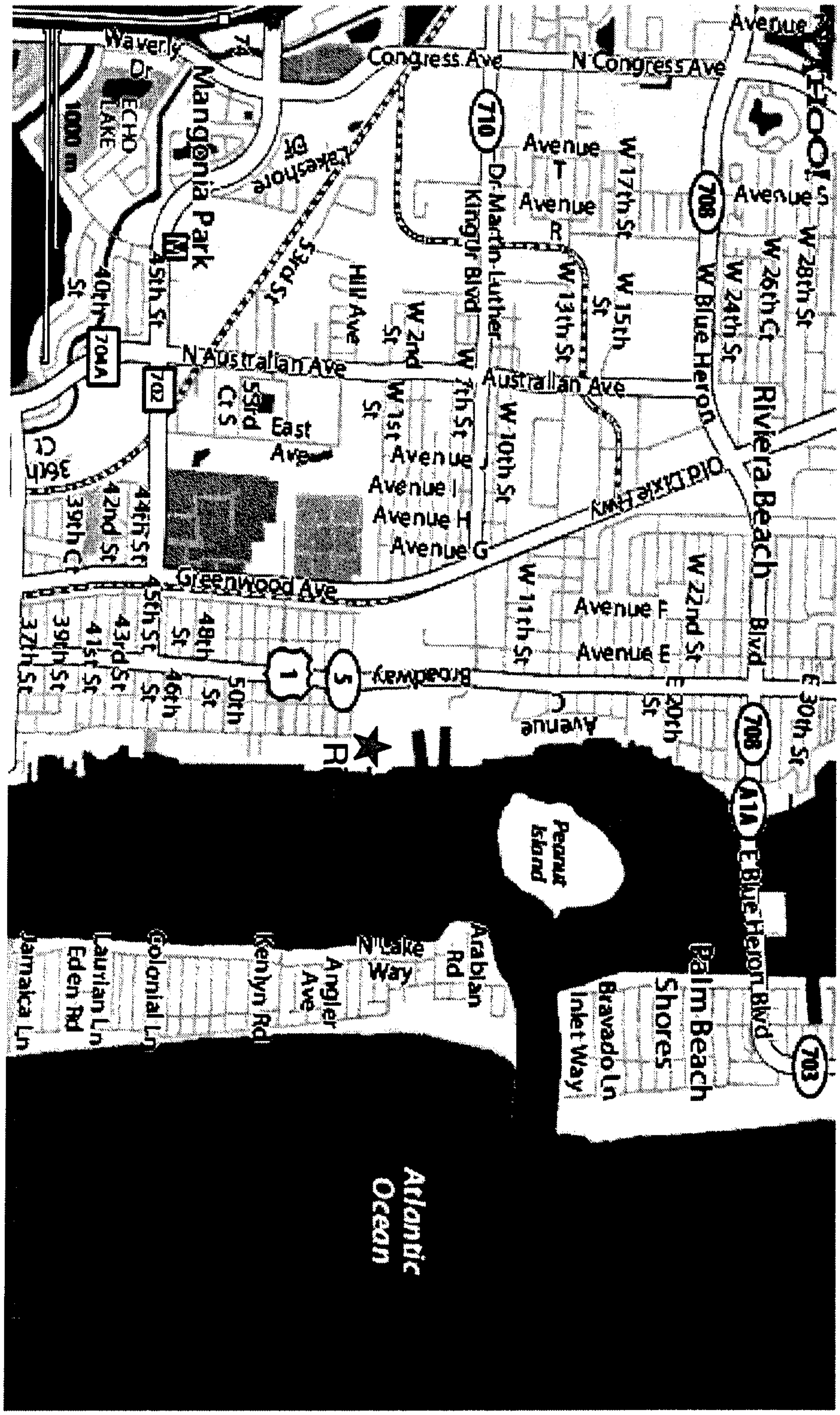
Cape Canaveral Energy Center
Estimated Construction Schedule

Milestone	Begin	End
Issue HRSG Orders	In progress	Dec 2009
Issue CT orders	In progress	Dec 2009
Issue LNTP for steam turbine	In progress	Sep 2008
Receive approvals necessary to begin construction	In progress	Mar 2010
Demolition of Existing Units	Sep 2010	Mar 2011
Site preparation and foundations	Apr 2011	Feb 2012
Balance of Plant	Jun 2011	Dec 2012
Erect HRSG's	Oct 2011	Dec 2012
Erect CT's	Feb 2012	Dec 2012
Erect steam turbine	Apr 2012	Dec 2012
Startup	Jan 2013	May 2013
Commercial Operation		Jun 2013

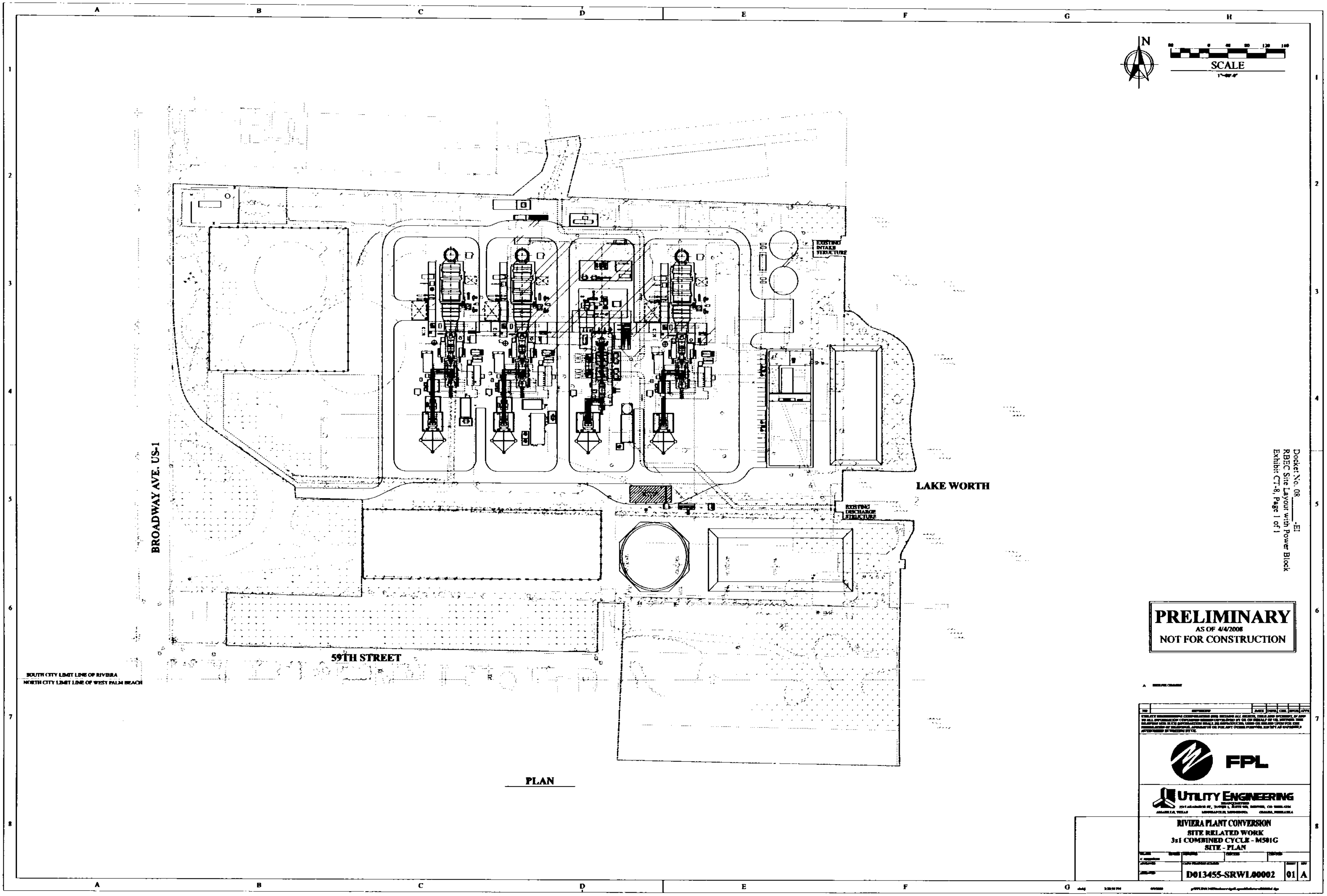
Cape Canaveral Energy Center
Construction Cost Components

Power Block	$	963 MM
Land	$	-
Transmission Interconnect & Integration	$	33 MM
AFUDC	$	119 MM
Total Plant Cost	$	1,115 MM

Riviera Plant Vicinity Map



Docket No. 08______-EI
RBEC Site Layout with Power Block
Exhibit CT-8, Page 1 of 1



Riviera Beach Energy Center Fact Sheet

Project Site

Riviera Plant is located on a twenty-one acre site, southwest of the Palm Beach Inlet and Peanut Island, and across the intra-coastal waterway from Palm Beach.

Riviera Plant started in 1946 with Unit 1, at 40 megawatts capacity. Unit 2 added 70 megawatts of capacity in 1953. Both Unit 1 and Unit 2 have since been retired.

Presently, Units 3 and 4, with their F-12 turbines, began commercial operation in 1962 and 1963 respectively.

Generation Technology

"Three on One" (3x1) Combined Cycle Configuration
- Three (3) MPS 501G Combustion Turbines
- Three (3) Heat Recovery Steam Generators with Duct Burners and Selective Catalytic Reduction System for NO_x Control
- One (1) Single-Reheat Steam Turbine

Expected Plant Peak Capacity

Summer (95°F / 50% RH)	1,207 MW
Winter (35°F / 60% RH)	1,310 MW

During the summer peak, producing enough energy to supply about 250,000 homes and businesses.

Projected Unit Performance Data

Average Forced Outage Rate (EFOR)	1.10%
Average Scheduled Maintenance Outages	1 wk/yr (2.1% POF)
Average Equivalent Availability Factor (EAF)	96.80%
Base Average Net Operating Heat Rate @ 75°F / 60% RH	6,576 Btu/kWh (HHV)

Fuel Type and Base Load Typical Usage @ 75°F

Primary Fuel	Natural Gas
Backup Fuel	Ultra Low Sulphur Oil

Cooling Water
- Primary Water Source- Lake Worth Lagoon (Intra-coastal Waterway)
- Existing intake and discharge infrastructure remains in place

Riviera Beach Energy Center
Estimated Construction Schedule

Milestone	Begin	End
Issue HRSG Orders	Apr 2009	Dec 2010
Issue CT orders	Mar 2009	Dec 2009
Issue LNTP for steam turbine	May 2008	Sep 2009
Receive approvals necessary to begin construction	In progress	Mar 2010
Demolition of Existing Units	Oct 2010	Mar 2012
Site preparation and foundations	Apr 2012	Feb 2013
Balance of Plant	Jun 2012	Dec 2013
Erect HRSG's	Oct 2012	Dec 2013
Erect CT's	Feb 2013	Dec 2013
Erect steam turbine	Apr 2013	Dec 2013
Startup	Jan 2014	May 2014
Commercial Operation		Jun 2014

Riviera Beach Energy Center
Construction Cost Components

Power Block	$	997 MM
Land	$	-
Transmission Interconnect & Integration	$	132 MM
AFUDC	$	147 MM
Total Plant Cost	$	1,276 MM