

Appendix II–1: Public Service Commission Determination of Need

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for West County Energy Center Unit 3 electrical power plant, by Florida Power & Light Company.	DOCKET NO. 080203-EI
In re: Petition for determination of need for conversion of Riviera Plant in Palm Beach County, by Florida Power & Light Company.	DOCKET NO. 080245-EI
In re: Petition for determination of need for conversion of Cape Canaveral Plant in Brevard County, by Florida Power & Light Company.	DOCKET NO. 080246-EI ORDER NO. PSC-08-0591-FOF-EI ISSUED: September 12, 2008

The following Commissioners participated in the disposition of this matter:

MATTHEW M. CARTER II, Chairman
LISA POLAK EDGAR
KATRINA J. McMURRIAN
NANCY ARGENZIANO
NATHAN A. SKOP

APPEARANCES:

BRYAN S. ANDERSON, ESQUIRE and JESSICA CANO, ESQUIRE, 700
Universe Boulevard, Juno Beach, Florida 33408-0420; R. WADE
LITCHFIELD, ESQUIRE, 215 South Monroe Street, Suite 810, Tallahassee,
Florida 32301-1859
On behalf of FLORIDA POWER & LIGHT COMPANY (FPL).

MARTHA CARTER BROWN, ESQUIRE and CAROLINE KLANCKE,
ESQUIRE, Florida Public Service Commission, 2540 Shumard Oak Boulevard,
Tallahassee, Florida 32399-0850
On behalf of the FLORIDA PUBLIC SERVICE COMMISSION (Staff).

FINAL ORDER GRANTING PETITIONS FOR DETERMINATION OF NEED

BY THE COMMISSION:

BACKGROUND

On April 8, 2008, Florida Power & Light Company (FPL) filed a petition for
determination of need for the proposed West County Energy Center Unit 3 (WCEC 3), pursuant

DOCUMENT NUMBER-DATE

08509 SEP 12 8

FPSC-COMMISSION CLERK

to Section 403.519, Florida Statutes (F.S.), and Rule 25-22.080, Florida Administrative Code (F.A.C.). WCEC 3 will be a combined cycle unit with a summer capacity rating of 1,219 megawatts (MW), built on an existing generating site in Palm Beach County, Florida, with an in-service date of June 1, 2011.

On April 30, 2008, FPL filed two additional petitions for determination of need at its existing Cape Canaveral and Riviera plants. Both petitions involve converting two oil and natural gas fueled steam electric generating units built in the 1960s into efficient combined cycle power plants. The Cape Canaveral Conversion will convert two operating 400 MW dual-fired steam generating units into a combined cycle power plant with a summer capacity of 1,219 MW. The proposed commercial operation date of the Cape Canaveral Conversion is June 1, 2013. The Riviera Conversion will convert two operating 280 MW dual-fired steam generating units into a combined cycle power plant with a summer capacity of 1,207 MW. The proposed commercial operation date of the Riviera Conversion is June 1, 2014.

Public Testimony

In addition to the prefiled testimony submitted by FPL, we received mailed comments and heard live testimony from two public witnesses at the formal administrative hearing in Tallahassee on June 23, 2008. Topics of interest addressed by the public witnesses included: system reliability and integrity, reasonable costs for electricity, renewable energy, demand-side management, conservation and cost-effectiveness.

Other areas of interest that were discussed during the public testimony focused on subjects beyond the scope of this proceeding under Section 403.519, F.S., or our general regulatory jurisdiction. They included: environmental concerns about water supply becoming contaminated and unavailable, health concerns about drinking contaminated water, safety concerns regarding the plant and associated facilities being located near a blasting area.

Section 403.519, F.S., authorizes us to examine FPL's projected costs for environmental controls necessary to meet current state and federal environmental requirements. The public testimony regarding the environmental concerns and health issues falls under the Department of Environmental Protection's (DEP) jurisdiction.

While safety is not a specific issue in a need determination proceeding conducted under Section 403.519, F.S., we do have jurisdiction to prescribe and enforce safety standards for transmission and distribution facilities of public utilities pursuant to Section 366.04(6), F.S. We also have jurisdiction over natural gas pipeline safety pursuant to Sections 368.01-368.61, F.S., and we have implemented this jurisdiction in Chapter 25-12, F.A.C., "Safety of Gas Transportation by Pipeline." At the hearing for these dockets, in response to the public testimony and questions by the Commissioners, FPL witness Gnecco testified that the project and the related natural gas lateral met safety standards.

Our ability to address some of the issues raised in public testimony is limited by the scope of Section 403.519, F.S., and other statutes which establish our jurisdiction. However,

these concerns may be relevant in certification proceedings before DEP, the Division of Administrative Hearings, and the Governor and Cabinet, sitting as the Siting Board.

Factors for Consideration

Pursuant to Section 403.519(3), F.S., this Commission is the sole forum for the determination of need for an electrical power plant. In making our determination, we must take into consideration the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, whether the proposed plant is the most cost-effective alternative available, and whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available.

This Order reflects our decision on the petitions for determination of need, and serves as our report under the Power Plant Siting Act, as required by Section 403.507, F.S. We have jurisdiction over the subject matter of this proceeding pursuant to Sections 403.519, 403.507, 366.01, 366.04, 366.05, 366.06, and 366.07, F.S. Our decision is explained in detail below.

DECISION

FPL has demonstrated a reliability need for additional resource capacity in 2013. Usually, when a company seeks to satisfy a need for additional resource capacity using natural gas facilities, a petition for need determination would be submitted approximately 3 years before the facility's in-service date. The company decided, however, that unique economic opportunities and site-specific circumstances made it more cost effective to build WCEC 3 for operation in 2011 and perform the conversions at Cape Canaveral and Riviera by 2013 and 2014. FPL contends that it will not be able to perform the conversions of Cape Canaveral and Riviera without approval of the proposed WCEC 3. FPL chose gas-fired combined cycle units as its resource option to meet its capacity needs. This decision was made primarily because coal and nuclear generation have longer construction times and would not be able to provide the additional capacity in the time needed. This approach will maintain FPL's reserve margin above 20 percent throughout the period.

FPL issued a Request for Proposals (RFP) for the WCEC 3 unit on December 13, 2007, according to the principles prescribed in Rule 25-22.082, F.A.C. (Bid Rule). FPL's analysis of the proposals revealed that WCEC 3 was more than \$600 million in cumulative present value revenue requirements (CPVRR) less costly than the next best alternative. FPL requested an exemption from the Bid Rule for the conversion petitions under the provisions of subsection 18 of the Bid Rule. FPL claimed that the WCEC 3 RFP results could provide a measure of the cost-effectiveness of the conversions because the WCEC 3 RFP was conducted recently, and FPL did not believe that the results would be materially different from an RFP for the conversions.

As explained below, we approve the need for the new WCEC 3, the conversions of the Cape Canaveral and Riviera plants, and the exemption from the Bid Rule for the conversions.

The Requirements of the Bid Rule

FPL states that its RFP related to the WCEC 3 facility was consistent with the requirements of the Bid Rule, and that specific content required by the Bid Rule was included in the RFP. FPL compared the proposed WCEC 3 to five other proposed resource plans that were received in response to the RFP. FPL's analysis of the proposals showed that WCEC 3 in 2011 was more than \$600 million CPVRR less costly than the next best alternative proposed in the RFP. An independent evaluator reviewed FPL's solicitation process and conducted his own evaluation of FPL's Next Planned Generating Unit and the proposals that were submitted in response to the RFP. As a result of his evaluation, the evaluator agreed with the results of the RFP.

The RFP evaluation was done using fuel and economic forecasts developed in 2007. FPL updated its fuel and economic forecast assumptions on March 13, 2008. Since all of the proposals were based on either natural gas or oil generation alternatives, the change in fuel and economic assumptions did not affect the relative rankings of proposals compared to constructing WCEC 3 in 2011.

We find that FPL has met the requirements of Rule 25-22.082, F.A.C. The record shows that WCEC 3 in 2011 is more than \$600 million CPVRR less costly than any of the proposals received through the RFP.

Exemption from the Bid Rule

While FPL conducted an RFP consistent with the requirements of the Bid Rule for the WCEC 3 project, FPL has requested an exemption from the Bid Rule for the Riviera and Cape Canaveral Conversion projects. FPL asserts that the conversion of the Riviera and Cape Canaveral plants satisfies each of the three available bases for an exemption from Rule 25-22.082, F.A.C., by providing CPVRR savings to customers, providing highly reliable capacity, and serving the public welfare by reducing emissions and fossil fuel usage.

Subsection 18 of the Bid Rule provides:

Upon a showing by a public utility and a finding by the Commission that a proposal not in compliance with this rule's provisions will likely result in a lower cost supply of electricity to the utility's general body of ratepayers, increase in the reliable supply of electricity to the utility's general body of ratepayers, or otherwise will serve the public welfare, the Commission shall exempt the utility from compliance with the rule or any part of it for which such justification is found.

FPL contends that if WCEC 3 is placed into service in 2011, the company will have the opportunity to convert the older, inefficient Riviera and Cape Canaveral plants into highly efficient combined cycle power plants. Together, the conversion projects are expected to result in customer savings of \$457 million CPVRR. FPL used the December 13, 2007, RFP that was conducted for WCEC 3 to compare the conversion projects. FPL asserted that the proposals

received for the WCEC 3 RFP are similar to proposals that would likely have been received in response to an RFP for the conversions. An independent evaluator reviewed FPL's evaluation and determined that the plan with the conversion projects was \$481 million CPVRR less expensive than the most economic resource plan using proposals received in response to the RFP. The conversion projects will be more cost-effective compared to using the purchased power proposals that were evaluated.

FPL has shown that its plan for WCEC 3 with conversions is more cost-effective than the plan that was compared to the RFP responses. We can infer from this evidence that the conversion projects will likely result in a lower cost supply of electricity, and therefore should be granted an exemption from the requirements of the Bid Rule. FPL has agreed to annually report the budgeted versus actual construction expenses for all three projects.

We grant FPL an exemption from the Bid Rule with respect to the Cape Canaveral and Riviera projects. FPL has shown that the conversion projects will result in a lower cost supply of electricity, increase the reliable supply of electricity.

Need for Electric System Reliability and Integrity

FPL contends that reliable forecasts show that, although growing at a slower rate, Florida's population is still on the rise. FPL asserts that the total growth in customers is the primary driver of its projected peak demand growth.

We have reviewed FPL's forecast assumptions, regression models, and the projected system peak demands, and find that this information is appropriate for use in this docket. The forecast assumptions were drawn from independent sources, which we have relied upon in prior cases. The regression models used to calculate the projected peak demands conform to accepted economic and statistical practices. Although slower customer growth could reduce actual peak demand from that forecasted, we find that the projected peak demands produced by the models used by FPL appear to be a reasonable extension of historical trends. FPL witness Morley's testimony indicated that FPL's forecasts accounted for the recent trend of a decreasing population growth rate.

FPL uses the University of Florida's Bureau of Economic and Business Research (BEBR) to develop its population projections. BEBR's population projections are normally updated every year, the most recent being in November 2007. Those projections show continued long-term growth in Florida, specifically, a 1.7 percent annual growth rate beginning in the 2008 through 2017 period. FPL also performed a sensitivity analysis using updated population projections from the University of Florida's BEBR dated February 2008. That analysis revealed that there will still be significant cost savings and other benefits realized with lower customer growth. Although slower customer growth could reduce actual peak demand from that forecasted, we find that the projected peak demands produced by the models used by FPL appear to be a reasonable extension of historical trends.

FPL's base case plan would add new combined-cycle generation in the years 2013, 2014, and 2016 in order to maintain a 20 percent reserve margin. If a 15 percent reserve margin

planning criterion is assumed, FPL's initial reliability need could be delayed until 2014. From 2011 through 2017, FPL has a need for 4,844 MW of additional generating capacity. WCEC 3 will supply approximately 1,219 MW of this need.

Under different circumstances, FPL would not file a petition for a determination of need for WCEC 3 until sometime in 2010. The decision to build WCEC in 2011, which is in advance of the identified reliability need, is driven by unique economic opportunities and site-specific circumstances. For example, the economic analytical results for WCEC 3 in 2011 show that costs of equipment, materials and labor are significantly lower than they would be if WCEC 3 were to be installed later, or at an alternative site. After the addition of WCEC 3 in 2011, FPL's reserve margin will be approximately 27.9 percent. FPL wishes to construct WCEC 3 in 2011 because it believes doing so will provide adequate generating capacity to allow for the removal from service of the existing Cape Canaveral and Riviera generating units in order to pursue the conversion of these facilities and not adversely impact system reliability. When the Canaveral and Rivera units are removed from service, FPL's reserve margin would drop to approximately 21.7 percent in the year 2011.

The table below summarizes the projected reserve margin for the scenarios mentioned previously:

Year	Estimated Impact on Summer Reserve Margin (%)			
	No Additions	Base Case	WCEC 3 in 2011 without Conversions	WCEC 3 in 2011 with Conversions following
2011	22.3	22.3	27.9	21.7
2012	20.6	20.6	26.0	20.0
2013	18.7	24.0	24.0	23.4
2014	13.6	23.8	23.8	23.2
2015	11.1	21.1	21.1	20.5
2016	3.4	22.9	22.9	22.3
2017	1.1	20.1	20.1	19.5

FPL's need for additional capacity to meet rising electricity demands cannot be satisfied with additional purchased power from renewable generation. Additional DSM programs and renewables are not capable of deferring the need for the additional capacity. Renewable generation opportunities as well as DSM programs will be addressed below.

As discussed above, the conversion of the Riviera and Cape Canaveral units would add approximately 1,069 MW of incremental capacity to FPL's system. FPL's base case plan would add new combined-cycle generation in the years 2013, 2014, and 2016 to maintain a 20 percent reserve margin. If a 15 percent reserve margin planning criterion was assumed, FPL's initial reliability need could be delayed until 2014. Under different circumstances, FPL would not file a petition for a determination of need until sometime in 2010. The decision to convert the Rivera

generating unit is driven by unique economic opportunities and site-specific circumstances. After the addition of WCEC 3 in 2011, FPL's reserve margin will be approximately 27.9 percent. The construction of WCEC 3 in 2011 will provide adequate generating capacity to allow the existing Riviera generating unit to be removed from service during the conversion period without adversely impacting system reliability. When the Riviera and Cape Canaveral units are removed from service, FPL's reserve margin would drop to approximately 21.7 percent in the year 2011. If WCEC 3 were not added in 2011, and FPL continued to pursue the conversions of the Cape Canaveral and Riviera units, FPL's reserve margin would drop below 20 percent beginning in 2011 and beyond. The decision to convert the existing Riviera and Cape Canaveral units is more cost-effective than FPL's base case plan of adding new greenfield generation in 2013 and 2014.

We find that there is a need for the WCEC 3 project and the conversion of the Riviera plant and the Cape Canaveral plant, taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519, F.S. The evidence shows that FPL will have a need for approximately 4,844 MW of additional capacity beginning in the 2011 through 2017 period. FPL performed a sensitivity analysis using updated population projections from the University of Florida's BEBR, dated February 2008. That analysis revealed that there would still be significant cost savings and other benefits realized with lower customer growth. FPL has demonstrated a reliability need in the summer of 2013 based on maintaining a 20 percent reserve margin planning criterion. The construction of WCEC 3 in 2011 will provide adequate generating capacity to allow for the conversions of the existing Cape Canaveral and Riviera generating units and will not adversely impact system reliability.

Need for Adequate Electricity at a Reasonable Cost

FPL contends that constructing WCEC 3 in 2011 will take advantage of construction cost efficiencies and provide more cost certainty than building a unit at a greenfield site at a later time. Moreover, adding WCEC 3 in 2011 will save customers \$137 to \$735 million CPVRR compared to the other available self-build alternatives.

The total installed cost estimate for WCEC 3 is \$864.7 million. FPL believes that the costs of WCEC 3 are reasonable and represent the most cost-effective option available. Compared to FPL's other self-build alternatives, FPL's original analysis revealed that the resource plan that included WCEC 3 in 2011 will save customers from \$137 million to \$460 million CPVRR. A later analysis was conducted using updated fuel and environmental cost forecasts. The results of that analysis depict savings increasing from \$460 million CPVRR to \$735 million CPVRR by the year 2040. The conversions will add approximately \$457 million in additional savings for FPL's ratepayers.

We find that FPL's fuel price forecasts are reasonable for purposes of evaluating its expansion and conversion plans. Although FPL did not compare its fuel forecasts to published forecasts, FPL represents that its forecasts are based on recognized, independent sources of forecast information. We note that, for natural gas, FPL used a real escalation rate – 1.14 percent for WCEC Unit 3 and 2.0 percent for the updated conversion forecasts – based on the average annual escalation from 2020 to 2030 from EIA's Annual Energy Outlook February 2007 price forecast. FPL states the escalation rates are "industry-accepted." FPL further states that the

“fuel price forecasts reflect the projected supply, demand, and price for fuel oil, natural gas, coal, and petroleum coke, as well as the transportation of these fuels to the existing and proposed sites.” According to witness Stubblefield, FPL is confident that there is enough natural gas to supply WCEC 3 and the conversion projects during their lifetimes.

Financial Assumptions

FPL’s analysis for WCEC 3 assumes an overall cost of capital of 8.40 percent with the federal manufacturer’s tax credit and 8.30 percent without the credit. A different discount rate was used for generation-related capital costs because the application of the federal production tax credit for new generating units results in a different effective tax rate for generation-related capital costs compared to other capital costs. These rates of return are based on a capital structure consisting of 55.8 percent equity at a cost rate of 11.75 percent and 44.2 percent debt at a cost rate of 6.43 percent. FPL applied the then current Allowance for Funds Used During Construction (AFUDC) rate of 7.42 percent. FPL used several of the same financial and economic assumptions for WCEC 3, such as the 2.50 percent escalation rate and the capital structure, that were used in the Company’s need determination filings for capacity uprates at its four existing nuclear units approved in Order No. PSC-08-0021-FOF-EI¹ and the Turkey Point Units 6 and 7 approved in Order No. PSC-08-0237-FOF-EI.² There was no evidence presented in the record that disputes the reasonableness of FPL’s financial assumptions. Based on this review, we find that the financial assumptions used for this evaluation are reasonable.

Generation Cost Estimates

The total cost of the proposed WCEC 3 is estimated at \$864.7 million and will provide 1,219 MW of capacity. The Riviera conversion total cost is estimated at \$1.3 billion, while the Cape Canaveral conversion total cost is estimated at \$1.1 billion. The estimated total installed cost for WCEC 3 is \$709/kilowatt. This cost estimate includes the benefits associated with utilizing an existing site and infrastructure. FPL has demonstrated that the cost of WCEC 3 is less than the cost of a new greenfield combined-cycle generating unit, which is estimated to be \$1,076/kW. West County Units 1 & 2 are currently under construction and FPL would be able to use those construction crews on the WCEC 3 project. If the decision to build any new generation is delayed until 2013, the WCEC site may not be feasible for expansion due to cooling water costs and availability, as well as increased costs due to the need to re-mobilize construction crews.

The estimated total installed cost for the conversion of the Cape Canaveral and Riviera plants are \$914/kw and \$1,057/kw. The Riviera and Cape Canaveral Conversions will take

¹ Order No. PSC-08-0021-FOF-EI, issued January 7, 2008, in Docket No. 070602-EI, In re: Petition for determination of need for expansion of Turkey Point and St. Lucie nuclear power plants, for exemption from Bid Rule 25-22.082, F.A.C., and for cost recovery through the Commission’s Nuclear Power Plant Cost Recovery Rule, Rule 25-6.0423, F.A.C.

² Order No. PSC-08-0237-FOF-EI, issued April 11, 2008, in Docket No. 070650-EI, In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company.

advantage of existing sites and infrastructure, with less cost uncertainty than building units at a greenfield site. FPL's analyses show that the resource plan with the Riviera and Cape Canaveral Conversions is projected to save customers \$457 million CPVRR.

Fuel Forecasts

The natural gas and oil price forecasts through 2020 are based on the forward curve for commodity prices and projections from PIRA Energy Group. After 2020, the prices are escalated for real price changes based on the Energy Information Administration's (EIA) long-term price forecast. Transportation costs are added to the commodity prices to obtain delivered prices. For WCEC 3, FPL's assumed gas transportation cost for evaluating the RFP responses is \$1.165 per MMBtu. For the conversion projects, FPL's assumed transportation cost for evaluation purposes is \$1.40 per MMBtu. For solid fuel, FPL used commodity price forecasts from JD Energy and added in marine and rail transportation costs and terminal charges. All fuel prices are converted to nominal dollars using the 2.5 percent annual escalation rate.

Environmental Costs

In preparing its economic analysis of WCEC Unit 3, FPL included a reasonable level of environmental compliance costs. The allowance costs used by FPL for WCEC Unit 3 were based on ICF International's report titled "U.S. Emission & Fuel Market Outlook, 2006 edition" (ICF's 2006 Report), as well as its updated version, "U.S. Emission & Fuel Market Outlook, 2007 edition" (ICF's 2007 Report). In particular, the mid-range ICF compliance cost forecast, namely ENV II, was used. This forecast is the same as what we recently reviewed and approved in Order No. PSC-08-0237-FOF-EI, for FPL's Turkey Point Units 6 & 7. The allocations of SO₂, NO_x, and H_g allowances were based on the Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) rules developed by the Environmental Protection Agency. For CO₂, it was assumed that allowances would be purchased under a cap-and-trade system similar to an auction. Apart from the consideration of air emission costs, FPL has also included all equipment and associated operating costs required to comply with current environmental laws and regulations in the economic analysis of the WCEC 3 resource plan.

The same methodology mentioned in the previous paragraph regarding allowance costs was used to evaluate the economic benefit of its conversion plans. FPL used its medium-level natural gas cost forecast and its medium-level CO₂ compliance cost forecast (ENV II). FPL conducted a sensitivity economic analysis that used both the original and the updated high CO₂ compliance cost forecasts provided in ICF's 2006 Report and ICF's 2007 Report. We find that FPL has included a reasonable level of environmental compliance costs in its economic analysis of WCEC 3 and the conversion options of the Cape Canaveral and Riviera plants.

Water Costs

Reclaimed water will be the primary source of cooling and process water for WCEC Unit 3. FPL's witness Gnecco testified that the East Coast Regional Water Reclamation Facility of the Palm Beach County Water Utilities will provide reclaimed water to the WCEC site. Witness

Gnecco asserted that the East Coast Regional Water Reclamation Facility is a very reliable source of reclaimed water. The capital and Operation and Maintenance costs associated with construction, operation, and maintenance of the treatment facility and pipeline will be included in the County's monthly water charge to FPL. Costs associated with the monthly water fee have been included in the economic analysis of this case.

The conversion of the Cape Canaveral and Riviera plants will not use additional water sources or exceed existing water permit limits. Water from the Indian River Lagoon (Intracoastal Waterway) is and will continue to be used for once-through cooling water for the Cape Canaveral conversion. After the conversion, the amount of cooling water required will not exceed current permit limits. In the Riviera conversion, water from Lake Worth (Intra-costal waterway) is and will continue to be used for once-through cooling water for the Riviera conversion. After the conversion, the amount of cooling water required will not exceed current permit limits.

We find that there is a need for the construction of the WCEC 3 plant and the conversion of the Riviera plant and the Cape Canaveral plant, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519, F.S. The cost information presented in the record demonstrates that the construction of WCEC 3 and the conversions of the Cape Canaveral and Riviera units will not only provide adequate electricity, but also ensure the most reasonable costs to ratepayers.

Need for Fuel Diversity and Supply Reliability

We review the need for fuel diversity in our evaluation of utility generation expansion plans as part of our annual Ten-Year Site Plan review process. In 2006, the Florida Legislature amended Section 403.519, F.S., to require that we specifically consider the need for fuel diversity on a utility's system when evaluating a petition for need.

The decision to build WCEC 3 is primarily driven by economic and environmental benefits. In addition, building WCEC 3 in 2011 will allow for the conversion of FPL's inefficient, 1960s-era Cape Canaveral and Riviera plants to highly efficient state of the art combined cycle units. Coal and nuclear generation have longer construction times and would not be able to provide the additional capacity in the time needed. Therefore, FPL's only available option for base load capacity is natural gas.

At the hearing, the question was raised whether there is an adequate supply of natural gas available to provide reliable service to customers. FPL asserts that there will be an adequate supply of natural gas available to fuel WCEC 3 for the life of the unit. FPL states that it was provided with projected natural gas supply and demand balance availability from the PIRA Energy Group. FPL asserts that those projections demonstrate the adequacy of natural gas supply.

We reviewed a document from the PIRA Energy Group, which contained information regarding the natural gas supply and demand balance. We agree with FPL that an adequate supply of natural gas will be available for the proposed WCEC and conversion projects.

FPL plans to supply WCEC 3 through existing capacity arrangements with the Gulfstream Natural Gas System's (Gulfstream) pipeline that now serves FPL's Martin and Manatee plants. Florida Gas Transmission will expand its pipeline system to begin serving the Martin and Manatee plants. For the conversions, FPL is in discussions with multiple pipeline companies regarding supply of gas to the Canaveral and Riviera plants. FPL expects to have firm transportation arrangements for these plants by late 2008.

FPL's generation mix is still predominately natural gas. The addition of WCEC 3 in 2011 will improve FPL's overall fuel efficiency by approximately 1.4 percent, resulting in a reduction of total oil and gas consumption by approximately 29 million MMBtu through 2017 compared to FPL's base case. Compared to the resource plan that includes WCEC 3 in 2011 without conversions, the addition of the conversions will improve FPL's system average heat rate by about 1.1 percent. The construction of WCEC 3 and the conversion of the Cape Canaveral and Riviera units will not change FPL's generation fuel mix as a percentage of net energy for load. Compared to FPL's base plan, adding WCEC 3 in 2011 followed by the conversion projects is projected to reduce total oil and gas consumption by approximately 87.8 million MMBtu through 2017 and is summarized in the table below:

Total Oil and Gas Usage		
Plan	Usage to 2017 (MMBtu x 1,000)	2017 Differential from Base Case (MMBtu x 1,000)
Base Case	5,655,313	0
WCEC 3 w/o Conversions	5,625,803	-29,510
WCEC 3 w/ Conversions	5,567,464	-87,849

As discussed above, the conversions will improve FPL's overall fuel efficiency by approximately 1.1 percent. The conversion projects are projected to result in a reduction of total oil and gas consumption by approximately 58.3 million MMBtu through 2017, compared to a plan that adds WCEC 3 in 2011 followed by a greenfield generating unit in 2014. Compared to FPL's base plan, adding WCEC 3 in 2011 followed by the conversion projects is projected to reduce total oil and gas consumption by approximately 87.8 million MMBtu through 2017.

We find that there is a need for the WCEC 3 plant and the conversion of the Riviera plant and the Cape Canaveral plant, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519, F.S. FPL has demonstrated that the addition of WCEC 3 and the conversions of the Cape Canaveral and Riviera plants will result in

a reduction of dependence on natural gas and fuel oil, because it will reduce FPL's total oil and gas consumption by approximately 87.8 million MMBtu through 2017. Building coal or nuclear generation by 2013 is not feasible because of the construction and permitting lead times for those types of generation. The addition of WCEC 3 and the conversions will also lead to an overall increase in system efficiency of 1.4 percent for WCEC 3 and 1.1 percent for the conversions for an overall system efficiency of 2.5 percent.

No Mitigating Renewable Energy Sources and Technologies or Conservation Measures

FPL contends that its forecasted need already accounts for all the cost-effective DSM identified through 2014 and projected through 2017, and available renewable resources, including the planned renewal of its existing firm renewable capacity purchase contracts and 126 MW of new renewable firm capacity.

In assessing the availability of DSM to meet its energy needs, FPL used the same assumptions that were used in the recently approved Turkey Point nuclear proceedings.³ An estimated 5,513,458 residential customers have participated in FPL's DSM programs through 2007, along with approximately 178,203 commercial customers. In 2007, 165,575 residential DSM audits were performed by FPL. For commercial customers, 11,755 DSM audits were performed by FPL. FPL described its recent and continuing efforts to educate customers on the benefits of energy conservation via DSM programs, including its outreach and participation at events attended by FPL customers. Accounting for reserve margin requirements, FPL's DSM efforts through 2007 have eliminated the need to construct the equivalent of approximately 12 new 400 MW generating units. FPL's initial projection indicates a savings of 3,030 MW of summer demand from the year 2008 through the year 2017. This represents an expected increase in DSM savings of 1,122 MW from 2008 through 2017. FPL evaluates DSM programs based on performance against the rate impact measure and participant tests, and screens out measures that would have a payback period of less than two years for consumers.⁴

In April of 2007, FPL issued an RFP for renewable generation extending to 2015. The responding bids equated to 126 MW of capacity. The amount of capacity that resulted from the bids of the April 2007 RFP would not be able to mitigate the need for the proposed WCEC 3 or conversion projects. No contracts resulted from the RFP due to FPL's determination that the costs were excessive. In 2008, FPL again issued an RFP for renewable generation, receiving proposals for 262 MW. The deadline for the proposals was less than two weeks prior to the date of the hearing in this docket, which allowed insufficient time for FPL to evaluate the responses. However, even if all contracts were signed, it would still not defer the need for WCEC 3 and the Riviera and Cape Canaveral conversion projects.

Witness Sim testified that if the \$3.26 billion of installed capital dollars that the proposed WCEC 3 and Conversion units are projected to cost were applied to a hypothetical installation of

³ Order No. PSC-08-0237-FOF-EI, issued April 11, 2008, in Docket No. 070650-EI, In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company.

⁴ Order No. PSC-04-0763-PAA-EG, issued August 9, 2004, in Docket No. 040029-EG, In re: Petition for approval of numeric conservation goals by Florida Power & Light Company.

renewables, that dollar amount would result in an estimated 90 MW of incremental firm summer capacity from photovoltaics, or 220 MW of summer demand reduction from solar water heaters. Further, FPL indicated that the photovoltaic capacity purchased would require approximately 2,800 acres of land to install, whereas the proposed WCEC 3 and the two conversions would be constructed on land already dedicated to power plants, and thus would not require the purchase of additional land. The hypothetical photovoltaic facility would serve an estimated 56,000 customers compared to Witness Sim's estimation that the three generating units would serve approximately 2 million customers. The customers to be served by the hypothetical solar water heaters would total approximately 1.1 million; however, those customers would have only those costs offset that relate to water heating.

FPL has proposed to install renewable resources in addition to the proposed plants. FPL identified three planned commercial scale solar projects: (1) a 75 MW solar thermal installation at FPL's Martin facility on 600 acres of land to be completed by 2010; (2) a 25 MW photovoltaic installation on FPL property on 180 acres in DeSoto County to be completed by 2010; and (3) a 10 MW photovoltaic installation at NASA's Kennedy Space Center in Brevard County on 60 acres of land. FPL also plans to install up to six wind turbine generators on FPL's property on Hutchinson Island in St. Lucie County. Local, state, and federal permits and approvals have not been attained, which could affect the estimated in-service date of 2010. The St. Lucie Wind Project would total an estimated 13.8 MW on approximately 20 acres.

We find that there are no additional renewable energy sources and technologies or cost-effective conservation measures available that might mitigate FPL's need for the proposed WCEC 3 in 2011 and conversions of the Cape Canaveral and Riviera plants as this criterion is used in Section 403.519(4), F.S. FPL states that while it will continue to pursue renewable resource opportunities, both purchased and self-built, DSM and renewable resources will not be sufficient to meet FPL's future need for more than 4,800 MWs of new generating capacity through 2017.

Most Cost-Effective Source of Power

FPL contends that adding WCEC 3 in 2011 is more cost-effective than its other self-build options, and more cost-effective than all proposals received in response to its 2007 RFP. Adding WCEC 3 in 2011 will result in customer savings of about \$460 million CPVRR compared to adding a similar unit at a greenfield site in 2013. If the conversion projects were added to the plan of the proposed WCEC 3 in 2011, FPL asserts that its customers would experience even greater cost savings. FPL states that if the environmental and fuel costs were higher, the economic benefits to customers would be greater.

The evidence in these proceedings demonstrates that the addition of WCEC 3 and the conversions is the most cost-effective optimization of FPL's required capacity additions. In order to optimize the base plan, FPL has strategically used the proposed WCEC 3 in 2011 followed by the conversions to reduce the amounts of fuel used and subsequent emission reductions to bring economic savings to its ratepayers.

FPL's fuel mix is still predominately natural gas. However, the addition of WCEC 3 and the conversions will improve FPL's overall fuel efficiency, resulting in a reduction of total oil and gas consumption by its customers. This in turn would lead to additional economic savings by displacing less efficient units with cleaner, more efficient generating units. In addition, WCEC 3 in 2011 would lead to a reduction of approximately 29,510 million MMBtu of oil and natural gas usage by year 2017. Including the conversions with WCEC 3 in 2011 would lead to additional savings and a reduction of approximately 87,849 million MMBtu of oil and natural gas over the same time period.

Compared to the base case, the addition of WCEC 3 in 2011 will reduce the overall emissions on FPL's system. The reduction in emissions will be even greater when including the conversions with the addition of WCEC 3 in 2011. Witness Silva testified that system fuel efficiency improvement achieved due to the conversion projects is the only way that FPL can significantly reduce CO₂ emissions until the new nuclear generating units are added to FPL's system in 2018. Witness Silva further testified that the conversions will also result in reduced emissions of SO₂ and NO_x. FPL states that the proposed WCEC 3 and the conversions will contribute significantly toward achieving the CO₂ emission targets reflected in the Governor's Executive Order 07-127. The following chart shows the emissions reductions associated with the proposed projects. The chart also reveals that, of the three gases emitted, NO_x, not CO₂, will have the greatest percentage emission savings:

Projected Emissions Analysis 2010-2017									
Plan	SO ₂ (tons)	Diff. from Base	SO ₂ % Diff.	NO _x (tons)	Diff. from Base	NO _x % Diff.	CO ₂ (million tons)	Diff. From Base	CO ₂ % Diff.
Base Case	453,874	0	0%	165,901	0	0%	493	0	0
WCEC 3 w/o Conv.	432,805	-21,069	-4%	154,346	-11,555	-7%	490	-3	0%
WCEC 3 w/Conv.	409,576	-44,298	-10%	134,713	-31,188	-23%	485	-8	-1%

FPL's fuel and environmental forecasts for WCEC 3 were based on 2007 forecasts. Those forecasts revealed that the addition of WCEC 3 in 2011 would result in customer savings of about \$460 million CPVRR compared to adding a similar unit at a Greenfield site in 2013. FPL provided updated 2008 fuel and environmental cost estimates for the proposed WCEC 3 in 2011 using the updated March 13, 2008, forecasts. The results demonstrated that projected savings for WCEC 3 in 2011 increased to \$735 million CPVRR. FPL's fuel and environmental forecasts for the conversion projects used the March 13, 2008 forecasts. The results revealed that the conversions alone would generate savings of \$457 CPVRR for FPL's ratepayers. As a result of the new forecasts, the package containing WCEC 3 and the conversions would bring savings of approximately \$1.2 billion CPVRR to FPL's ratepayers, compared to the base case.

The following chart addresses the financial assumptions that we analyzed regarding FPL's proposal. The chart shows that the savings to FPL's ratepayers will begin in the near term (2017) and become even greater through the projected life of the units (2040):

Projected Financial Assumptions thru 2040				
Plan	CPVRR (millions thru 2017)	Difference from Base (millions thru 2017)	CPVRR (millions thru 2040)	Difference from Base (millions thru 2040)
Base Case	\$54,194	\$0	\$168,105	\$0
WCEC 3 w/o Conv.	\$53,887	\$-307	\$167,370	\$-735
WCEC 3 w/Conv.	\$53,771	\$-423	\$166,913	\$-1,192

The construction of WCEC 3 and the conversion of the Riviera and Cape Canaveral plants are the most cost-effective alternatives available, as this criterion is used in Section 403.519, F.S. As discussed above, FPL's economic analyses utilized a reasonable range of fuel and environmental costs. As part of the discovery process, FPL provided an updated analysis based upon 2008 fuel and environmental costs estimates. When compared to adding greenfield units in 2013 and 2014, the updated analyses indicate that adding WCEC 3 in 2011 followed by the conversion projects would result in a reduction of approximately 44,298 tons of SO₂ (9.8 percent); 31,188 tons of NO_x (18.8 percent); and 8 million tons of CO₂ (1.6 percent) by the year 2017. In addition, the updated analyses indicate that adding WCEC 3 in 2011 followed by the conversion projects would save approximately 87,849 million MMBtu of oil and natural gas over the same time period. These environmental and fuel reduction benefits continue into the future and combine to result in an estimated savings to FPL's customers of approximately \$1.2 billion in present value savings by the year 2040. Compared to the base case and WCEC 3 without conversions plans, the analyses show that the proposed WCEC 3 in 2011 with conversions is the most cost-effective alternative available to FPL and its ratepayers. In fact, updated environmental and fuel cost forecasts revealed even greater savings for FPL's ratepayers. Together, these three projects will result in the greatest savings for FPL's ratepayers.

Need for West County Energy Center Unit 3 and the Conversions of Riviera and Cape Canaveral

FPL asserts that the evidence presented demonstrated that WCEC 3 in 2011, as well as the proposed conversions, satisfies all criteria listed in Section 403.519, F.S. FPL further contends that when compared to other self-build alternatives, WCEC 3 in 2011 without the conversions is the most cost-effective choice available by \$137 million to \$735 million CPVRR. When combined, the proposed WCEC 3 and the conversions are estimated to save FPL's ratepayers approximately \$1.2 billion by the year 2040. Furthermore, FPL argues that if the company were to delay the addition of WCEC 3 beyond 2011, it would not be able to move forward with its conversions of the Cape Canaveral and Riviera plants, thereby missing out on the benefits associated with those projects.

We find that the evidence in the record demonstrates that, based on maintaining a 20 percent reserve margin planning criterion, FPL will have a reliability need for additional capacity

in the summer of 2013. If WCEC 3 is built in 2011, FPL can remove the Cape Canaveral and Riviera plants from operation in 2010. FPL can then convert the steam electric generating units, which have been in operation since the 1960s, to high-efficiency combined cycle power plants, and return them to operation in 2013 and 2014. WCEC 3 is projected to be approximately \$735 million less expensive than FPL's base case expansion plan. The acceleration of WCEC 3 allows for the conversion of Cape Canaveral and Riviera plants, which are projected to increase savings to FPL ratepayers of approximately \$1.2 billion.

Annual Reporting of Costs

FPL has agreed that it will report, on an annual basis, budgeted and actual costs compared to the estimated total in-service cost of the proposed WCEC 3, Cape Canaveral, and Riviera units. The report shall be submitted to the Director of the Division of Economic Regulation. In addition, FPL also agreed that if a different combustion turbine design from the one presented in these proceedings is chosen, FPL will report to us regarding the comparative cost advantage of the alternate design chosen. Such a selection would only be made if the projected cost to FPL's customers would be lower as a result of the use of an alternate design.

CONCLUSION

FPL has demonstrated that its plan to build WCEC 3 and convert its existing Cape Canaveral and Riviera plants meets all of the requirements of Section 403.519, F.S. The new and converted units will provide nearly 2,300 MW of capacity needed through 2017, and ensure a 20 percent reserve margin. The assessments of various combinations of timings and generating resources used reasonable assumptions in demonstrating the proposed projects would provide adequate electricity at reasonable cost and, in fact, were the most cost-effective alternative. FPL demonstrated that use of all identified cost-effective conservation and reasonably available renewable generation will not provide the capacity or demand reduction necessary to mitigate the need for these projects.

Therefore, we approve the three need determinations and exemption from the Bid Rule for the two conversions. FPL shall report annually to the Director of Economic Regulation the budgeted and actual costs compared to the estimated total in-service cost of the proposed WCEC 3, Cape Canaveral Conversion and Riviera Conversion.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the three petitions for determination of need, filed by Florida Power & Light Company, are hereby granted as set forth herein. It is further

ORDERED that Florida Power & Light Company is granted an exemption from Rule 25-22.082, F.A.C., for the conversions of the Riviera and Cape Canaveral Plants. It is further

ORDERED that Florida Power & Light Company shall report, on an annual basis, budgeted and actual costs compared to the estimated total in-service cost of the West County Energy Center Unit 3, Cape Canaveral, and Riviera units, as set forth herein. It is further

ORDERED that these dockets shall be closed when the time for filing an appeal has run.

By ORDER of the Florida Public Service Commission this 12th day of September, 2008.



ANN COLE
Commission Clerk

(S E A L)

MCB/CMK

DISSENT BY: COMMISSIONER SKOP

COMMISSIONER SKOP, dissenting:

I respectfully dissent with the majority view on Issue 9 and Issue 17, to the extent that I am not comfortable waiving Section (15) of Rule 25-22.082 (Bid Rule), Florida Administrative Code for the two conversion projects.⁵

In relevant part, Section (15) of the Bid Rule requires that:

“If the public utility selects a self-build option, costs in addition to those identified in the need determination proceeding shall not be recoverable unless the utility can demonstrate that such costs were prudently incurred and due to extraordinary circumstances.”

From my perspective, it makes no sense to waive the requirement of a Commission rule that is directly on point, and which was clearly intended to protect consumers from cost overruns.⁶

⁵ FPL remains bound to the “self-build option” requirement of Rule 25-22.082(15) for the WEC-3 unit.

⁶ If changes to the existing rule are warranted, I would respectfully suggest that the Commission would be better served by revising the rule through the rulemaking process.

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request:

- 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within five (5) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or
- 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

Appendix II-2: Palm Beach County Agency Report



**Department of Planning,
Zoning & Building**

2300 North Jog Road
West Palm Beach, FL 33411-2741
(561) 233-5000

Planning Division 233-5300
Zoning Division 233-5200
Building Division 233-5100
Code Enforcement 233-5500
Contractor Certification 233-5525
Administration Office 233-5005
Executive Office 233-5228

www.pbcbgov.com/pzb

**Palm Beach County
Board of County
Commissioners**

Addie L. Greene, Chairperson

Jeff Koons, Vice Chair

Karen T. Marcus

Robert J. Kanjian

Mary McCarty

Burt Aaronson

Jess R. Santamaría

County Administrator

Robert Weisman

*"An Equal Opportunity
Affirmative Action Employer"*

August 15, 2008

Michael P. Halpin
Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road, MS 48
Tallahassee, FL 32399-2400

Re: FPL West County Energy Center Unit 3 Project
Power Plant Siting App. 05-47SA1; DOAH Case No. 07-5574EPP
Palm Beach County Agency Report

Dear Mr. Halpin:

This letter constitutes a summary from Palm Beach County required under Section 403.507(2)(a) 3., Florida Statutes (F.S), regarding the West County Unit 3 (WCEC) Project proposed by Florida Power & Light Co. (FPL). The project presented to the County involves the addition of a third nominal 1250 megawatt (MW) natural gas fired combined cycle generating unit at the WCEC site located on the north side of State Road 80 in the unincorporated central Palm Beach County. As indicated below, based on the County's review of the Site Certification Application and other relevant information, the County has determined that it is consistent with all applicable Palm Beach County ordinances, regulations, standards or criteria.

The Board of County Commissioners (BCC) originally approved the 220-acre parcel, which now represents the site of the WCEC, for a power plant use in June 2002 through issuance of a Development Order Resolution No. R-2002-0009. In 2004, the BCC approved a Development Order Amendment (DOA) that more specifically addressed FPL's proposed three-unit WCEC (Resolution No. R-2004-0401, Control No. 1989-052). The County approved a final site plan, for WCEC Units 1 and 2, on June 28, 2006.

On November 29, 2007, the BCC approved another DOA, which proposed an increase in the authorized maximum nominal electrical output for the three units at the WCEC site from 3300 to 3800 megawatts (Resolution No. R-2007-2144). After FPL filed the Site Certification Application (SCA) to the State of Florida for the WCEC Unit 3 Project in December 2007, the County issued its determination that the Project and the WCEC site are consistent with County land use plans and zoning requirements pursuant to Section 403.50665, F.S. On January 30, 2008, the County held an informational



public meeting concerning the Project as suggested by F.S. Section 403.50663. A Final site plan, for WCEC Unit 3, was approved on May 14, 2008.

These local development approvals reflect the County's determinations that the WCEC as it was presented, is consistent with Palm Beach County's Comprehensive Plan, is in compliance with the County's Unified Land Development Code, its procedures and guidelines, other applicable ordinances, and also subject to the letter dated July 3, 2008 (with attachments) to Joe Verdone, Attorney, from Rebecca Caldwell, Building Official, PBC Building Division (attached). Palm Beach County recommends approval of the WCEC Unit 3 Project provided that it complies, and remains compliant with the conditions contained within the Development Order as amended and as set forth in the approved final site plan.

Should you have any questions regarding the above, please contact me at (561) 233-5234, or Carrie Rechenmacher, Senior Site Planner at (561) 233-5209.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jon MacGillis".

Jon MacGillis, ASLA
Zoning Director
Palm Beach County

Attachment

C: Peter Merrit Regional Ecologist, Treasure Coast Regional Planning Council
Bob Wiesman, County Administrator, Palm Beach County
Verdenia Baker, Deputy County Administrator
Denise Neiman, County Attorney, Palm Beach County
Barbara Alterman, Executive Director, PZ&B
Maryann Kwok, Chief Planner, Zoning Division
Wendy Hernandez, Zoning Manager
Carrie Rechenmacher, Senior Site Planner, Zoning Division
ZD Reading File
Application File - 2008-445

**Department of Planning,****Zoning & Building**

2300 North Jog Road

West Palm Beach, FL 33411

(561) 233-5000

Planning Division 233-5300

Zoning Division 233-5200

Building Division 233-5100

Code Enforcement 233-5500

Contractors Certification 233-5525

Administration Office 233-5005

Executive Office 233-5228

www.pbcbgov.com/pzb**Palm Beach County
Board of County
Commissioners**

Addie L. Greene, Chairperson

Jeff Koons, Vice Chair

Karen T. Marcus

Robert J. Kanjian

Mary McCarty

Burt Aaronson

Jess R. Santamaria

County Administrator

Robert Weisman

*"An Equal Opportunity
Affirmative Action Employer"*

July 3, 2008

Joe Verdone, AICP
Carlton Fields, Attorney at law
P.O. Box 150
West Palm Beach, FL 33401-6149

Re: Florida Power & Light Generation Plant Construction
West County Energy Center

Dear Joe,

This letter is being written in continuance of the May 13, 2008 meeting with yourself, representatives of your client Florida Power and Light Company (FPL), and representatives of the design/build firm West County Power Partners LLC, with Deputy Building Official Richard Gathright and myself representing Palm Beach County Building Division. The meeting was as a result of our discovery that Florida Power and Light Company had begun the construction of a new power generation plant that included an office warehouse building of approximately 30,000 square feet, of which approximately 5,000 square feet was a control area for the generator plant. This work was begun without building permits, and had made considerable progress without inspections by the Building Division.

Immediately after the meeting, I sent inspectors to the generation plant site to assess the status of work progress. During this status assessment, there were code violations observed and noted, but no formal inspections have been performed by Palm Beach County. I have attached copies of the inspector's field notes for your, and Florida Power & Light Company's information. Please note that at the time of our meeting, the building shell was complete, underground plumbing was complete, and non-structural framing and drywall was approximately 85-90% complete.

In the referenced meeting, I stated my belief that neither the Florida Statute Sections 403.510 and 403.511, nor the Florida Building Code Section 102.2 exemption for electrical utility structures applied to this building, with the exception of the control area. You and the FPL representatives asserted that the building was exempt from local permitting, but that you were willing to allow plan review and inspection from that point forward. Richard Gathright noted that permits were the Building Division's administrative process for enforcing code compliance. Although you and FPL representatives were willing to allow plan review and inspections, and pay the associated costs; no assurances were made that our services would result in code compliance, or that all elements of construction that had already been covered, would be exposed for code required inspections.



Also during the meeting, you and your client cited many jurisdictions throughout Florida that did not require permits, plan review, or inspection based upon these sections of code and statute. This assertion was purportedly a major factor in FPL's decision not to seek permits for the referenced building originally, as it was believed the exemption was accepted collectively by local governments to apply. In conclusion, we referred you to take the matter to the County Attorneys Office for interpretation.

Subsequently, the Building Division has received no requests by FPL to perform plan review or inspections. An interpretation by the County Attorneys Office has just been received by myself, whereby they agree that the building is exempt from our requiring building permits. They note that the law allows the local government to require code compliance and charge fees. However, it is silent on how that compliance is to be achieved without permitting authority.

Since the construction of the building has continued during this legal interpretation process, so that substantial destructive exposure actions would need to be taken to perform code required inspections, and FPL has not taken steps to request plan review or formal inspections; it appears that FPL is satisfied with it's Quality Control program, performed under the direction of a Florida licensed professional engineer, to achieve code compliance for the office warehouse building. If my understanding of FPL's stance on the issue of code compliance is incorrect, and FPL is willing to tear down as needed to perform the code required inspections, the Building Division is willing to perform them, after full plan review and the payment of associated fees.

Sincerely,

A handwritten signature in black ink, reading "Rebecca D. Caldwell". The signature is stylized with a large, flowing "R" and "C".

Rebecca D. Caldwell, Building Official
Palm Beach County Building Division

RDC:file

cc: Barbara Alterman, Executive Director, Planning, Zoning & Building
Richard Gathright, Deputy Building Official, Building Division
Leonard Berger, Assistant County Attorney
Tom Young, FPL
Rob Leonard, FPL

Appendix II-3: Department of Community Affairs Agency Report



STATE OF FLORIDA

DEPARTMENT OF COMMUNITY AFFAIRS

"Dedicated to making Florida a better place to call home"

CHARLIE CRIST
Governor

THOMAS G. PELHAM
Secretary

August 15, 2008

Mr. Mike Halpin, Program Administrator
Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Final Agency Report for Florida Power and Light West County Energy Center, Site
Certification Application for Unit 3

Dear Mr. Halpin:

This letter serves as the Agency Report by the Department of Community Affairs (DCA) as required by the Power Plant Siting Act (PPSA), Chapter 403.501-403.518, Florida Statutes, (F.S.) in response to the application filed by Florida Power and Light (FPL) for certification of the West County Energy Center Unit 3 site. The applicant proposes to construct and operate one additional 1,250 megawatt natural gas-fired combined cycle generating unit at the existing 220-acre West County Energy Center site, located approximately five miles west of the City of Wellington in unincorporated Palm Beach County. Construction and operation of Units 1 and 2 was approved by the Governor and Cabinet acting as the Siting Board in December 2006. Units 1 and 2 are scheduled to come in-service in 2009 and 2010 respectively; Unit 3 is scheduled to come in-service in 2011.

Department staff has reviewed the completed site certification application and, as proposed, has no issues of concern. The Department previously identified an issue during its review of FPL's West County site certification application for Units 1 and 2 in a letter dated October 25, 2005 and again as a preliminary issue for Unit 3 of this facility on June 16, 2008. It is our understanding now that Units 1 and 2 of this facility are still under construction and the Condition of Certification XXXIV on Emergency Management for Units 1 and 2 requires that the applicant prepare a West County Energy Center hurricane preparation and recovery plan and submit the plan to DCA and the applicable County department no later than completion of building construction code compliance review of the West County Energy Center by Palm Beach County (PBC). Further, the Department understands that the applicant is in the process of finalizing and getting ready to submit the West County Energy Center hurricane preparation and recovery plan to DCA and PBC. The applicant has further stated that after Unit 3 is certified, the plan will be updated as necessary to include the third unit at the site.

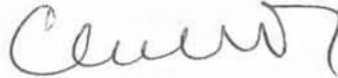
2555 SHUMARD OAK BOULEVARD ♦ TALLAHASSEE, FL 32399-2100
850-488-8466 (p) ♦ 850-921-0781 (f) ♦ Website: www.dca.state.fl.us

♦ COMMUNITY PLANNING 850-488-2356 (p) 850-488-3309 (f) ♦
♦ HOUSING AND COMMUNITY DEVELOPMENT 850-488-7956 (p) 850-922-5623 (f) ♦

Mr. Mike Halpin
August 15, 2008
Page 2

If you have any questions regarding this report, please contact Dr. Barbara Lenczewski at (850) 922-1786, or email barbara.lenczewski@dca.state.fl.us.

Sincerely,

A handwritten signature in dark ink, appearing to read 'C. Gauthier', with a stylized flourish at the end.

Charles Gauthier, AICP, Director
Division of Community Planning

CD/bl

cc: Mr. Peter Merritt, Executive Director, Treasure Coast Regional Planning Council
Mr. Lorenzo Aghemo, Director, Palm Beach County Planning Department

Appendix II-4: Department of Transportation Agency Report



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE C. KOPELOUSOS
SECRETARY

Mail Station 58
850/414-5265

August 13, 2008

Mr. Mike Halpin, Program Administrator
Florida Energy and Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road, MS 48
Tallahassee, Florida 32399-2400

Re: Florida Power and Light West County Energy Center Unit 3
Power Plant Siting Application No. PA05-47SA1
DOAH Case No. 07-5574EPP
DEP OGC Case No. 07-2198

Dear Mr. Halpin:

Enclosed is the Florida Department of Transportation's Agency Report for the Florida Power and Light West County Energy Center Unit 3 Power Plant Siting Application.

If you have any questions, please call me at 414-5294 or Connie Mitchell, Siting Coordinator, at 414-4572. Thank you.

Sincerely,

Kimberly C. Menchion
Assistant General Counsel

Enclosure

KCM/als

cc: Larry Hymowitz, District 4
Connie Mitchell
Cindy Mulkey

**FLORIDA DEPARTMENT OF TRANSPORTATION
FLORIDA POWER AND LIGHT
WEST COUNTY UNIT 3
AUGUST 2008**

SECTION I. CORRIDOR LOCATION ISSUES

No outstanding issues.

SECTION II. OUTSTANDING SUFFICIENCY ISSUES

No outstanding issues.

SECTION III. VARIANCES TO STANDARDS

No variances requested.

SECTION IV. SPECIAL USE PERMISSIONS

No special use permissions requested.

SECTION V. RECOMMENDATION FOR CERTIFICATION

The Florida Department of Transportation recommends the certification of the proposed electric power plant expansion. This recommendation is made contingent upon the conditions of Section VI being addressed/met.

SECTION VI. PROPOSED CONDITIONS OF CERTIFICATION

6.1 REQUEST FOR RESTRICTED AREAS

No requests for restricted areas are necessary.

6.2 POST CERTIFICATION REVIEW ITEMS

Access Management to the State Highway System: Any access to the State Highway System will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, and 14-97, Access Management Classification System and Standards, Florida Administrative Code.

Overweight or Overdimensional Loads: Operation of overweight or overdimensional loads by the applicant on State transportation facilities during construction and operation of the utility

facility will be subject to safety and permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

Use of State of Florida Right of Way or Transportation Facilities: All usage and crossing of State of Florida right of way or transportation facilities will be subject to Rule Chapter 14-46, Utilities Installation or Adjustment, Florida Administrative Code; Florida Department of Transportation's Utility Accommodation Manual (Document 710-020-001); Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Standard Specifications for Road and Bridge Construction; and pertinent sections of the Florida Department of Transportation's Project Development and Environmental Manual. State Road 80 has been identified as Florida Intrastate Highway System (FIHS) and Strategic Intermodal System's (SIS) facilities. The placement of the transmission line and pipeline should take into consideration the planned widening of these facilities. The cost of relocating or reconstructing the transmission line and pipeline will be borne by the applicant to the extent required by Section 337.403, Florida Statutes, and Rule Chapter 14-46, Florida Administrative Code.

Standards: The Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's Utility Accommodation Manual; and pertinent sections of the Department of Transportation's Project Development and Environmental Manual will be adhered to in all circumstances involving the State Highway System and other transportation facilities.

Drainage: Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Rule Chapter 14-86, Drainage Connections, Florida Administrative Code, including the attainment of any permit required thereby.

Use of Air Space: Any newly proposed structure or alteration of an existing structure will be subject to the requirements of Chapter 333, F.S., and Rule 14-60.009, Airspace Protection, F.A.C. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent Determination by the FAA stating that the structure exceeds any federal obstruction standard of 14 CFR Part 77, Subpart C for any structure that is located within a 10-nautical-mile radius of the geographical center of a public-use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit from the Florida Department of Transportation or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under Florida Department of Transportation jurisdiction, application will be made by submitting Florida Department

Transportation Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein.

Level of Service on State Roadway Facilities: All traffic impacts to State roadway facilities on the FIHS or the SIS, or funded by Section 339.2819, Florida Statutes, will be subject to the requirements of the level of service standards adopted by local governments pursuant to Rule Chapter 14-94, Statewide Minimum Level of Service Standards, Florida Administrative Code, in accordance with Section 163.3180(10), Florida Statutes. All traffic impacts to State roadway facilities not on the FIHS, the SIS, or funded by Section 339.2819, Florida Statutes, will be subject to adequate level of service standards established by the local governments.

SECTION VII BEST MANAGEMENT PRACTICES

Traffic control during facility construction and maintenance will be subject to the standards contained in the Manual on Uniform Traffic Control Devices; Rule Chapter 14-94, Statewide Minimum Level of Service Standards, Florida Administrative Code; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and Florida Department of Transportation's Utility Accommodation Manual, whichever is more stringent.

It is recommended that the applicant encourage transportation demand management techniques by doing the following:

Placing a bulletin board on site for car pooling advertisements.

Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the site during construction, the applicant should ensure that its contractors adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

Appendix II-5: South Florida Water Management District Agency Report



LAN 04-06

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

August 15, 2008

Mr. Michael P. Halpin, P.E.
Administrator, Siting Coordination Office
Department of Environmental Protection, MS 48
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Mike
Dear ~~Mr. Halpin~~:

**Subject: FPL West County Energy Center Unit 3
Power Plant Site Certification Application, PA 05-47SA1
Final Agency Report**

Enclosed is the South Florida Water Management District's (SFWMD's) final agency report on the above subject project, as required by Section 403.526, F.S., and Chapter 62-17.091, F.A.C. The report was officially approved by the SFWMD's Governing Board for transmittal to the Florida Department of Environmental Protection (FDEP) at their meeting on Thursday, August 15, 2008.

The SFWMD is recommending approval of the proposed project, subject to compliance with the SFWMD's Recommended Certification Conditions. If the applicant submits additional information required by any of the Recommended Certification Conditions prior to the time the FDEP must issue its Combined Agency Report or the Certification hearing is held on this project, and staff is able to make a determination of consistency with the appropriate SFWMD rules and criteria, the SFWMD will provide the FDEP with a revised report and set of Recommended Certification Conditions which reflect the results of the SFWMD's review of the additional information.

If you have any questions concerning the above, please do not hesitate to contact me at (561) 682-6862.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim", is written over the word "Sincerely,".

James J. Golden, AICP
Lead Planner
Environmental Resource Regulation Department

/jjg

Enclosure

c: See attached list

Toni Sturtevant, Esquire
Florida Department of Environmental Protection
Douglas Building, MS 35
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

James V. Antista, Esquire
Florida Fish & Wildlife Conservation Commission
Bryant Building, Room 108
620 South Meridian Street
Tallahassee, FL 32399-1600

Kelly Martinson, Esquire
Florida Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

Leon M. Biegalski, Esquire
Florida Department of Transportation
605 Suwannee Street, MS 58
Tallahassee, FL 32399-0450

Paul Darst
Florida Department of Community Affairs
2450 Shumard Oak Boulevard
Tallahassee, FL 32399-1600

Larry Hymowitz
Florida Department of Transportation
3400 West Commercial Boulevard
Ft. Lauderdale, FL 33309

Michael Busha, Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

Forrest Watson
Florida Department of
Agriculture & Consumer Services
Division of Forestry
3125 Connor Boulevard
Tallahassee, FL 32399-1650

Barton Bibler
Department of Health
Environmental Engineering
4042 Bald Cypress Way
Tallahassee, FL 32399-1742

Laura Kammerer
Bureau of Historic Preservation
R.A. Gray Building
500 South Bronough
Tallahassee, FL 32399

Samantha M. Cibula, Esquire
Florida Public Service Commission
2450 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Robert P. Banks, Esquire
Palm Beach County Attorney's Office
301 North Olive Avenue, Suite 601
West Palm Beach, FL 33401

Peter C. Cunningham, Esquire
Douglas S. Roberts, Esquire
Hopping, Green & Sams, P.A.
P.O. Box 6526
Tallahassee, FL 32314

Barbara Linkiewicz
Environmental Services
Florida Power & Light Company
P.O. Box 14000
Juno Beach, FL 33408

IMPACT ASSESSMENT REPORT

Prepared by

South Florida Water Management District

I PROJECT SUMMARY

Name: West County Energy Center Unit 3
Applicant: Florida Power and Light Company (FPL)
SFWMD ID No.: PA05-47SA1
Location: Sections 29&32/Township 43 South/Range 40 East,
Palm Beach County
Existing Land Use: Power Plant Facility (under construction)
Size: +220 acres
Proposed Land Use: New Generating Unit
Power Generation Capability: Nominal 1,250 Megawatts (MW) Unit 3
Nominal 3,750 MW Units 1, 2, & 3
Certification Threshold: Mandatory (75 MW or greater)
Optional (Less than 75 MW)

II POTENTIAL FOR ADVERSE REGIONAL IMPACTS SUMMARY

Category	Minimal	Significant	Major
District Lands	N/A		
Surface Water Management – Quantity	N/A*		
Surface Water Management – Quality	N/A*		
Wetlands/Other Surface Waters – Functions	N/A*		
Water Use	X		

*** Surface water management, wetlands and related Environmental Resource Permit (ERP) issues associated with the construction of the proposed power plant are being reviewed by Florida Department of Environmental Protection staff (FDEP) staff, pursuant to the terms of the Operating Agreement Concerning Management and Storage of Surface Waters Regulation and Wetland Resource Regulation between the FDEP and the SFWMD.**

III GENERAL PROJECT-RELATED INFORMATION

A. PURPOSE OF ACT AND DISTRICT RESPONSIBILITIES

The purpose of the Florida Electric Power Plant And Transmission Line Siting Act (subsequently referred to herein as the "Siting Act"), Sections 403.501-403.539, Florida Statutes, is to certify the location, construction, operation, and maintenance of electrical power plant sites and electrical transmission lines, including associated facilities, through a centralized and coordinated planning and licensing process administered by the Florida Department of Environmental Protection (FDEP). Authority to issue the Certification Order is assigned to the Governor and Cabinet sitting as the State Siting Board, or the Secretary of the FDEP, after issuance of a Recommended Order by an Administrative Law Judge (the FDEP or the applicant may request that the Administrative Law Judge cancel the certification hearing and relinquish jurisdiction to the FDEP if all parties to the proceeding stipulate that there are no disputed issues of material fact to be raised at the certification hearing). This process is commonly referred to as one-stop permitting process.

The Siting Act process specifically pre-empts all other existing state, regional, and local permitting and approval processes normally required of new development, including the SFWMD's Right Of Way Occupancy Permit, Environmental Resource Permit (ERP), and Water Use Permit review processes (Note: Under the current Operating Agreement between the FDEP and the SFWMD, the FDEP is responsible for conducting the ERP-related review of the entire project). However, the Siting Act mandates that the Department of Community Affairs, affected water management district(s), affected local government(s), Florida Fish and Wildlife Conservation Commission, affected regional planning council(s), Department of Transportation, and Public Service Commission participate in the process, prepare an assessment report on matters within their jurisdiction, and grants each agency party status in the proceedings. Other affected agencies may also participate in the process at the request of the FDEP or by filing for party status.

The certification process is the only opportunity that the SFWMD will have to review and "permit" the proposed activities. Through the required agency report, the SFWMD can assess the project's compliance with SFWMD non-procedural (i.e., technical) criteria and recommend approval or denial. The SFWMD recommended certification conditions then become the means by which the SFWMD is assured that all applicable SFWMD criteria has been applied and met in the design, construction, operation and maintenance of the proposed power plant or electrical transmission line and any associated facilities.

B. PROJECT PROPOSAL

The ±220 acre power plant site is located in unincorporated Palm Beach County approximately 3 miles west of Pratt-Whitney Road on the north side of S.R. 80/Southern Boulevard (see Exhibit 1). The project site is bounded on the north by the existing FPL Corbett Substation, on the east by the Palm Beach Aggregates, Inc., private haul road and the SFWMD's Comprehensive Everglades Restoration Plan (CERP) C-51 and Southern L-8 Reservoir Project, on the south by the S.R. 80/Southern Boulevard right-of-way, and on the west by FPL's existing Levee-Midway 500 kV electrical transmission line right-of-way.

The Site Certification for the West County Energy Center was approved in December, 2006. At that time, the Siting Board approved construction of Units 1 and 2 and granted conceptual approval for the future construction of Unit 3. Units 1 and 2 are currently under construction. Operation of Units 1 and 2 is scheduled for 2009 and 2010, respectively.

Unit 3 will be connected to the existing electrical transmission line network through a connection to a new switchyard on the project site south of Unit 3. The primary fuel will be natural gas. Ultra low-sulfur light oil will be used as a backup fuel. The project site has received zoning approval from the Palm Beach County Board of County Commissioners for the proposed power plant, including Unit 3. Unit 3 is scheduled for operation in 2011.

The primary proposed source of cooling, service, and process water for Unit 3 is reclaimed water that will be provided by the Palm Beach County Utilities Department. The proposed secondary/emergency backup sources will be potable water supplied by the Palm Beach County Utilities Department, the Upper Floridan Aquifer, the L-10/L-12 Canal, and the on-site stormwater ponds. Potable water will be obtained from the surficial aquifer or from Palm Beach County.

Note: FPL is not requesting an increase in ground or surface water allocations for Unit 3 above and beyond those previously approved for Units 1 and 2.

Additional details on the proposed project can be found in the attached Water Supply and Development checklist and footnotes on pages 10 through 11 of this report. The checklist and footnotes evaluate the potential water use impacts associated with the siting, construction, operation, and maintenance of the proposed project.

IV CONCLUSIONS AND RECOMMENDATIONS

This report contains the SFWMD's conclusions and recommendations to the Florida Department of Environmental Protection (FDEP) regarding the Certification of the proposed West County Energy Center Unit #3 project for inclusion in the FDEP Report required by Section 403.507(2)(a)2., F.S., and Rule 62-17.133, F.A.C.

SFWMD staff has reviewed the Site Certification Application with respect to current SFWMD statutes and rules. Based on the information contained in the original application, completeness responses, and additional submittals, and assuming compliance with the intent of the SFWMD recommended certification conditions, staff is of the opinion that the proposed project can be constructed consistent with SFWMD non-procedural statutes and rules.

It is the recommendation of SFWMD staff that the FDEP incorporate the following modifications/additions into the existing Conditions of Certification for the FPL West County Energy Center project. SFWMD staff will work with the FDEP, the Licensee, and the other parties to reach agreement on a final set of recommended certification conditions. In addition, if the Licensee submits any of the supplemental information required by certain of the recommended certification conditions prior to the Certification Hearing on this project, and SFWMD staff is able

to make a determination of consistency with the appropriate SFWMD rules, SFWMD staff will provide the FDEP with a revised set of recommended certification conditions that reflect the results of the SFWMD's review of the additional information.

XXXII. WATER MANAGEMENT

B. Water Use Conditions

2. Site Specific Design Authorizations

a. Authorized Monthly Withdrawals

~~This~~ The existing Certification authorizes a maximum monthly withdrawal of 605 MGM from the L-10/L-12 Canal and/or the upper Floridan aquifer for cooling, service, and process water for Units 1 and 2, subject to the limitations set forth in Condition B.2.d below. This authorization includes these sources as a backup water supply for Unit 3, in the event that the reclaimed water supply is temporarily interrupted. This Certification authorizes a maximum monthly withdrawal of 1.09 MGM from the surficial aquifer for potable water for Units 1, 2 and 3. The SFWMD may authorize alternative water supply sources for the project's cooling, service and process water, as set forth in Condition B.2.h below. However, in no instance shall the project's water use exceed a maximum of 605 MGM for its cooling, service and process water demands, except as provided for in Conditions B.2.d(4) and B.2.f below.

b. Authorized Annual Withdrawals

This Certification authorizes an average annual withdrawal of 5,550 MGY from the L-10/L-12 Canal and/or the upper Floridan aquifer for cooling, service, and process water for Units 1 and 2, subject to the limitations set forth in Condition B.2.d below. This authorization includes these sources as a backup water supply for Unit 3, in the event that the reclaimed water supply is temporarily interrupted. This Certification authorizes an average annual withdrawal of 12.78 MGY from the Surficial aquifer for potable water for Units 1, 2 and 3. The SFWMD may authorize alternative water supply sources for the project's cooling, service and process water, as set forth in Condition B.2.h below. However, in no instance shall the project's water use exceed an average of 5,550 MGY for its cooling, service and process water demands, except as provided for in Conditions B.2.d(4) and B.2.f below.

c. Aquifer Performance Test

(1) Authorization to commence withdrawals from the upper Floridan aquifer for the backup water supply for the cooling tower makeup water will not be granted until an Aquifer Performance Test (APT) is completed, evaluated by the SFWMD, and a determination is made by the SFWMD that reasonable assurances have been provided confirming that interference to existing legal users will not occur. The report submitted to the SFWMD on the APT shall include the following and shall be signed and sealed by a Florida Registered Professional Geologist:

- (a) The transmissivity and storage of the proposed pumping zone of the Floridan aquifer;
- (b) An analysis of the potential impacts to existing legal users;

(c) An impact analysis, if potential impacts to existing legal users are identified.

(2) Upon submittal of the APT report, the SFWMD shall have 30 days to review the report for completeness. If the information is not complete, accurate, or fully documented, the SFWMD shall, within the 30 day time period, request additional information needed to complete the review of the report. Once the report is deemed complete, the SFWMD shall evaluate the potential for impacts to existing legal users in accordance with the applicable criteria in Rule 40-2, F.A.C., and the Basis of Review for Water Use Permit Applications in the SFWMD.

(3) If the SFWMD determines that the results of the additional site-specific test data confirms the initial conclusion that interference to existing legal users will not occur, then the SFWMD shall provide the Licensee and DEP withwritten confirmation of this finding within 30 days of submittal of a complete report to the SFWMD on the APT.

(4) If the SFWMD determines that the potential exists for interference with existing legal users as a result of the site-specific test data, then the SFWMD will advise the Licensee and DEP, within 30 days of submittal of a complete report to the SFWMD on the APT, of this conclusion. The SFWMD will review additional submittals of data such as additional modeling, alternative water supplies, and mitigation plans that may be proposed by the Licensee to provide reasonable assurances that interference with existing legal users will not occur. The SFWMD shall have 30 days to review the additional submittals for completeness. Upon completion of the evaluation, the SFWMD will provide the Licensee and DEP with notification of authorization to commence withdrawals from the Floridan aquifer at acceptable rates and will require mitigation, as necessary and appropriate, pursuant to the Basis of Review for Water Use Permits in the SFWMD, to prevent interference with existing legal users. Reference: Sections 373.219 and 373.223, F.S.; Rules 40E-2.091, 40E-2.041, 40E-2.301, and 40E-2.381, F.A.C.

d. Limitations on Authorized Withdrawals

Withdrawals from the L-10/L-12 Canal are authorized, except as indicated below.

(1) Withdrawals from the L-10/L-12 Canal are prohibited when Water Supply Deliveries are being made. Water Supply Deliveries are defined as releases from regional system storage conducted to maintain designated canal stages within the L-10/L-12 Canal that have been depleted by consumptive and non-consumptive uses that occur during dry conditions.

(2) Withdrawals from the L-10/L-12 Canal are prohibited when Regulatory Releases are being made from Lake Okeechobee and water supply demands from existing legal users, authorized prior to May 10, 2006, exceed the capacity of the S-352 structure. Regulatory Releases are defined as releases from Lake Okeechobee that are conducted to pass lake inflows or lower the lake stage for the purpose of current and/or future flood control, pursuant to Lake Okeechobee's Water Supply and Environment (WSE) Regulation Schedule (in effect at the time of withdrawal pursuant to the Water Control Plan for Lake Okeechobee and the Everglades Agricultural Area).

(3) Determination of water availability from the L-10/L12 Canal shall be made by SFWMD Operations Department staff, based on the following criteria:

(a) When the Licensee is withdrawing from the L-10/L-12 Canal, the Licensee shall contact the SFWMD's West Palm Beach Operations Control Center by 8:00 a.m. each Friday for a determination as to whether or not water is available from this source for the following week. In the event that water is unavailable from the L-10/L-12 Canal for the following week, the Licensee shall have up to 48 hours following the determination of unavailability to cease withdrawals from the L-10/L-12 Canal.

(b) When the Licensee is withdrawing from the Floridan aquifer, the Licensee may (but is not required to) contact the SFWMD's West Palm Beach Operations Control Center by 8:00 a.m. each Friday for a determination as to whether or not water is available from the L-10/L-12 Canal for the following week.

(c) Determination of water availability from the L-10/L-12 Canal shall be made only if water is available for a minimum period of one week. Shorter time-frames will not be authorized by the SFWMD's West Palm Beach Operations Control Center.

(4) If, pursuant to Condition B.2.h, the SFWMD requires or authorizes the Licensee to utilize an alternative water supply source that results in a reduction or increase of the authorized withdrawals set forth in Conditions B.2.a and B.2.b above, the SFWMD shall petition the DEP for a modification to these Conditions of Certification.

e. Authorized Withdrawal Facilities

Prior to commencement of construction of the withdrawal facilities, the Licensee shall submit the details of the proposed withdrawal facilities (number of wells, well diameter, well depth, casing depth) for review and approval by the SFWMD. These Conditions of Certification shall be modified at a future date to reflect the specific withdrawal facilities authorized by the SFWMD.

f. Emergency Withdrawals

Any withdrawals from the L-10/L-12 Canal, the Floridan aquifer, or the Surficial aquifer in excess of the withdrawals authorized under this Certification shall require prior SFWMD approval. Any withdrawals from alternative surface or ground water supply sources shall require prior SFWMD approval. The SFWMD may grant such approval for any emergency withdrawals less than 90 days in duration without modifying these Conditions of Certification. The SFWMD's approval shall be based on the non-procedural requirements of Chapter 40E-2, F.A.C.

g. Consistency Review of Authorized Withdrawals

Within five years from the date of issuance of the Certification Order and every five years thereafter, unless extended by mutual agreement between the Licensee and the SFWMD, the Licensee shall submit to the SFWMD a report on the project's consistency with SFWMD's Water Use Conditions of Certification contained herein. Within 90 days after receipt of the completed report, the SFWMD shall evaluate the information contained therein and issue a written notification to the DEP and the Licensee as to whether the ground water withdrawals for consumptive use authorized by this Certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40-2, F.A.C., in effect at the time the certification was issued by the Siting Board. In determining whether the Licensee has established that its use of water complies with rule 40E-2, F.A.C., and the Basis of Review for Water Use Permit Applications within the SFWMD, the SFWMD shall evaluate whether the Licensee's use of water interferes with a legal use of water that existed at the time the certification was issued by the Siting Board. If the notification indicates that the withdrawals are not in compliance with these provisions, the SFWMD shall recommend to the Licensee possible alternatives for bringing the withdrawals into compliance with SFWMD's Water Use Conditions of Certification contained herein. In addition,

if DEP determines, in consultation with SFWMD, based upon a review of a report submitted pursuant to this condition, that the Licensee has failed to establish that the Licensee's use of water meets the consumptive water use requirements described herein, DEP may seek to modify the authorization to use water in the certification or take other appropriate measures to ensure that the consumptive use of water meets the conditions for issuance in Chapter 40E-2, F.A.C., as described herein. Any modification made pursuant to this condition shall not be subject to competing applications provided there is no increase in the allocation and no change in source.

h. Alternative Water Supplies

(1) Reclaimed Water Supply: Units 1 and 2

(a) Upon written notification from the SFWMD that a reliable source of reclaimed water is available at the project site to provide Units 1 and 2 with cooling water in a quality that meets the reclaimed water user requirements and limitations set forth in Rule 62-610, F.A.C., and would not require significant modifications to the plant's water pre-treatment system, the Licensee shall conduct a feasibility evaluation in accordance with Section 3.2.3.2 of the Basis of Review For Water Use Permit Applications in the SFWMD to determine the environmental, technical, and economic feasibility of utilizing reclaimed water. The evaluation shall include an analysis of potential conflicts with facility permit requirements such as air emission control and wastewater disposal.

(b) In conducting the feasibility evaluation, it shall not be deemed to be economically feasible for the Licensee to use reclaimed water unless the PSC authorizes the recovery of the additional costs associated with reclaimed water use.

(c) If the feasibility evaluation demonstrates that the use of reclaimed water is feasible, the Licensee shall provide the SFWMD with a schedule for reclaimed water use, for the SFWMD's review and approval, within 90 days of such notification. Once the use of reclaimed water has been approved by the SFWMD and established, withdrawals of surface water from the L-10/L-12 Canal, the Floridan aquifer, or any other authorized use of excess storm water shall be reduced in proportion to the volume of reclaimed water to be used by Units 1 and 2.

(2) Reclaimed Water Supply: Unit 3

(a) Reclaimed water shall be the primary cooling, service and process water source for Unit 3, pursuant to the Reclaimed Water Agreement between Palm Beach County and the Licensee, entered into on May 20, 2008, and all the agreements referenced and incorporated therein.

~~(2)~~ (3) Excess Storm Water

(a) Upon identification of a reliable alternative source of excess storm water available at the project site from the L-8, the L-8 water storage ponds, or other sources to serve Units 1 and 2 in a quantity and quality acceptable to the Licensee, and which does not result in a conflict with permit requirements for the facility, the Licensee shall provide the SFWMD with a schedule for use of the excess storm water for the SFWMD's review and approval.

(b) Once the use of excess storm water has been approved by the SFWMD and established, withdrawals of surface water from the L-10/L-12 Canal and/or ground water from the Floridan aquifer shall be reduced in proportion to the volume of excess storm water to be used by Units 1 and 2.

~~(3)~~ (4) Dual-Purpose Floridan Aquifer Wells

(a) If determined to be mutually beneficial, the Licensee and the SFWMD shall enter into an agreement to share the water made available by, and the costs associated with, the permitting, construction, and operation of dual-purpose aquifer storage and recovery (ASR) wells.

(b) Once withdrawals of ASR water have been approved by the SFWMD and established, the use of surface water from the L-10/L-12 Canal and/or excess storm water authorized under this certification shall be reduced in proportion to the volume of ASR water to be used by Units 1 and 2.

i. Request for Modification of Withdrawals

The SFWMD may request a modification of the ground water withdrawals for consumptive use authorized by this Certification, in accordance with the provisions of Section 403.516, F.S. and Section 62-17.211, F.A.C. Any request for an increase in water withdrawals shall be made pursuant to the provisions of Section 403.516, F.S., and Section 62-17.211, F.A.C.

j. Dewatering Activities

Prior to commencement of construction of those portions of the project that involve dewatering activities, the Licensee shall submit a detailed plan for any such activities to the SFWMD for a determination of compliance with the nonprocedural requirements of Chapters 40E-2, 40E-3 and 40E-20, F.A.C., in effect at the time of submittal. The following information, referenced to NGVD where appropriate, shall be submitted:

- (1) A detailed site plan which shows the location(s) for each proposed dewatering area;
- (2) The method(s) used for each dewatering operation;
- (3) The maximum depth for each dewatering operation;
- (4) The location and specifications for all proposed wells and/or pumps associated with each dewatering operation;
- (5) The duration of each dewatering operation;
- (6) The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving water(s);
- (7) An analysis of the impacts of the proposed dewatering operations on any existing on and/or off-site legal users, wetlands, or existing groundwater contamination plumes;
- (8) The location of any infiltration trench(es) and/or recharge barriers; and
- (9) All plans must be signed and sealed by a Professional Engineer or a Professional Geologist registered in the State of Florida.

Reference: Sections 373.229 and 373.308, F.S.; Rules 40E-2.091, 40E-2.301, and 40E3.500-531, F.A.C.

k. Reporting Requirements

Prior to the use of any proposed withdrawal facility authorized under this Certification, the Licensee shall equip each facility with a SFWMD-approved operating water use accounting system and submit a report of calibration to the SFWMD, pursuant to Section 4.1 of the Basis of Review For Water Use Permit Applications. In addition, the Licensee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility (existing and proposed) authorized under this Certification every five years from each previous calibration,

continuing at five year increments. The Licensee shall report monthly withdrawals for each withdrawal facility to the SFWMD quarterly. The Licensee shall specify the water accounting method and means of calibration on each report.

Reference: Section 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.

l. Existing Well Repair, Replacement, Abandonment

If any of the existing on-site wells require repair, replacement, and/or abandonment, the Licensee shall submit the information described in Chapter 40E-3, F.A.C., for review by the SFWMD prior to initiating such activities.

Reference: Sections 373.308 and 373.316, F.S.; Rules 40E-3.041, 40E-3.101, 40E 3.411, and 40E-3.500-531, F.A.C.

m. New Well Construction

Prior to construction of any new or replacement wells, the Licensee shall submit the drilling plans and other pertinent information, required by Chapter 40E-3, F.A.C., to the SFWMD for review and approval. If the well locations are different from those previously reviewed and approved in this Certification, the Licensee shall also submit to the SFWMD, for review and approval, an evaluation of the impacts of the proposed pumpage from the proposed well location(s) on adjacent existing legal users, pollution sources, environmental features, and water bodies. Reference: Section 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.

n. Water Conservation Plan

Prior to the commencement of construction of Units ~~1 and 2~~ 3, the Licensee shall submit a revised Water Conservation Plan, as required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Licensee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;
(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Licensee's facilities; and

(c) Use of processes to decrease water consumption. (2) Development and implementation of an employee awareness program concerning water conservation. Reference: Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.

SUBJECT: **WATER SUPPLY AND DEVELOPMENT** - WCEC Unit #3, PA05-47SA1

Proposed Potable Water Sources: On-site/Palm Beach County Utilities (1)

Permit No.: 50-00135-W (Palm Beach County Utilities)

Expiration Date: March 13, 2023

Current Usage: 58.63 MGD

Permitted Allocation: 86.99 MGD

Projected Demand: No increase in previously approved allocation proposed

Proposed Non-Potable Water Sources: Reclaimed water (2)

Projected Demand: 10.1 MGD maximum day/7.34 MGD average day

	ACCEPTABLE RESPONSE IN APPLICATION	RESOLVABLE THROUGH SITE SPECIFIC STANDARDS		MAJOR REGIONAL ISSUES
		MINOR	MAJOR	

I. PROJECTED DEMANDS OF PROJECT

A. POTABLE WATER

1. Use generation rates	X			
2. Conservation practices		X(3)		

B. NON-POTABLE WATER

1. Use generation rates	X			
2. Conservation practices		X(3)		
3. Wastewater re-use	X(2)			

II. WATER USE IMPACTS

A. ON-SITE

1. Proposed Sources				
a. Groundwater	X(4)			
b. Surface water	X(4)			
c. Wastewater re-use	X(2)			
d. Reverse osmosis	X			
2. Resource capability	X			
3. Impacts				
a. Salt water intrusion	X			
b. Pollution/contamination	X			
c. Environmental	X			

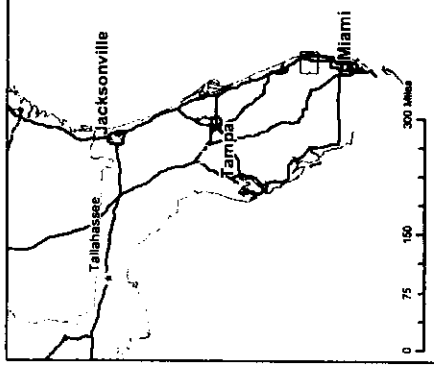
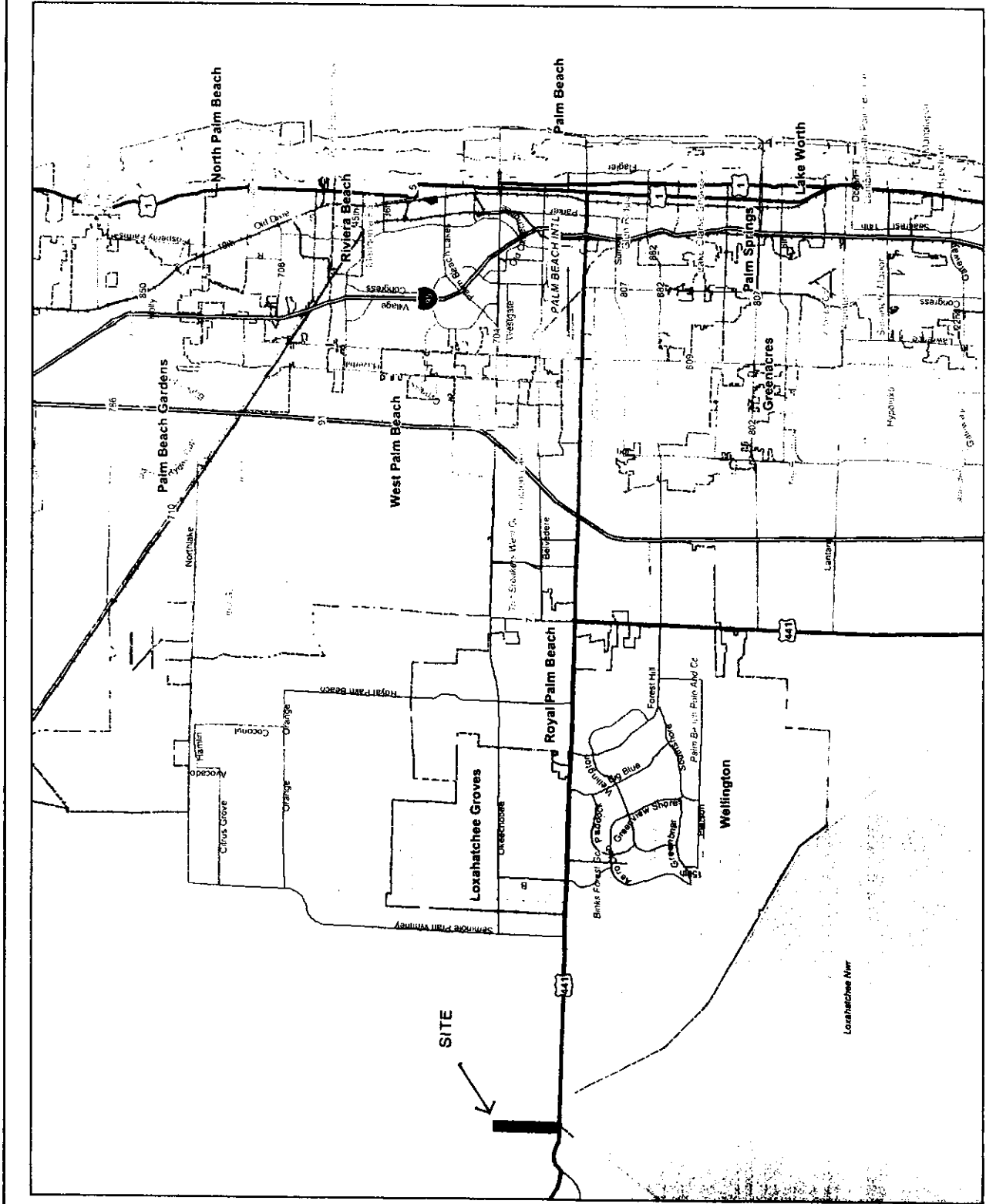
B. OFF-SITE

1. Verification of availability from utility	X(1,2)			
2. Resource capability	X			
3. Impacts				
a. Salt water intrusion	X			
b. Pollution/contamination	X			
c. Environmental	X			
d. Other legal users	X			

FOOTNOTES: See following page.

WATER SUPPLY AND DEVELOPMENT FOOTNOTES:

- (1) Potable water will be obtained from the project's previously approved on-site potable water system (surficial aquifer) or from Palm Beach County, pursuant to an executed temporary bulk water agreement. The Licensee is not requesting an increase in allocation from the surficial aquifer for the previously approved on-site potable water system. The Licensee has also provided a letter from Palm Beach County Utilities stating that they have the ability to provide potable water to the project through 2014 and beyond.
- (2) The primary proposed source of cooling, service and process water for Unit 3 will be reclaimed water supplied by Palm Beach County Utilities. The Licensee has provided District staff with a copy of the executed reclaimed water agreement.
- (3) The SFWMD is requiring that a revised Water Conservation Plan be submitted for review and approval prior to commencement of construction of Unit 3. **[See recommended changes to Certification Condition XXXII.B.2.n]**
- (4) Proposed backup cooling, service and process water sources include the on-site stormwater ponds, the L-10/L-12 Canal, the upper Floridan aquifer, and potable water obtained from Palm Beach County pursuant to an executed temporary bulk water agreement. The Licensee is not requesting an increase in the previously approved allocation from the upper Floridan aquifer and the L-10/L-12 Canal. **[see recommended changes to Certification Conditions XXXII.B.2.a, b, and h(2)]**



LEGEND

■ FPL West County Energy Center

REFERENCE

1. ESRI, Media Kit Data and Maps, 2. WCEC Location FPL
3. Loxahatchee NWR US Fish and Wildlife Service 7/10/2002
4. Wellington Boundary, Village of Wellington 1/1/4/07



PROJECT

WEST COUNTY ENERGY CENTER

TITLE

SITE LOCATION



PROJECT NO. 0745182		SCALE AS SHOWN	
DESIGN	NO. 11/18/07	DATE	NO. 11/18/07
DESIGN	NO. 11/18/07	DATE	NO. 11/18/07
DESIGN	NO. 11/18/07	DATE	NO. 11/18/07

FIGURE 2.1

EXHIBIT 1

Appendix II-6: Treasure Coast Regional Planning Council Agency Report

TREASURE COAST REGIONAL PLANNING COUNCIL

Report on the

Florida Power & Light Company
West County Energy Center Unit 3

July 18, 2008

Introduction

Pursuant to the Florida Electrical Power Plant Siting Act (Sections 403.501 – 403.539, Florida Statutes) Florida Power & Light Company (FPL) has submitted to the Florida Department of Environmental Protection (FDEP) a Site Certification Application (SCA) for the West County Energy Center (WCEC) Unit 3, a new electrical generating unit located in Palm Beach County. As the coordinating agency, FDEP has requested that Treasure Coast Regional Planning Council (TCRPC) review the application and submit a report to FDEP by August 15, 2008.

Council's report is to contain recommendations that address the impact upon the public of the proposed electrical power plant, based on the degree to which the power plant is consistent with the applicable provisions of the Strategic Regional Policy Plan (SRPP) adopted pursuant to Chapter 186, Florida Statutes and other matters within its jurisdiction. The goals strategies and policies cited in this report are contained in the SRPP, which is authorized by Sections 186.501-186.513, Florida Statutes, and Rule 29K-5.002, Florida Administrative Code. Notice is hereby given that the goals, policies and strategies of the SRPP cited in this report are non procedural requirements referred to in Section 403.507(3)(a), Florida Statutes.

Summary of the Project

FPL is proposing to construct and operate a new 1250 megawatt (MW) natural gas-fired combined cycle generating unit at the WCEC, a 220-acre site located in unincorporated Palm Beach County. Construction and operation of Units 1 and 2 were approved by the Governor and Cabinet acting as the Siting Board on December 26, 2006. Unit 3 is similar to Units 1 and 2, which are presently under construction and scheduled to come in-service in 2009 and 2010, respectively. Unit 3 is proposed to be in service in 2011. The ultimate site capacity approved by the Governor and Cabinet is 3,300 MW. The site has been approved by Palm Beach County for up to 3,800 MW of electrical generation.

The WCEC site is located north of State Road 80 and 3 miles west of Seminole-Pratt Road (Exhibit 1). A private road borders the eastern side of the site, allowing access to State Road 80 to the south. The site was originally owned by Palm Beach Aggregates, Inc. (PBA). The site was cleared, excavated, and back-filled by PBA. Prior to the initiation of construction of Units 1 and 2, the site was vacant but was previously used for industrial and agricultural purposes. The land uses surrounding the site are predominantly

agriculture to the west and water storage and mining to the east (Exhibit 2). The existing FPL Corbett substation is located adjacent to the site to the northwest. FPL has an existing 500 kV transmission corridor located on the western boundary of the site. Ongoing mining activities conducted by PBA are east and north of the site. The South Florida Water Management District (SFWMD) L-8 reservoir is located adjacent to the east side of the project site (Exhibit 3).

WCEC Unit 3 will use the same design as Units 1 and 2. Each combined cycle unit to be constructed on the project will consist of three combustion turbines (CT), associated heat recovery steam generators, and a steam electric turbine/generator (Exhibit 4). The steam electric turbines will include a mechanical draft cooling tower for condenser cooling. Natural gas delivered via pipeline is the primary fuel type for this facility with ultra low-sulfur light oil serving as a backup fuel. Natural gas will be transported to the project through a lateral pipeline from natural gas suppliers such as Gulfstream Natural Gas System or Florida Gas Transmission. The ultra low-sulfur light oil backup fuel will be trucked to the site. The project will be connected to the existing electrical transmission network via the FPL Corbett substation. No new transmission lines are required to connect the project to the existing transmission network.

Primary water uses for the project will be for condenser cooling, CT inlet air cooling, nitrogen oxide injection, steam cycle makeup, and service water. Condenser cooling for the steam cycle portion of the project will be accomplished using a mechanical draft cooling tower. Reclaimed water will be the primary source of water for Unit 3. Reclaimed water will be provided by Palm Beach County according to the terms of a Reclaimed Water Agreement executed on May 20, 2008. Reclaimed water will be used for cooling system makeup, and may be used for process and service water, and landscape irrigation.

Stormwater runoff that collects in onsite retention ponds may be recycled by pumping the water to cooling towers. WCEC Unit 3 may also use water from the L10/L12 Canal as a secondary source for cooling, process, and service water when the SFWMD determines that excess water is available from this canal beyond the allocation for Units 1 and 2.

Floridan aquifer and potable water supplied by Palm Beach County will be backup water sources for Unit 3 cooling, process, and service water. Potable water for WCEC employees will be supplied by the WCEC potable water system, which was authorized by the Site Certification for WCEC Units 1 and 2.

The project has been designed to avoid direct discharge to surface waters. Non-contact stormwater runoff in the power block area will be routed to onsite stormwater retention ponds. Non-contact stormwater outside the power block area will also be collected and routed to a stormwater pond, designed to meet federal, state, and local requirements. All non-hazardous wastewater will be treated as appropriate and discharged to the boulder zone of the lower Floridan aquifer through the underground injection control well system.

Evaluation

The Village of Wellington is the closest municipality to the project site and is located south of the site and State Road 80. Loxahatchee Groves is the second closest municipality to the site, located about 4.5 miles to the east of the site. As part of this review, Council solicited comments from the Village of Wellington, Town of Loxahatchee Groves, and Palm Beach County. As of the date of this report, Council has not received any comments from these local governments.

Council's review of WCEC Unit 3 identified the following regional issues discussed below:

Issue 1: Vulnerability of the region to fuel price increases and supply interruptions.

SRPP Regional Goal 9.1 calls for decreasing vulnerability of the region to fuel price increases and supply interruptions. The FPL Ten Year Power Plant Site Plan 2008-2017 indicates that natural gas accounted for 51.9 percent of its energy sources system wide in 2007, and the plan projects that natural gas will account for 72 percent of its energy sources in 2017. The increase in reliance on natural gas over the next 10 years is a concern because an increase in the future price of natural gas is likely to lead to higher electric bills for customers throughout the FPL service area. The South Florida Sun-Sentinel reported on June 3, 2008 that FPL has asked state regulators for permission to increase residential customers' power bills by an average of 16 percent to offset the utility's soaring oil and natural gas costs.

Also, the increase in reliance on natural gas is a concern because FPL's natural gas supply is delivered only through two major pipelines operated by Gulfstream Natural Gas System and the Florida Gas Transmission Co. A disruption in one or both of these natural gas supplies could interrupt FPL's ability to provide electricity throughout much of its service territory. An increase in the reliance of natural gas as a fuel source makes the region more vulnerable to supply interruptions than if a more balanced approach to fuel sources were adopted by FPL.

Issue 2: The region's reliance on fossil fuels.

SRPP Regional Strategy 9.1.1 is to reduce the region's reliance on fossil fuels. An analysis of FPL energy sources described in the Ten Year Power Plant Site Plan 2008-2017 indicates that as of December 31, 2007, FPL's proportion of fossil fuels used over the next ten years was projected to increase from 79.5 percent in 2007 to 81.8 percent in 2017 (Exhibit 5). However, recently FPL has made several announcements committing to increased reliance on renewable resources. Furthermore, on June 5, 2008 FPL amended Appendix 10.8 of the WCEC Unit 3 SCA to state:

“FPL is currently involved in activities to maintain and add renewable resources produced by generators that produce electricity from biomass and municipal waste. FPL anticipates that 143 MW of renewable purchase

contracts currently set to expire in the 2009-2011 will be extended or otherwise continued. In addition, FPL currently projects, that 126 MW of new renewable firm capacity will be provided in the 2008-2017 timeframe from FPL's own development efforts, responses to FPL's 2008 Renewable Request for Proposals, and/or unsolicited proposals from renewable energy sources. To this end, on May 16, 2008, FPL filed for FPSC approval of 110 MW of new renewable generating capacity consisting of 75 MW of solar thermal at FPL's existing Martin Power Plant site, 25 MW of photovoltaics (PV) at FPL's DeSoto site, and 10 MW of PV at NASA's Brevard County site. The 75 MW of solar thermal will not contribute additional firm capacity because steam produced from the solar thermal facility will replace steam produced from gas-fired operation. However, the 35 MW of PV facilities may be able to contribute firm capacity. This will be determined once actual operating data from the facilities is available."

Council supports FPL's recent efforts to add 379 MW of renewable resources to its system, including 269 MW of biomass and municipal waste-to-energy projects; and 110 MW of solar thermal and PV systems. However, Council notes that the ten year plan indicates FPL is planning to add six new natural gas-fired combined cycle units totaling 7,314 MW of summer capacity during the same timeframe, which far outpaces the expansion of renewable resources (Exhibit 6). The 379 MW of renewable energy represents only 1.4 percent of the total summer capacity (28,044 MW) projected to be available in 2011, and 1.2 percent of total summer capacity (30,742 MW) projected to be available in 2017.

Issue 3: Increased use of renewable energy.

In July 2007 Governor Charlie Crist signed Executive Order 07-127 calling for utilities to produce at least 20 percent of their electricity from renewable sources with a strong focus on solar and wind energy. FPL's commitment to 379 MW of renewable resources discussed above is a good start to achieving this goal. However, FPL will need to add renewable sources at a greater rate to be consistent with the Governor's goal of 20 percent of the electricity from renewable sources. To meet this goal in the next 10 years, FPL would have to install approximately 6,148 MW of renewable firm capacity by 2017. To meet half of this goal (10 percent) in the next 10 years, FPL would have to install approximately 3,074 MW of renewable summer capacity by 2017. To meet one quarter of this goal (5 percent), FPL would have to install approximately 1,537 MW of renewable summer capacity by 2017. To meet one eighth of this goal (2.5 percent), FPL would have to install approximately 768 MW of renewable summer capacity by 2017. FPL's commitment to 379 MW of renewable resources discussed above is a good start, but it does not move the company beyond its current commitment to renewable resources when projected out 10 years. FPL needs a stronger commitment to renewable energy in order to progress toward the Governor's goal of producing 20 percent of their electricity from renewable sources.

Issue 4: Protection of water quality and quantity.

SRPP Regional Goal 6.3 is to protect water quality and quantity. Proposed WCEC Unit 3 will require an annual average of 7.348 million gallons per day of total operational water after construction. The primary source for cooling tower makeup water and process water for WCEC Unit 3 will be reclaimed water supplied by Palm Beach County. Most of this water will eventually be evaporated in the cooling tower during the cooling process. FPL will only use water from the Floridan aquifer when reclaimed water is not available. Canal water will only be used when the South Florida Water Management District requests that it be used. The water will be treated with chlorine and used several more times until it becomes too concentrated with nutrients and dissolved solids. What remains is known as cooling tower blow down, which is classified as industrial waste water and will be disposed of by deep well injection.

Southern Florida is currently experiencing severe water shortages with Lake Okeechobee at near record lows. SFWMD has imposed restrictions on irrigating landscape and other water uses throughout most of the agency's 16-county region. It remains important to conserve all water possible and to reuse water when the opportunity exists. The use of reclaimed water by WCEC Unit 3 will remove a significant amount of water from the current system of water resources in Palm Beach County. Dedicating reclaimed water for use by WCEC Unit 3 represents a lost opportunity for further reuse of this water in other ways, such as for irrigation, enhancing wetlands, recharge of the shallow aquifer, and reduction of dependence on regional water reserves. Impacts to the water supply can be reduced by increasing reliance on renewable energy sources.

Issue 5: Protection and sustainability of the Everglades Ecosystem.

SRPP Regional Goal 6.9 is the protection and sustainability of the Everglades. The main way the WCEC could impact the Everglades is from deposition from air emissions. The estimated maximum potential annual emissions from all three units of the WCEC project at ultimate build-out of the site include: 1077 tons of nitrogen oxides; 597 tons of sulfur dioxide; 1563 tons of carbon monoxide; 750 tons of particulate matter; 264 tons of volatile organic compounds; 121 tons of sulfuric acid mist; and 120 pounds of lead. The WCEC will be using the best available control technology to limit the emissions from the facility. The estimated air quality impacts associated with the ultimate build-out of the project are predicted to be below the exceedance levels established by the Florida Ambient Air Quality Standards.

Even though the emissions from the WCEC are expected to be below air pollution regulatory criteria established by the state and federal governments, the cumulative emissions from fossil fuel burning power plants are partially responsible for increasing levels of acidic precipitation and visible atmospheric degradation. The accumulation of the emitted pollutants in the environment may cause significant adverse effects on human health and natural systems. The full economic cost of allowing these emissions into the environment is not being considered when comparing the cost of burning fossil fuels versus the use of renewable energy sources, such as solar energy. Impacts to the

Everglades ecosystem can be reduced by increasing reliance on renewable energy sources.

Issue 6: Upgrading less efficient and more polluting facilities.

SRPP Regional Policy 2.1.2.3 is to locate infrastructure investments in areas designated as existing or future cities, towns and villages; and Policy 15.1.3.4 is to give high priority to infill projects in order to assist in discouraging suburban sprawl and encouraging sustainable economic development. Council is very concerned that the new power plants are being constructed before older less efficient and more polluting facilities are upgraded. Council has recommended for many years that the existing Riviera Plant site located in the City of Riviera Beach be upgraded. This site currently houses two operational 300 MW oil-fired units and one retired 50 MW generating unit. On April 30, 2008 FPL announced plans to modernize the Riviera Plant by replacing the existing units with a high-efficiency natural gas unit capable of producing 1,250 MW of electricity. The new design will have significant economic and environmental benefits. However, representatives of FPL have indicated that the Riviera Plant can not be upgraded unless WCEC Unit 3 is approved. This is because upgrading the facility will require taking the existing capacity out of service for approximately three years, while the new facility is constructed. According to FPL's current plans, such an action would cause FPL's system-wide capacity to fall below the 20 percent reserve margin mandated by the Florida Public Service Commission (FPSC).

Council urges FPL and the State of Florida to make modernization of the Riviera Plant a priority. The Ten Year Site Plan states that a major system concern is "...maintaining a balance between load and generating capacity in Southeastern Florida." For this reason, the Riviera Plant should be given priority over the Cape Canaveral Plant, which has also been identified by FPL for modernization. Council recommends that the review of the Site Certification Application for the Riviera Plant upgrade be expedited by the State and all parties involved in the review process.

Analysis of reserve margin requirements provided in the FPL Ten Year Power Plant Site Plan 2008-2017 indicates that FPL could possibly meet future energy needs without WCEC Unit 3 by upgrading the Riviera Plant, and come very close to maintaining the 20 percent reserve margin (Exhibit 7). Given this scenario, the analysis shows that the reserve margin would slip below 20 percent to 18.6 percent in 2012, 19.3 percent in 2015, and 18.4 percent in 2017. The projected capacity that would need to be made up in those three years is 305 MW, 165 MW, and 406 MW, respectively. The capacity deficit in those years could be made up through a combination of alternatives, including 1) purchasing the firm capacity from other utilities, 2) request for proposals for additional renewable energy, and 3) development of proposed solar facilities (described above); and 4) development of a new program to install, own, and operate PV units on the rooftops of private and public buildings (described below). Furthermore, Council notes that recent legislation signed by Governor Charlie Crist on June 25, 2008 may result in additional capacity becoming available from other sources in the near future, which may reduce the projected capacity deficits in 2012, 2015, and 2017.

Proposed Alternative

Council offers a proposed alternative to FPL's current business plan. In addition to the current efforts by FPL to expand the use of renewable energy, Council recommends that FPL develop a program to install, own, and operate PV units on the rooftops of private and public buildings. This program should be modeled after the Southern California Edison plans to install 250 MW of solar energy on more than 100 buildings in the greater Los Angeles area at a rate of 50 MW a year.

The shift to rooftop PV systems distributed throughout the area of demand will reduce the reliance on large transmission lines and reduce FPL's costs associated with owning property; purchasing fuel; and permitting, constructing, and maintaining a power plant. Another advantage of this strategy is that PV systems do not require water for cooling and will not have any impacts on the Everglades ecosystem.

The development of utility-owned distributed PV represents a paradigm shift from FPL's traditional method of providing centralized power generation. This approach will require a commitment from the State of Florida to ensure that the FPL will be temporarily subsidized, if necessary, in order for the utility to achieve the appropriate level of profit from this solar program. The FPSC could model the development of this program in a fashion similar to the existing program in California.

Council's proposed alternative has the following advantages:

- Reduced need for new power plants
- Increased fuel diversity
- Reduced vulnerability to fuel price interruptions
- Reduced vulnerability to supply interruptions
- Reduced infrastructure expenses
- Reduced fuel costs
- Reduced impact on water resources
- Reduced air emissions
- Reduced impact on the Everglades ecosystem

Conclusion

The WCEC Unit 3 is inconsistent with the Strategic Regional Policy Plan. Specifically, the proposed project is inconsistent with: Regional Goal 9.1: Decrease vulnerability of the Region to fuel price increases and supply interruptions; Regional Strategy 9.1.1: Reduce the Region's reliance on fossil fuels; Regional Goal 6.3: Protection of water quality and quantity; Regional Goal 6.9: Protection and sustainability of the Everglades Ecosystem; Regional Policy 2.1.2.3: Locate infrastructure investments in areas designated as existing or future cities, towns and villages; and Policy 15.1.3.4: Give high priority to infill projects in order to assist in discouraging suburban sprawl and encouraging sustainable economic development. Furthermore, the proposed facility is not

consistent with implementing the Governor's Executive Order 07-127 calling for utilities to produce at least 20 percent of their electricity from renewable sources with a strong focus on solar and wind energy.

Recommendations to the Governor and Cabinet

Council recommends the Governor and Cabinet should:

1. Condition the construction of WCEC Unit 3 on the establishment of a business plan by the State and FPL that will eliminate the need for FPL to construct future greenfield, fossil-fueled power plants in Florida. The establishment of such a business plan is contingent on the State legislature and the FPSC adopting laws, rules, and procedures that will enable the necessary legal and rate-making environment. Pursuant to Section 403.507(3)(c) Treasure Coast Regional Planning Council cites the following: Sections 186.501-186.513, inclusive, Florida Statutes, Section 29K-5.002 Florida Administrative Code, Sections 403.507(2) & 403.509(3) Florida Statutes;
2. Require that FPL, upon FPSC approval of determination of need, take all actions necessary to upgrade the Riviera Plant so it is back "online" in early 2014. It is also recommended that FPL examine the feasibility of using land within its transmission corridor west of the Riviera Plant for solar power generation purposes;
3. Require that FPL adopt Council's proposed alternative to add 50 MW a year of rooftop PV systems to increase capacity to meet peak loads;
4. Coordinate with the State legislature and the FPSC to enact the necessary legislation, rules and procedures to allow the electric utilities in the State of Florida to install, own, and operate PV units on the rooftops of private and public buildings;
5. Continue to coordinate with the State legislature and the FPSC to enact the necessary legislation, rules and procedures that would allow Florida's power companies to meet the State's renewable portfolio standards established as a result of the Governor's Executive Order 07-127;
6. Continue to coordinate with the State legislature and the FPSC to enact the necessary legislation, rules and procedures to amend the regulatory framework to provide financial incentives for the power providers and customers to rely to a greater extent on solar energy and other renewable energy resources; and
7. Continue to coordinate with the State legislature and the FPSC to amend the regulatory framework to increase conservation measures.

List of Exhibits

Exhibit

- 1 Site Location Map
- 2 Land Cover Map
- 3 Site Aerials
- 4 Site Layout
- 5 FPL Energy Sources Percent by Fuel Type
- 6 Projected Capacity Changes and Reserve Margins for FPL
- 7 Analysis of FPL Reserve Margin





LEGEND

- | | |
|---|------------------------------------|
| Land Cover | |
| 160 - Mining | 511 - Ditches |
| 190 - Open Land | 532 - Reservoirs |
| 211 - Improved Pastures | 641 - Freshwater Marshes |
| 422 - Brazilian Pepper | 831 - Electric Power Facilities |
| 510 - Canals | 839 - Utilities Under Construction |

REFERENCE

Golder Associates, 2007



PROJECT		West County Energy Project	
TITLE		Land Cover	
		PROJECT No. 073-87652	SCALE AS SHOWN
		DESIGN CC 17 Aug. 2007	
		GIS AB 08 Nov. 2007	
		CHECK CC 08 Nov. 2007	
		REVIEW KB 08 Nov. 2007	

Exhibit 2



Figure 2.1.0-4. WCEC Site showing Units 1 and 2 under construction. View from northeast to southwest.

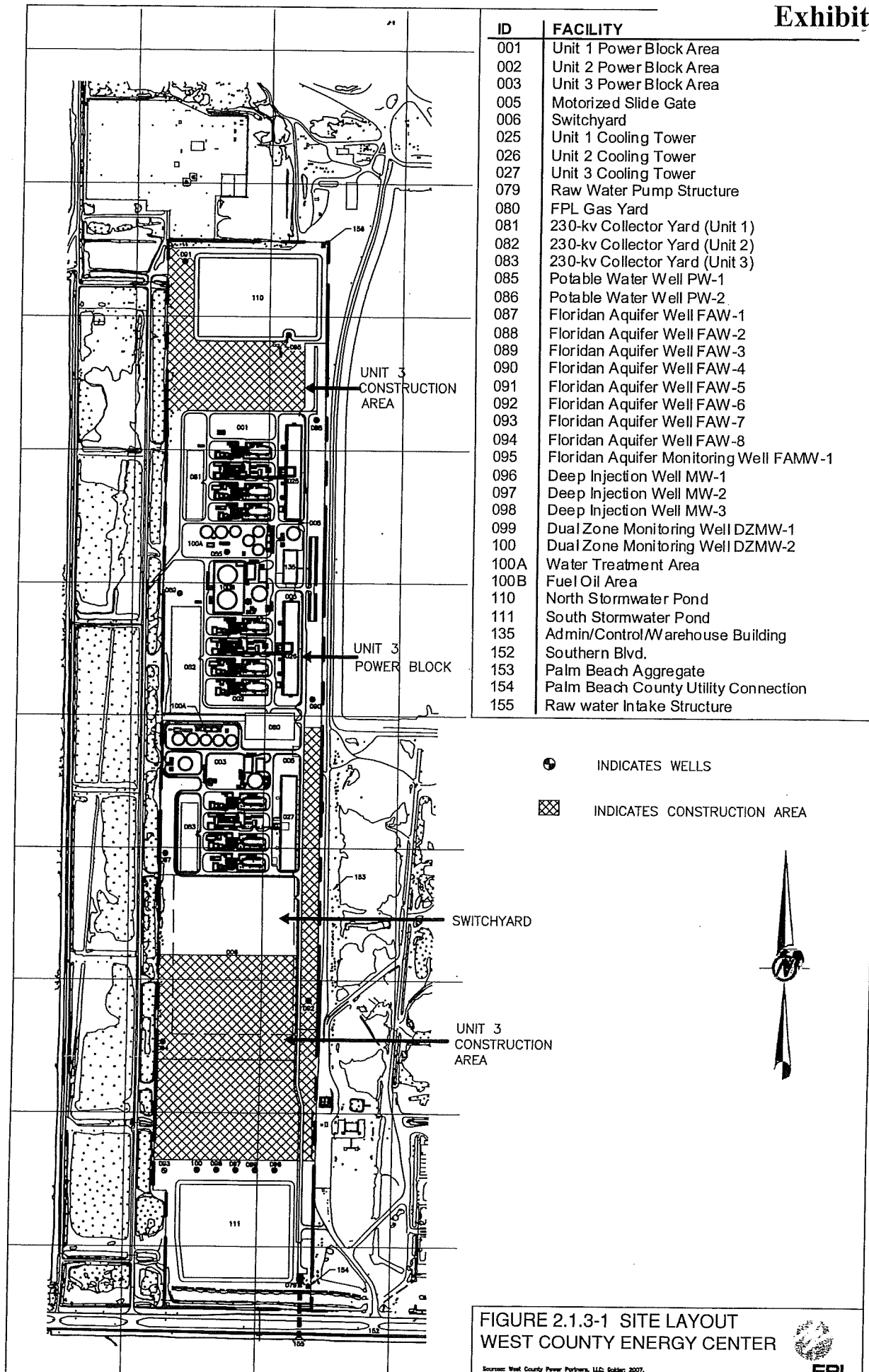


Figure 2.1.0-5. WCEC Site showing Units 1 and 2 under construction. View from northwest to southeast.

Source: Aerodynamic LLC, Golder; 2007.

07387652\Rpts\SCA\Ch2\Figure 2.1.0-4&5.doc





FPL Energy Sources Percent by Fuel Type

Energy source	2007	2017
Nuclear ¹	19.2 %	17.3 %
Fossil fuels ²	79.5 %	81.8 %
Renewable ^{3,4}	1.3 %	0.9 %
Total	100.0 %	100.0 %

¹ The nuclear values shown for 2017 reflect the contribution from the nuclear uprates at FPL's existing St. Lucie and Turkey Point nuclear units. However, the contributions from FPL's two new nuclear units at Turkey Point are not reflected in the 2017 values, because these new units are planned for 2018 and 2020, respectively.

² The fossil fuels values are estimated by adding the percentages for coal (6.0 %), oil (8.4 %), natural gas (51.9 %), energy interchange (9.3 %), and the nonrenewable portion of "other" (3.8 %) in 2007; and coal (4.5 %), oil (0.7 %), natural gas (72.0 %), energy interchange (0.0 %), and the nonrenewable portion of "other" (4.6 %) in 2017. As these values indicate, there is a significant reduction in projected oil usage.

³ The 2007 value for renewable (1.3 %) is provided in the plan; the 2017 value (0.9 %) is estimated assuming that current contracts for renewable energy are extended through 2017.

⁴ The projection of energy for 2017 did not attempt to project the contribution from new renewable energy sources. The projection for 2017 shown above assumes the same output from existing renewable sources divided by an increased overall energy production (due to growing population and electrical load), thus resulting in a lower percent value. FPL's 2008 site plan discusses in depth a number of FPL efforts regarding new renewable energy sources. However, a number of uncertainties exist regarding these projects (including the total MW of the projects, whether these projects will receive all necessary permits and approvals from regulatory agencies, the number and type of proposals that will be received in response to FPL's renewable energy request for proposals, etc.). Due to these current uncertainties, FPL decided not to attempt projections for contributions from new renewable sources in its 2008 site plan. As these uncertainties are resolved, FPL expects to include projections of contributions from new renewable sources in future ten year site plans.

Source: This table was created using information from the FPL Ten Year Power Plant Site Plan 2008-2017, and revised according to the recommendations of Dr. Steven R. Sim, Senior Manager of Integrated Resource Assessment and Planning for FPL.

Table ES.1: Projected Capacity Changes and Reserve Margins for FPL

<i>Projected Capacity Changes and Reserve Margins for FPL ⁽¹⁾</i>				
		<i>Net Capacity Changes (MW)</i>		<i>FPL Reserve Margin (%)</i>
		<i>Winter ⁽²⁾</i>	<i>Summer ⁽³⁾</i>	
				<i>Winter Summer</i>
2008	Changes to Existing Units	41	14	28.4% 23.0%
	Changes to Existing Purchases ⁽⁴⁾	(836)	---	
2009	West County Unit #1 ⁽⁵⁾	---	1,219	25.0% 24.9%
	Changes to Existing Units	28	1	
	Changes to Existing Purchases ⁽⁴⁾	(326)	(431)	
2010	West County Unit #1 ⁽⁵⁾	1,335	---	25.4% 25.2%
	West County Unit #2 ⁽⁵⁾	---	1,219	
	Extension Renewable Capacity Purchases	98	98	
	Changes to Existing Purchases ⁽⁴⁾	(559)	(455)	
2011	West County Unit #2 ⁽⁵⁾	1,335	---	28.9% 27.9%
	West County Unit #3 ⁽⁵⁾	---	1,219	
	New Renewable Capacity Purchases	---	32	
	Extension Renewable Capacity Purchases	45	45	
	Changes to Existing Purchases ⁽⁴⁾	(46)	(45)	
2012	Changes to Existing Purchases ⁽⁴⁾	---	(156)	33.3% 26.0%
	West County Unit #3 ⁽⁵⁾	1,335	---	
	New Renewable Capacity Purchases	126	94	
	Changes to Existing Nuclear Units	103	310	
2013	Changes to Existing Nuclear Units	311	104	31.5% 24.0%
	Changes to Existing Purchases ⁽⁴⁾	(180)	---	
2014	Unsited 3 x 1 CC #1 ⁽⁵⁾	---	1,219	24.7% 23.8%
2015	Unsited 3 x 1 CC #1 ⁽⁵⁾	1,335	---	27.1% 21.1%
2016	Unsited 3x1 CC #2 ⁽⁵⁾	---	1,219	20.2% 22.9%
	Unsited 3x1 CC #3 ⁽⁵⁾	---	1,219	
	Changes to Existing Purchases ⁽⁴⁾	(930)	(1,311)	
2017	Unsited 3x1 CC #2 ⁽⁵⁾	1,335	---	25.9% 20.1%
	Unsited 3x1 CC #3 ⁽⁵⁾	1,335	---	
	Changes to Existing Purchases ⁽⁴⁾	(390)	---	
TOTALS =		5,495	5,614	
⁽¹⁾ Additional information about these resulting reserve margins and capacity changes are found on Schedules 7 & 8 respectively. ⁽²⁾ Winter values are values for January of year shown. ⁽³⁾ Summer values are values for August of year shown. ⁽⁴⁾ These are firm capacity and energy contracts with QF, Utilities and other purchases. See Table I.B.1 and Table I.B.2 for more details. ⁽⁵⁾ All new unit additions are scheduled to be in-service in June of the year shown. Consequently, they are included in the Summer reserve margin calculation for the in-service year and in both the Summer and Winter reserve margin calculations for subsequent years.				

Analysis of FPL Reserve Margin

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Firm Summer Peak Demand MW	Current Projected Reserve Margin MW	Reserve Margin Percent of Peak	Removal of WCEC Unit 3 MW	Riviera Plant Upgrade MW	Addition of New Renewable Firm Capacity MW	Revised Reserve Margin Based on Removal of WCEC Unit 3 & Added Renewables MW	Revised Reserve Margin Percent of Peak Based on Removal of WCEC Unit 3 & Added Renewables	Projected Capacity Available Above or Below the 20% Reserve Margin MW
2008	20,448	4,694	23.0%	0	0	0	4,694	23.0%	604
2009	20,758	5,173	24.9%	0	0	0	5,173	24.9%	1,021
2010	21,408	5,385	25.2%	0	-565	0	4,820	22.5%	538
2011	21,927	6,117	27.9%	-1,219	-565	126	4,459	20.3%	74
2012	22,449	5,843	26.0%	-1,219	-565	126	4,185	18.6%	-305
2013	22,898	5,498	24.0%	-1,219	654	126	5,059	22.1%	479
2014	23,925	5,690	23.8%	-1,219	654	126	5,251	21.9%	466
2015	24,451	5,164	21.1%	-1,219	654	126	4,725	19.3%	-165
2016	25,022	5,720	22.9%	-1,219	654	126	5,281	21.1%	277
2017	25,591	5,151	20.1%	-1,219	654	126	4,712	18.4%	-406

Source: This table is based on reserve margin values provided in the FPL Ten Year Power Plant Site Plan, 2008-2017. Columns 1, 2, 3, and 4 of this table correspond with Columns 1, 9, 10, and 11 of Schedule 7.1, Forecast of Capacity, Demand, and Scheduled Maintenance at Time of Summer Peak on page 82 of the ten year plan.