

Ms. Ann Cole
May 7, 2008
Page 2

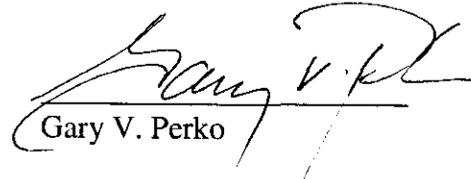
Please acknowledge receipt and filing of the above by stamping the enclosed extra copies of the Petition and testimony and return them to me. If you have any questions concerning this filing, please contact me at 425-2359.

Thank you for your assistance in connection with this matter.

Very truly yours,

HOPPING GREEN & SAMS, P.A.

By:


Gary V. Perko

Attorneys for FLORIDA MUNICIPAL POWER AGENCY

GVP/dwg
Enclosures

cc: Jennifer Brubaker (PSC)
Thomas Ballinger (PSC)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

RECEIVED-FPSC
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In re: Petition to determine need for Cane
Island Power Park Unit 4 in Osceola County
by Florida Municipal Power Agency.

DOCKET NO. _____ COMMISSION
CLERK

080253

FILED: May 7, 2008

**PETITION OF FLORIDA MUNICIPAL POWER AGENCY
TO DETERMINATION NEED FOR AN ELECTRICAL
POWER PLANT IN OSCEOLA COUNTY**

FLORIDA MUNICIPAL POWER AGENCY ("FMPA"), by and through undersigned
counsel, hereby petitions the Florida Public Service Commission ("Commission") pursuant to
Section 403.519, Florida Statutes, and Rule 25-22.081, Florida Administrative Code, to
determine the need for the proposed electrical power plant to be located at the existing Cane
Island Power Park in Osceola County, Florida, and to file its order making that determination
with the Department of Environmental Protection (DEP) pursuant to Section 403.507(2)(a)2.,
Florida Statutes. In support of this petition, FMPA states:

Introduction

1. FMPA submits this Petition and accompanying Need for Power Application in
support of a proposed 300 megawatt (nominal) "combined cycle" electric generating unit to be
located at the existing Cane Island Power Park in Osceola County, Florida. The proposed unit
will ensure that the fifteen municipal members of FMPA's "All-Requirements Power Supply
Project" (ARP) have adequate supplies of power to serve their customers' needs at a reasonable
cost. FMPA's evaluation of responses to competitive requests for proposals (RFPs), together
with separate economic analyses presented in the Application, demonstrate the proposed unit is
the most cost-effective alternative to meet the ARP's power supply needs. The ARP already

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FPSC-COMMISSION CLERK

utilizes demand side management (DSM) programs and renewable resources and is exploring additional conservation and renewable energy sources. Even with the potential demand and energy reductions from potentially available conservation and renewable energy resources, however, FMPA needs the proposed new unit to reliably meet the ARP's power supply requirements. The proposed unit will not only cost effectively help meet the ARP's growing needs, it will displace less efficient generation resources and thereby reduce the ARP's carbon footprint consistent with the carbon dioxide (CO₂) emission reduction goals set forth in the Governor's Executive Order No. 07-127.

2. Accompanying this Petition is a detailed Need for Power Application, with appendices, that sets forth the information required by Rule 25-22.081, FAC. That Need for Power Application, including appendices, is incorporated by reference as Exhibit No. ___ (FMPA-1) to this Petition. Contemporaneously with this Petition, FMPA is submitting the pre-filed testimony of seven (7) witnesses in support of this Petition and the Need for Power Application.

3. Pursuant to Section 403.5064, Florida Statutes, FMPA and Kissimmee Utility Authority (KUA), submitted a site certification application for the proposed unit to DEP and other agencies, including the Commission, on April 1, 2008.

Preliminary Information

4. The agency affected by this Petition is:

Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

5. Petitioners' full names and address are:

Florida Municipal Power Agency
8553 Commodity Circle
Orlando, Florida 32819-9002

6. All notices, pleadings and other communications required to be served on the petitioner should be directed to:

Gary V. Perko
David S. Childs
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Primarily Affected Utilities

7. FMPA is a joint action agency comprised of 30 municipal electric utilities. FMPA was created under the Florida Interlocal Cooperation Act of 1969, Section 163.01, Florida Statutes, and the Joint Power Act, Chapter 361, part II, Florida Statutes. FMPA is specifically authorized under the Joint Power Act to undertake joint projects for its members and to issue tax-exempt bonds and other obligations to finance the costs of such projects. Pursuant to that authority, FMPA developed the ARP to secure an adequate, economical and reliable supply of electric capacity and energy to meet the needs of the ARP members, which include fifteen municipal utilities serving approximately 180,000 customers throughout Florida. ARP members purchase all their capacity and energy from the ARP. FMPA serves the needs of the ARP using FMPA owned or co-owned facilities, as well as power purchases from generating ARP members (i.e., members with their own generating capacity and purchases) and other, utilities or independent power producers (IPPs).

8. The fifteen ARP member utilities currently include Kissimmee Utility Authority (KUA), Fort Pierce Utilities Authority, Keys Energy Services (Key West), Beaches Energy Services (Jacksonville Beach), and the Cities of Bushnell, Clewiston, Fort Mead, Green Cove Springs, Havana, Lake Worth, Leesburg, Newberry, Ocala, Starke and Vero Beach. With members extending from Havana to Key West, the ARP member cities are geographically diverse.

9. FMPA and the members of the ARP are the “primarily affected utilities” within the meaning of Rule 25-22.081, Florida Administrative Code. The substantial interests of FMPA and the members of ARP will be affected by the Commission’s decision on this Petition. If the Commission did not make an affirmative determination of need for the proposed new unit, there would be adverse impacts on FMPA/ARP system reliability and FMPA’s cost of generating electricity. Because the ARP members are dependent upon FMPA for essentially all of their wholesale power requirements and are obligated to pay rates that fully recover FMPA’s costs, they also would be directly impacted if the Commission were not to make an affirmative determination of need.

10. As a joint operating agency, engaged in the business of generating and transmitting electric energy, the FMPA is an “electric utility” under 403.503(13), Florida Statutes, and, therefore, is an “applicant” as defined by Section 403.503(4), Florida Statutes. See Order No. PSC-01-1103-FOF-EM, issued in Docket No. 010143-EM, on May 14, 2001.

The Proposed Power Plant

11. The new unit, to be known as Cane Island Unit 4, will be a high-efficiency, 1x1 F class, natural gas-fueled combined cycle unit, consisting of a combustion turbine and a heat recovery steam generator that will drive a steam turbine generator. The new unit will be capable

of generating nominally 300 megawatts (MW), enough electricity to serve approximately 60,000 homes in Florida. The projected in-serve date for Cane Island Unit 4 is May 1, 2011. The total installed capital cost of the unit is projected to be approximately \$422 million. The proposed new unit will be wholly owned by FMPA and operated under contract by KUA, an ARP-member utility. All of the generation capacity from the unit will be committed to ARP members for retail sale to their customers.

12. Cane Island Unit 4 will be located at the existing Cane Island Power Park which currently supports three generating units (Cane Island Units 1, 2 and 3). The site consists of 1,029 acres located one mile northwest of Intercession City and five miles west of Kissimmee in Osceola County. The site currently contains all of the infrastructure needed for operation of the existing units, including fuel supply, transmission and other facilities. The design of Cane Island Unit 4 will maximize the co-use of those existing site facilities.

13. Locating Cane Island Unit 4 at an existing site avoids both the cost and uncertainty associated with securing another site and the need to devote additional valuable Florida land resources to electrical generating sites and transmission lines. The project will interconnect into the existing Cane Island substation. The Cane Island substation is connected to the KUA, Orlando Utilities Commission, Tampa Electric Company, and Progress Energy Florida 230 kV transmission systems through four existing transmission lines.

14. The Cane Island Site is served by two independent suppliers of natural gas --Florida Gas Transmission Company (FGT) and Gulfstream Natural Gas System, LLC. As such, Cane Island 4 will have a reliable fuel supply.

The Florida Electrical Power Plant Siting Act (PPSA)

15. The Florida Electrical Power Plant Siting Act (PPSA), Chapter 403, Part II, Florida Statutes, provides a “centrally coordinated, one-stop licensing process” for power plant projects. The PPSA provides a centralized process to ensure that all affected state and local agencies review a project before the Siting Board, consisting of the Governor and Cabinet, takes final action on the site certification application. The Commission’s need determination is a critical step in the PPSA certification process. Along with the reports submitted by DEP and other agencies, the Commission’s need determination allows the Siting Board to balance “the increasing demand for electrical power plants with the broad interests of the public.” Section 402.502, Florida Statutes.

16. Section 403.519(3), Florida Statutes, sets forth the following criteria which the Commission must consider in making need determinations:

- 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;
- whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available; and
- whether there are conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant.

Rule 25-22.081, Florida Administrative Code, sets forth specific information which each Need for Power Application must include to allow the Commission to address the statutory factors.

The information required by Rule 25-22.081, Florida Administrative Code, as well as other relevant information is summarized below and discussed in detail in the accompanying Application.

The Need for Cane Island Unit 4

17. The first step in determining need for electrical capacity is to develop a load forecast and then to compare that load forecast to net system capacity resources to determine how much, if any, additional capacity is needed to meet the utility's applicable reliability criteria or reserve margin. Available net system capacity resources consider existing generation resources, contractual power purchases and any reserves associated with partial requirements purchases, scheduled capacity additions and unit de-ratings, and scheduled unit retirements.

18. Under the ARP structure, FMPA meets all of the ARP members' power requirements. To secure sufficient capacity and energy, FMPA forecasts each ARP member's electrical power demand and energy requirements on an individual member basis and integrates the results into a forecast for the entire ARP. The forecast of peak demand and net energy for load to be supplied by ARP relies on an econometric forecast of each ARP member's retail sales, combined with various assumptions regarding loss, load, and coincidence factors, generally based on the recent historical values for such factors, and summed across the ARP members.

19. Florida is among the fastest growing states in the nation, and as its communities grow, so does the need for electricity. FMPA's base case 2008 load forecast winter peak demand is 1,427 MW, its forecast summer peak demand is 1,545 MW, and its forecast annual net energy for load is 7,655 gigawatt hours (GWh). The winter peak demand is projected to grow at an average annual growth rate of 3.2 percent from 2008 through 2009 (from 1,427 to 1,473 MW), and then grow at an annual rate of 2.2 percent from 2010 through 2026 (from 1,319 to 1,878

MW). The summer peak demand is projected to grow at an average annual growth rate of 3.2 percent from 2008 through 2009 (from 1,545 to 1,593 MW), and then grow at an annual rate of 2.2 percent from 2010 through 2026 (from 1,462 to 2,077 MW). Net energy for load (NEL) is expected to grow at an annual average growth rate of 3.1 percent from 2008 through 2009 (from 7,655 to 7,896 GWh), and then grow at an annual average rate of 2.2 percent from 2010 through 2026 (from 7,237 to 10,233 GWh). The load forecast includes the addition of loads for Fort Meade in 2009 and the deletion of loads for Vero Beach in 2010.

20. For planning purposes, FMPA has established a 15 percent minimum planned reserve margin criterion for the winter period and an 18 percent planned reserve margin criterion for the summer period. Because FMPA's forecast annual peak demands are projected to occur in the summer of each year, capacity additions necessary to maintain forecast capacity requirements are driven by projected summer peak demands.

21. The ARP's capacity needs have been growing rapidly. FMPA's summer reserve margins are forecast to fall shortly below the 18 percent level in the summer of 2010. By the following summer of 2011, FMPA's reserve margin is projected to decrease to -1.3 percent, or 286 MW below the required capacity. By the summer season of 2012, 363 MW is needed to maintain an 18 percent reserve margin. By providing capacity necessary to meet the ARP's growing needs, Cane Island Unit 4 will contribute to the reliability and integrity of the FMPA/ARP electric system.

Analysis of Generating ("Supply Side") Alternatives

22. FMPA has evaluated several supply side technologies, either as alternatives to Cane Island Unit 4 or as capacity resource options for installation following the proposed unit. As part of that analysis, FMPA evaluated renewable technologies, conventional technologies,

and emerging technologies. Based on the results of production cost modeling of multiple economic scenarios, FMPA identified a new nominal 300 MW combined cycle generating facility as the most cost-effective alternative to meet the ARP's need for additional capacity.

23. Although there currently exists no state or federal regulation of CO₂ emissions, FMPA also performed several sensitivity analyses utilizing different fuel costs and potential CO₂ regulatory costs based on estimates developed by the U.S. Department of Energy's Energy Information Agency and the U.S. Environmental Protection Agency. All of the analyses demonstrate that the proposed Cane Island Unit 4 with an in-service date of 2011 is FMPA's most cost-effective alternative to meet the ARP's need for additional capacity. As FMPA's most cost-effective means of meeting the ARP's growing needs, Cane Island Unit 4 will help FMPA and the ARP member provide adequate electricity at a reasonable cost.

24. Although FMPA is not subject to the Commission's "Bid Rule," the agency issued a competitive request for proposals (RFP) for purchase power options, as well as separate RFPs for renewable and solar energy resources. Based on FMPA's evaluation, none of the responses to the RFPs were cost-effective as compared to the self-build alternative. Nevertheless as part of its commitment to renewable resources, the ARP is investigating a new solar initiative which would include initial installation of 10 MW of solar photovoltaic capacity with potential to ultimately increase the photovoltaic capacity to 100 MW.

25. FMPA's generating mix already includes reasonably available renewable resources. As a result of the renewable RFP, FMPA also is in discussions with one proposer regarding a potential purchase of 58 MW of renewable energy from a new biomass facility. However, because the cost of solar and biomass resources are higher than FMPA's avoided cost, before committing to such purchase, FMPA will need to ensure that the costs are within a

reasonably acceptable margin higher than FMPA's avoided cost. Furthermore, FMPA's ultimate commitment to utilizing a biomass resource at the attendant higher cost will depend on whether the emissions inventory guidelines to be developed by FDEP confirm biomass as a carbon-neutral resource in Florida. FMPA also will need to examine the actions of other Florida utilities in meeting CO₂ reduction targets to ensure that FMPA's rates remain cost competitive. The time frame for implementation of any solar and biomass resources would depend on the time necessary to complete negotiations and to obtain all required regulatory approvals and permits.

26. Although FMPA has not made a final decision on the potential solar and biomass purchases, they have been included in two of the alternative resource plans examined in the economic analyses. Those analyses demonstrate that Cane Island Unit 4 would still be the most cost-effective alternative for meeting the ARP's capacity needs even if FMPA were to enter into the biomass and solar purchases.

Analysis of Non-Generating Alternatives

27. As a wholesale supplier of electric energy to the ARP, FMPA is not directly responsible for conservation and DSM programs. However, ARP members offer a variety of conservation and DSM programs to their consumers. The impact of these existing conservation and DSM programs are reflected in the load forecast presented in the Need for Power Application.

28. As part of its commitment to conservation, in July 2007, FMPA issued an RFP for DSM activities. FMPA received four proposals and short-listed three for further evaluation. Discussions are proceeding with the two vendors to implement load control measures designed to reduce peak load demand by up to 44 MW within the next nine (9) years. Additionally, FMPA is considering undertaking a program to assist ARP Members in implementing energy

conservation measures. Under this program, FMPA could collect funds through its rates that would be allocated among the ARP Members. As an example, the Members could utilize these funds to purchase compact fluorescent light bulbs that could be distributed to retail customers at reduced or no cost.

Environmental Benefits

29. Cane Island Unit 4 will minimize environmental impacts by, among other things, using the most efficient and pollutant-preventing generating technology available. This concept has been incorporated with the selection of a combined cycle process utilizing an advanced combustion turbine. Compared to more conventional simple cycle generating plants, combined cycle units have lower heat rates and, therefore, generate more electrical output (megawatts) per unit of fuel consumed. As a result, air pollutant emissions per megawatt output are minimized. Moreover, because Cane Island Unit 4 will be one of the highest efficiency plants in the state, it will displace generation from less efficient units with higher emission rates, including CO₂ emissions. As such, along with FMPA's other efforts, the addition of Cane Island Unit 4 will help the ARP move toward, if not achieve, the 2017 CO₂ emission reduction target level specified in the Governor's Executive Order 07-127.

Adverse Consequences If Cane Island Unit 4 Is Not Built

30. Delaying Cane Island Unit 4 would result in reduced reliability and higher costs. If the proposed unit is delayed, FMPA's summer reserve margin will fall to -5.9 percent in 2012 which is well below FMPA's 18 percent reserve margin criterion and would not allow FMPA to meet firm load. If other capacity would be installed to retain FMPA's 18 percent summer reserve margin, cumulative present worth costs would increase by more than \$37.8 million with a two year delay.

Disputed Issues of Material Fact

31. FMPA is not aware of any dispute regarding any of the material facts contained in this petition. In any event, FMPA intends to prove in this proceeding that the proposed Cane Island Unit satisfies the criteria set forth in Section 403.519, Florida Statutes, for an affirmative determination of need.

Statutes and Rules That Warrant Requested Relief

32. FMPA is entitled to the determination of need requested in this Petition pursuant to Section 403.519, Florida Statutes, and Rule 25-22.080, Florida Administrative Code.

Conclusion

33. The proposed unit will ensure that the ARP has an adequate supply of power to serve its members' growing needs at a reasonable cost. The competitive RFPs, together with separate economic analyses presented in the Need for Power Application demonstrate Cane Island Unit 4 is the most cost-effective alternative to meet the ARP's power supply needs. The ARP already utilizes reasonably available DSM programs and renewable resources. Even with potential demand and energy reductions that could be achieved from additional conservation and renewable energy initiatives that FMPA is pursuing, Cane Island Unit 4 is the ARP's least cost alternative to reliably meet the ARP's power supply needs. Without the proposed unit, FMPA's summer reserve margin will fall substantially below FMPA's 18 percent reserve margin criterion and would not allow FMPA to meet firm load.

Statement of Relief Requested

WHEREFORE, based upon the foregoing and the more detailed information in the Need for Power Application and pre-filed testimony submitted herewith, FMPA respectfully requests

that the Commission grant a favorable determination of need for Cane Island Unit 4 within the time limitations set forth in Rule 25-22.080, Florida Administrative Code. Specifically, FMPA respectfully requests that:

(1) the Commission give notice of the commencement of the proceeding as required by Rule 25-22.080(2), Florida Administrative Code;

(2) the Commission schedule commencement of a hearing in this matter within 90 days of the filing of this Petition or as soon as possible thereafter pursuant to Rule 25-22.080(2), Florida Administrative Code; and

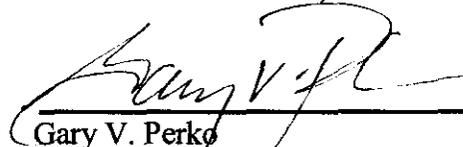
(2) the Commission determines there is a need for the proposed electrical power plant described in this petition, and file its order making such determination with the Florida Department of Environmental Protection pursuant to Section 403.507(2)(a)2., Florida Statutes.

RESPECTFULLY SUBMITTED this 7th day of May, 2008.

Frederick M. Bryant
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Tallahassee, Florida 32315-3209

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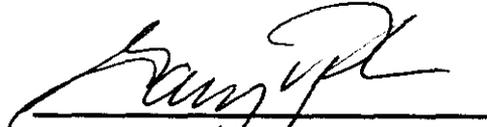

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Petition for Determination of Need for An
Electrical Power Plant in Osceola County was served upon the following by hand delivery on
this 7th day of May, 2008:

Jennifer Brubaker, Esq.
Supervising Attorney
Office of General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850



Attorney