

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for Certification as )  
A Qualifying Facility Pursuant to ) DOCKET NO. \_\_\_\_\_-EQ  
Rule 25-17.080, F.A.C., by Innovative )  
Energy Group of Florida, LLC ) FILED: DECEMBER 13, 2007  
\_\_\_\_\_ )

INNOVATIVE ENERGY GROUP OF FLORIDA, L.L.C.'S PETITION FOR  
CERTIFICATION AS A QUALIFYING FACILITY

Innovative Energy Group of Florida, LLC ("IEGF"), pursuant to Rules 28-106.201 and 25-17.080, Florida Administrative Code ("F.A.C."), and consistent with several applicable provisions of the Florida Statutes,<sup>1</sup> hereby petitions the Florida Public Service Commission ("Commission") for certification as a Qualifying Facility ("QF"). In summary, IEGF's petition is very similar to the QF certification petition filed in 2006 (the "2006 QF Certification Petition") by Florida Biomass Energy Group, L.L.C. ("Florida Biomass") and granted by the Commission.<sup>2</sup> IEGF's petition relates to the same power plant project ("Project") and technology described in Florida Biomass's 2006 petition, but the ownership of the project now lies with IEGF pursuant to separate agreements between IEGF and Florida Biomass. In addition, IEGF will be the entity selling green, renewable electric capacity and energy to Progress Energy Florida ("PEF") pursuant to a Negotiated Contract for the Purchase of Firm Capacity and Energy

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<sup>1</sup> All references in this petition to the Florida Statutes are to the 2007 edition thereof.

<sup>2</sup> In Re: Petition for Certification as a Qualifying Facility Pursuant to Rule 25-17.070, F.A.C., by Florida Biomass Energy Group, L.L.C., Docket No. 060367-EQ, PAA Order No. 06-0596-PAA-EQ (Florida Pub. Serv. Comm'n, July 7, 2006).

from a Qualifying Facility between PEF and IEGF (the "Negotiated Contract"). This Negotiated Contract is a slightly amended version of a negotiated contract between Florida Biomass and PEF that the Commission has already approved pursuant to Rule 25-17.0832(3), F.A.C.<sup>3</sup>

Accordingly, since IEGF will now be the owner and operator of the Project, as well as the entity selling power to PEF, IEGF desires to confirm its status as a Qualifying Facility under applicable Florida law and Commission Rules. In further support of this Petition for Certification as a Qualifying Facility ("Petition"), IEGF states as follows.

#### PROCEDURAL BACKGROUND

1. The name, address, and telephone number of the Petitioner are as follows:

Innovative Energy Group of Florida, L.L.C.  
1752 Sea Lark Lane  
Navarre, Florida 32566  
(850) 936-0007 Telephone  
(850) 936-9607 Facsimile.

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<sup>3</sup> In Re: Request for Approval of Contract with a Qualifying Facility for Purchase of Firm Capacity and Energy between Florida Power Corp. d/b/a Progress Energy Florida, Inc., and Florida Biomass Energy Group, L.L.C., Docket No. 060387-EQ, PAA Order No. 06-0743-PAA-EQ (September 1, 2006) and Consummating Order No. PSC-06-0864-CO-EQ (October 18, 2006). Certain limited amendments to that Green Power Purchase Agreement are currently pending in Commission Docket No. 070645-EQ, In Re: Joint Petition to Amend Negotiated Contract for Firm Capacity and Energy from Qualifying Facility Between Florida Power Corporation d/b/a Progress Energy Florida, Inc. and Florida Biomass Energy Group, L.L.C., which was filed with the Commission on October 10, 2007.

2. All pleadings, orders and correspondence should be directed to Petitioner's representatives as follows:

Robert Scheffel Wright, Attorney at Law  
John T. LaVia, III, Attorney at Law  
Young van Assenderp, P.A.  
225 South Adams Street, Suite 200  
Tallahassee, Florida 32301  
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(850) 561-6834 Facsimile

3. The agency affected by this Petition for Certification as a Qualifying Facility is:

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

#### FACTUAL BACKGROUND

4. Material Changes from 2006 QF Certification Petition.

As set forth below, almost all facts relevant to IEGF's Petition remain the same as those set forth in the 2006 QF Certification Petition filed by Florida Biomass, including: the power plant, the power generation technology, the fuel (Arundo donax or E-Grass ®), the fuel processing technology, and the fact that the plant will produce electricity with no net carbon dioxide emissions. There are two material changes from the 2006 Petition: first, as noted above, IEGF is now the entity that will own and operate the Project and sell electric capacity and energy to Progress. Second, while IEGF continues to pursue farm sites in Florida, IEGF has encountered significant challenges in obtaining suitable Florida land for the farm at an economically feasible cost. Accordingly, it is at least likely that IEGF

will, in order to ensure the economic viability of the Project, locate its farm site in Texas. The processing technology will remain unchanged, as will the power generation technology and the net impacts on total carbon dioxide emissions. Even though the farm may not be located in Florida, it will still be "closed-loop" in a relevant and meaningful way: there will still be no net carbon dioxide emissions from the combined farm and power generation operations, so the Project is still "closed-loop" in terms of its impacts on the U.S. airshed and the planet's atmosphere.

5. Petitioner Innovative Energy Group of Florida, LLC is a Florida limited liability corporation, authorized to do business in Florida, whose business is the development and operation of closed-loop, biomass-fired electrical generating plants. IEGF is presently wholly owned by Innovative Energy Group, Ltd. Ultimately, other investors may own limited liability corporation interests in IEGF; however, no more than 49.9 percent of the ultimate ownership interests in the Project will be held by utilities, utility holding companies, or subsidiaries of utilities or utility holding companies.

6. IEGF is developing the first commercial-scale, closed-loop, biomass-crop-fired electrical generating plant in the United States, and to the best of Petitioner's knowledge, in the world. The generating plant will be located in Florida.

7. The Project will be fueled by a biomass crop grown for that purpose. The crop plant is commonly known as Giant Reed (scientific name *Arundo donax*), a large and fast-growing member of the grass family. Also referred to as "E-Grass"®, the *Arundo* crop that fuels the Project will be grown on approximately 15,000 to 20,000 acres of existing agricultural land that IEGF, or an affiliate, will lease for this purpose. As noted above, the farm may be located in Florida or Texas.

8. The Project will utilize combustion turbine-combined cycle technology, consisting of a combustion turbine ("CT") with approximately 85MW of nominal capacity, a matched heat recovery steam generator ("HRSG"), and a matched steam turbine generator ("STG") with approximately 60MW of nominal generating capacity. The Project is expected to be equipped with duct-burners to provide additional energy to Progress at times of greatest need. The Project will satisfy all applicable land use and environmental regulatory requirements, and IEGF will ensure that the Project has, and is operated in accordance with, all applicable permits.

9. The biomass fuel crop will be harvested and processed into a liquid fuel, commonly referred to as "bio-crude," using a pyrolysis process. If the farm is located in Florida, the thermal fuel input to the CT will also include combustible exhaust gases from the pyrolysis process; if the farm is located in Texas, then pyrolysis gases will be used within the pyrolysis

cycle and the fuel for the power plant in Florida will consist solely of the liquid, renewable "bio-crude." If the farm is located in Florida, the power plant and processing facilities will be co-located with the farm. If the farm is located in Texas, the liquid fuel production facilities will also be located there, and the fuel would be shipped, most likely via barge, to the power plant in Florida. On an annual basis, the biomass-derived fuel is expected to provide approximately 95 to 98 percent of the total thermal energy input into the generating equipment. (The balance of the Project's thermal energy input will consist of up to 5 percent, on a total annual basis, of No. 2 fuel oil, propane, or both, used as start-up fuel.)

10. The entire capacity and energy output of the Project will be sold to Progress pursuant to the Negotiated Contract, which provides for capacity and energy payments and specifies performance criteria. The Negotiated Contract has an initial term of 25 years, with an option, subject to Progress's and IEGF's mutual agreement, to extend the term by an additional five years. Progress and IEGF have filed a joint petition for approval of the Negotiated Contract as amended (the "Joint Petition"), which is now pending in Commission Docket No. 070645-EQ. As will be demonstrated in the Joint Petition proceedings, the Negotiated Contract is significantly cost-effective as compared to Progress's next avoided unit, under any reasonably foreseeable natural gas price forecast.

11. The Project's operation will provide clean, "green" energy, produced from renewable biomass resources, and will accordingly displace electricity generated from other Florida power plants that would otherwise use natural gas or other fossil fuels to generate the same amount of electricity.

**Statement of Affected Interests**

12. In this docket, the Commission will determine whether to grant IEGF's Petition for Certification as a Qualifying Facility. This certification is a condition precedent to the Agreement and is critical to the continued effectiveness of the Negotiated Contract, which in turn is critical to the development of this renewable-energy power project. Accordingly, IEGF's substantial interests will be directly affected by the Commission's decision on this Petition. Additionally, as the purchaser of the Project's renewable, "green" electricity, Progress supports this Petition.

**DISCUSSION AND ANALYSIS**

13. IEGF is developing a 145MW (maximum nominal) closed-loop, biomass-fired, combined cycle electrical power plant ("Project"), the output of which will be sold to Progress Energy Florida, Inc. ("Progress") pursuant to the Negotiated Contract. IEGF requests that the Commission certify the Project as a Qualifying Facility ("QF") under the Commission's rules in order to further the purposes of the Florida Energy Efficiency and Conservation Act ("FEECA"), codified as Sections 366.80-.85 &

403.519, Florida Statutes, the Commission's rules implementing FEECA, Section 366.91, Florida Statutes, and Section 366.051, Florida Statutes. In brief, the Project will meet all of the criteria for certification as a qualifying small power production facility under the rules of the Federal Energy Regulatory Commission ("FERC"), except for the 80MW size limit on qualifying small power production facilities under the FERC's rules.

Accordingly, the Project will serve and promote the purposes of FEECA; of Section 366.91, Florida Statutes; of Section 366.051, Florida Statutes; and of Commission Rule 25-17.080(1), F.A.C. Additionally, certification of the Project as a QF will satisfy the interests of IEGF's contract partner, Progress, in procuring green, renewable electricity for its customers, and Progress supports this Petition. Accordingly, the Commission should grant the requested certification as provided for by the aforementioned Rule.

14. Specifically, pursuant to Rule 25-17.080(1), F.A.C., IEGF respectfully petitions the Commission to grant the Project "qualifying facility status for the purpose of receiving energy and capacity payments pursuant to [the Commission's cogeneration] rules." As explained fully in the following paragraphs, the Project will "meet the objectives of economically reducing Florida's dependence on oil and the economic deferral of utility power plant expenditures." In addition, the Project will further the legislatively established and endorsed purposes of:



- a. using renewable energy resources in a small power production facility to meet Florida's electricity demands;
- b. diversifying Florida's electricity generation fuel mix;
- c. reducing Florida's dependence on natural gas as an electric generation fuel;
- d. encouraging new investment in the state; and
- e. making Florida a leader in new and innovative renewable electricity generation technologies.

See Fla. Stat. §§ 366.051 & 366.91(1).

**Statutes and Rules That Entitle IEGF To the Relief Requested**

15. As described and discussed in detail below, IEGF is specifically entitled to its requested certification as a Qualifying Facility by Rule 25-17.080(1), F.A.C., as supported by the Project's furtherance of the public interest consistent with FEECA, Section 366.91, Florida Statutes, and Section 366.051, Florida Statutes.

16. FEECA provides, in pertinent part, as follows.

Since solutions to our energy problems are complex, the Legislature intends that the use of . . . renewable energy sources . . . be encouraged.

Fla. Stat. § 366.81.

17. Commission Rule 25-17.080(1), F.A.C., which implements FEECA, provides in relevant part as follows.

**25-17.080 Definitions and Qualifying Criteria**

(1) For the purpose of these rules the Commission adopts the Federal Energy Regulatory Commission Rules 292.101 through 292.207, effective March 20, 1980, regarding

definitions and criteria that a small power producer or cogenerator must meet to achieve the status of a qualifying facility. Small power producers and cogenerators which fail to meet the FERC criteria for achieving qualifying facility status but otherwise meet the objectives of economically reducing Florida's dependence on oil and the economic deferral of utility power plant expenditures may petition the Commission to be granted qualifying facility status for the purpose of receiving energy and capacity payments pursuant to these rules.

(2) In general, under the FERC regulations, a small power producer is a qualifying facility if:

(a) the small power producer does not exceed 80MW; and

(b) the primary (at least 50%) energy source of the small power producer is biomass, waste, or another renewable resource; and

(c) the small power production facility is not owned by a person primarily engaged in the generation or sale of electricity. This criterion is met if less than 50% of the equity interest in the facility is owned by a utility, utility holding company, or a subsidiary of them.

18. Section 366.91(1), Florida Statutes, declares the Legislature's intent to promote renewable energy resources in Florida, through the following findings.

The Legislature finds that it is in the public interest to promote the development of renewable energy resources in this state. Renewable energy resources have the potential to help diversify fuel types to meet Florida's growing dependency on natural gas for electric production, minimize the volatility of fuel costs, encourage investment within the state, improve environmental conditions, and make Florida a leader in new and innovative technologies.

19. Section 366.051, Florida Statutes, provides in pertinent part that "Electricity produced by cogeneration and small power production is of benefit to the public when included as part of the total energy supply of the entire electric grid of the state . . . ."

**Statement Explaining How the Facts Alleged By IEGF  
Relate to the Above-Cited Rules and Statutes In Compliance  
With Section 120.54(5)(b)4.f, Florida Statutes**

20. Applying the criteria set forth in the above rules and statutes to IEGF's Project, it is clear that the Project promotes all of the substantive goals of the rules and the statutes. In fact, but for the FERC rule's 80MW size limitation on qualifying small power production facilities, the Project would qualify under the FERC rules. Specifically, the Project will satisfy the criteria in the rules and statutes in the following ways.

a. As determined by the Commission in granting Progress's 2006 petition for contract approval, the Project will be cost-effective to Progress and Progress's customers. This fact will be confirmed through the Commission's proceedings on Progress's and IEGF's joint petition for amendment of the Negotiated Contract. That is, it will meet the objective of economically deferring utility power plant expenditures, and it will economically reduce Florida's dependence on oil in at least some hours. Consistent with the letter, spirit, and intent of Rule 25-17.080, F.A.C., and of FEECA, the Project will also

economically reduce Florida's dependence on natural gas, an expensive fossil fuel.

b. Relative to Rule 25-17.080(2), F.A.C., the Project's fuel will be approximately 95-98 percent renewable biomass (as compared to the rule-specified minimum requirement of 50 percent). Moreover, IEGF will ensure that no more than 49.9 percent of the equity interests in the Project are ultimately owned by utilities, utility holding companies, or their subsidiaries.

c. Relative to FEECA, the Project will be fueled by renewable biomass crops. It is therefore a renewable energy source of exactly the type that the Legislature intended to encourage through FEECA. As noted above, the Project is also cost-effective to Progress and Progress's customers.

d. Relative to Section 366.91, Florida Statutes, the Project will: (1) be a renewable electricity generation resource located in Florida and fired by biomass fuels; (2) reduce Florida's dependency on natural gas as an electric generating fuel; (3) reduce, pursuant to the Negotiated Contract, the volatility of fuel costs to Progress and Progress's customers; (4) encourage significant new investment (approximately \$100 million in capital investment) and create significant additional employment in Florida (approximately 50 new permanent jobs in addition to approximately 200 construction jobs in Florida); (5) improve environmental conditions through the use of a clean,

"green," closed-loop, renewable energy power plant; and (6) make Florida the national/international leader in commercial-scale closed-loop, biomass-fueled electricity generation.

e. Relative to Section 366.051, Florida Statutes, as a renewable-fueled small power production facility, the Project will be of benefit to the public as part of the state's total energy supply.

#### Disputed Issues of Material Fact

21. Innovative Energy Group of Florida is not aware of any disputed issues of fact relative to this petition. However, IEGF states that the following are issues of material fact that the Commission should determine in granting IEGF's requested QF certification.

- a. Whether the Project will be a small power production facility.
- b. Whether the Project will be a "closed-loop" renewable electricity generation facility.
- c. Whether no more than 49.9 percent of the equity interests in the Project will be owned by utilities, utility holding companies, or their subsidiaries.
- d. Whether the Project's operation will reduce Florida's dependence on oil and natural gas as electric generating fuels.
- e. Whether the Project will provide cost-effective capacity and energy to Progress and Progress's customers.
- f. Whether the Project will reduce the volatility of fuel costs to Progress and Progress's customers.
- g. Whether the Project will encourage new investment in Florida energy production infrastructure.

## Statement of Ultimate Facts Alleged

22. IEGF is entitled to the requested certification as a qualifying facility pursuant to Commission Rule 25-17.080(1), F.A.C., by the following facts.

- a. IEGF's Project will be a small power production facility in that it will be fueled by approximately 95-98 percent biomass fuel.
- b. The Project will be a "closed-loop" renewable electricity generation facility.
- c. The Project will have approximately 145 megawatts of maximum nominal generating capacity.
- d. No more than 49.9 percent of the equity interests in the Project will be owned by utilities, utility holding companies, or their subsidiaries.
- e. The Project's operation will reduce Florida's dependence on oil and natural gas as electric generating fuels.
- f. Pursuant to the Negotiated Contract between IEGF and Progress, the Project will provide cost-effective capacity and energy to Progress and Progress's customers.
- g. Pursuant to the Negotiated Contract between IEGF and Progress, the Project will reduce the volatility of fuel costs to Progress and Progress's customers.
- h. The Project will be constructed with approximately \$100 million of new investment in Florida electric generation infrastructure.
- i. The Project will create approximately 50 new permanent jobs associated with the integrated farming and power plant operations and approximately 200 construction jobs in Florida.

## CONCLUSION

Innovative Energy Group of Florida, LLC is developing a 145MW closed-loop, biomass-fueled electric generating unit in Florida, the output of which will be sold at cost-effective pricing to Progress Energy Florida, Inc. for the benefit of Progress's customers and for the benefit of Florida as a whole. The Project will be the nation's first commercial-scale, closed-loop biomass-fueled generating plant, making Florida the national leader with this technology. As described above, the Project will provide additional benefits, including reducing the volatility of fuel prices and reducing Florida's dependence on oil and natural gas as generating fuels. Because, except for its larger, commercial-scale size of 145MW, the Project satisfies all applicable criteria for certification as a QF, and because the Project will further the energy policy and public interest purposes endorsed by the Florida Legislature, the Commission should grant IEGF's Petition for Certification as a Qualifying Facility.

## RELIEF REQUESTED

WHEREFORE, as explained in the foregoing Petition, Innovative Energy Group of Florida, LLC respectfully asks the Commission to issue its order GRANTING this Petition and CERTIFYING the Project as a Qualifying Facility pursuant to Commission Rule 25-17.080(1), F.A.C., and consistent with the

public interest and energy policy goals of FEECA, Section 366.91,  
Florida Statutes, and Section 366.051, Florida Statutes.

Respectfully submitted this 13th day of December, 2007.



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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition for Certification as a Qualifying Facility has been served by electronic mail and by U.S. Mail on the following, this 13th day of December, 2007.

John T. Burnett, Esquire  
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