BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION			JAN (	CE
In re: Joint Petition to Determine Need For the Gainesville Renewable Energy Center in Alachua County by Gainesville Regional Utilities and Gainesville Renewable	) ) )	DOCKET No. 090451-EM FILED: JANUARY 6, 2010	-6 PM 3: 2	VED-FESC
Energy Center, LLC	)	FILED. JANUARI 0, 2010	ũ	

### POST-HEARING STATEMENT OF ISSUES AND POSITIONS AND BRIEF OF GAINESVILLE REGIONAL UTILITIES AND GAINESVILLE RENEWABLE ENERGY CENTER, LLC

Gainesville Regional Utilities ("GRU") and Gainesville Renewable Energy Center, LLC ("GREC LLC"), pursuant to the Prehearing Order in this docket, Order No. PSC-09-0814-PHO-EI, and the Order Establishing Procedure, Order No. 09-0671-PCO-EI, and pursuant to Rule 28-106.215, Florida Administrative Code ("F.A.C."), hereby submit their Posthearing Statement of Issues and Positions and Brief. Citations to the Hearing Transcript are in the form TR abc (page number), citations to hearing exhibits are in the form EXH jkl (exhibit number) at pqr (page number), and citations to the transcript from the December 9, 2009 customer hearing in Gainesville are in the form CHTR xyz (page number).

### SUMMARY OF THE PETITIONERS' REQUESTED RELIEF

Gainesville Regional Utilities, the utility arm of the City of Gainesville, Florida, and

Gainesville Renewable Energy Center, LLC, collectively referred to herein as the "Petitioners," respectfully seek the Commission's affirmative determination of need for the Gainesville Renewable Energy Center (the "Project" or the "GREC Project"), a 100-megawatt net biomassfueled electrical power plant to be constructed and operated by GREC LLC on land leased from the City of Gainesville at GRU's Deerhaven Generating Station. The Project will provide renewable electric capacity and energy to GRU pursuant to a negotiated 30-year power purchase agreement (the "PPA") between GRU and GREC LLC. GRU and GREC LLC are proper joint applicants for the Commission's determination of need pursuant to applicable precedent of the Commission and the Florida Supreme Court.

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Giving full and appropriate consideration to the criteria set forth in the Commission's need determination statute, Section 403.519, Florida Statutes, the Commission should grant the requested determination of need. Specifically, with regard to each of the statutory criteria, the Project, and GRU's purchase of the Project's output pursuant to the PPA, will meet GRU's need for reliable, reasonably priced electricity and will provide the legislatively recognized benefits to Florida associated with native renewable electricity production. More specifically:

- 1. The Project will enhance GRU's system reliability and integrity, particularly by providing additional, highly reliable baseload generating capacity, even though it is not strictly needed, based on current forecasts, to meet minimum reserve margin criteria until 2023.
- 2. The GREC Project will provide adequate electricity at a reasonable cost for the following reasons. First, GRU expects that the Project will operate at a dispatch cost below coal, even without costs associated with carbon and greenhouse gas regulation. Second, both Levelized Cost of Energy ("LCOE") and Net Present Value Revenue Requirements ("NPVRR") analyses demonstrate that the Project and the PPA have lower LCOE and lower cumulative net present worth costs than all natural gas-fired alternatives and all coal alternatives with carbon regulation, and coal is not presently permittable in Florida.
- 3. The GREC Project will contribute to fuel diversity and supply reliability by displacing a significant proportion of GRU's fossil-fueled generation with biomass fuels from local sources, thereby reducing the proportion of GRU's electricity generation from fossil fuels from current levels of more than 90 percent to approximately 55 percent in 2024. In addition to the obvious enhancement to fuel diversity, the Project's use of local biomass fuels will provide enhanced fuel supply reliability and will also provide a financial hedge against potential regulation of carbon emissions and renewable portfolio standard requirements.
- 4. GRU needs additional generating capacity and energy over its planning horizon and further needs the numerous benefits provided by obtaining additional capacity and energy from

<sup>&</sup>lt;sup>1</sup> All citations herein to the Florida Statutes are to the 2009 edition.

local renewable resources. This is true even though GRU already has implemented aggressive renewable energy initiatives, including a landfill gas project and a solar photovoltaic program featuring the first European-style solar feed-in tariff offered by any utility in the United States. There are no other renewable energy options available to GRU that are more cost-effective than the GREC Project.

- 5. Even taking GRU's aggressive energy conservation programs into account, GRU needs additional generating capacity and energy over its planning horizon, and there are no energy conservation measures available that can displace the substantial amounts of fossil-fired energy that will be displaced by the GREC Project.
- 6. By several different measures, including LCOE and NPVRR analyses, the GREC Project and PPA are more cost-effective than all natural gas-fired alternatives and also more cost-effective than coal-fired alternatives that take carbon/greenhouse gas regulation into account. Moreover, the coal-fired alternatives without carbon/greenhouse gas emissions regulation cannot be regarded as realistic options under Florida's current permitting policies. Finally, the GREC Project and PPA were, and are, undisputedly the lowest-cost viable renewable energy option available to GRU, and accordingly, there is no more cost-effective alternative available to meet GRU's future power supply needs.

Taking all factors into account, including the specific statutory criteria under Section 403.519, Florida Statutes, and also the pro-renewable energy policies articulated by the Florida Legislature in Sections 366.91, 366.92, and 366.81, Florida Statutes, the Commission should grant the requested determination of need for the Gainesville Renewable Energy Center Project. The Project and the PPA meet GRU's needs for system reliability and integrity, for adequate electricity at a reasonable cost, for fuel diversity, and for fuel supply reliability. Additionally, the Project is needed even taking into account GRU's aggressive renewable energy initiatives and energy conservation programs, which have been based upon the Total Resource Cost test since 2006.

Moreover, the GREC Project and the associated PPA were unanimously determined by the Gainesville City Commission to be the most cost-effective renewable energy alternative available to meet Gainesville's desires to ensure reliable, cost-effective, sustainable power supplies for GRU and the Gainesville community. Finally, the Project will promote the prorenewable energy policies set forth by the Florida Legislature by:

- reducing Florida's dependency on natural gas as a generating fuel;
- reducing Florida's exposure to fuel price volatility;
- improving environmental conditions in Florida through reduced emissions from conventional electric generation fuels and also through reduced emissions of greenhouse gases in Florida;
- increasing the use of renewable energy resources in Florida; and
- encouraging investment in Florida.

In summary, the Commission should grant the requested determination of need for the Gainesville Renewable Energy Center, as requested by Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC. The Project contributes to GRU's needs for power in accordance with the statutory criteria, and significantly, the GREC Project is the most cost-effective renewable energy alternative available to GRU to meet its short- and long-term needs for adequate electricity at a reasonable price while increasing its fuel diversity and reducing its dependence on fuels imported from outside Florida.

This Posthearing Statement and Brief addresses the specific issues identified in the Prehearing Order. In addition, incorporated into the specific issue discussions, GRU and GREC LLC develop four legal points for the Commission's consideration. First, the Commission has specifically recognized that there are aspects of need other than a simple need for generating capacity measured by reserve margins, and the Petitioners, based on applicable Commission precedent, believe that the Commission should grant the requested determination of need in light of these other aspects, notably the need for fuel diversity and supply reliability and also Florida's general need for additional renewable energy as recognized by the Legislature. Following that

point, GRU and GREC LLC also explain that the Project's contributions to renewable energy in Florida, as an "other matter within the Commission's jurisdiction," constitute additional reasons, explicitly recognized by the Legislature, to grant the requested determination of need. Next, the Petitioners submit that the Commission should give no credence to attempts by public witnesses to cast aspersions on the Project because of the redactions of confidential, proprietary business information from the publicly available version of the PPA. The fact is that, had any of the public witnesses wished to do so, they could have intervened in this docket, signed a confidentiality agreement with GREC LLC, and seen the information. They cannot now attempt to derail the Project by their claimed problem, which was created by their own inaction. Finally, the Petitioners – and especially GRU as the utility arm of the City of Gainesville – ask the Commission to consider the principle of "comity" in weighing all of the factors that must be considered in this need determination proceeding. GRU and GREC LLC recognize that comity is an inherently non-binding principle, but GRU respectfully asks that the Commission recognize and give substantial weight to the fact that the Gainesville City Commission has already considered all of these factors, including reserve margin need, cost, bill impacts, and the many benefits of renewable energy to the Gainesville community, and unanimously voted to approve the GREC Project with all of those factors taken into account. GRU accordingly asks the Commission to reach the same conclusion and to grant the requested determination of need.

### THE STATUTORY CONTEXT AND STANDARD OF PROOF

The Commission has jurisdiction over the determination of need for the Gainesville Renewable Energy Center pursuant to Section 403.519, Florida Statutes. The provisions relevant to this proceeding are set forth in Section 403.519(3), which provides in pertinent part as follows:

The commission shall be the sole forum for the determination of this matter, which accordingly shall not be raised in any other forum or in the review of proceedings in such other forum. In making its determination, the commission shall take into account 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. The commission shall also expressly consider the conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant and other matters within its jurisdiction which it deems relevant.

The Commission's need determination statute thus sets forth several specific criteria – reliability need, need for adequate electricity at a reasonable cost, need for fuel diversity, need for supply reliability, cost-effectiveness, and need for a proposed power plant in light of available renewable energy resources and conservation measures – that the Commission must consider, and the statute also directs the Commission to consider "other matters within its jurisdiction which it deems relevant." The Commission's prior need determination orders make clear that no single need criterion is determinative, but rather that the Commission is to consider all relevant criteria. For example, in a 1981 docket addressing the need for proposed coal-fired power plants with in-service dates in 1985 and 1987, the Commission noted that the proposed generating units were not needed until at least 1991, but, following the statute, granted the petitioners' determination of need, stating as follows:

We construe the "need for power" to encompass several aspects of need . . . [including] the socio-economic need of reducing the consumption of imported oil in the State of Florida.

In Re: JEA/FPL's Application of Need for St. John's River Power Park Units 1 and 2 and Related Facilities, Docket No. 810045-EU (Fla. Pub. Serv. Comm'n, June 26, 1981) Order No. 10108 at 2; see also In Re: Application for Certification of Tampa Electric Company's Proposed 417 Megawatt Net Coal-Fired Big Bend Unit No. 4, Docket No. 800595-EU (Fla. Pub. Serv. Comm'n, Jan. 16, 1981) Order No. 9749 at 4; In Re: Petition of Orlando Utilities Commission for Determination of Need for Stanton Unit 1, Docket No. 810180-EU (Fla. Pub. Serv. Comm'n, Oct. 2, 1981) Order No. 10320 at 3-4.

The standard of proof for the Commission's decision in this case is a preponderance of the evidence. In Re: Petition of Florida Power & Light Co. for Authority to Increase Its Rates and Charges, FPSC Docket No. 810002-EU, Order No. 10306, 1981 WL 634490 at 7. The Commission's decisions must be supported by competent substantial evidence of record, but once thus supported, they are not subject to reversal on factual grounds. United Telephone Co. v. Mayo, 345 So. 2d 640, 654 (Fla. 1977). Where there is competent substantial evidence of record supporting different positions, the Commission has discretion to decide on either position or, at least generally, on any position intermediate between the competing ends of a continuum. Id.; Gulf Power Co. v. Wilson, 597 So. 2d 270, 273 (Fla. 1992); In Re: Application of Gulf Power Company for Authority to Increase Its Rates and Charges, FPSC Docket No. 800001-EU, Order No. 9852, 1981 WL 634110 at 4; Gulf Power Co. v. Bevis, 296 So. 2d 482, 487 (Fla. 1974); City of Miami v. Florida Public Service Commission, 208 So. 2d 249, 253 (Fla. 1968).

### <u>DESCRIPTION OF THE GAINESVILLE RENEWABLE ENERGY CENTER PROJECT</u> <u>AND THE POWER PURCHASE AGREEMENT BETWEEN GRU AND GREC LLC</u>

The GREC Project. The proposed GREC Project will be a biomass-fired steam generating facility with a nominal rating of 100 megawatts (MW) net output and 116 MW gross output. TR 246 The Project will be located within GRU's existing Deerhaven generating site and will be fueled entirely by clean, woody biomass. <u>Id</u>. Major components of the Project include the biomass fuel handling system, the biomass-fired boiler, a condensing steam turbine generator with evaporative cooling towers, and auxiliary support equipment. <u>Id</u>. The GREC Project will utilize a zero liquid discharge system to eliminate industrial wastewater discharges, in accordance with the Deerhaven site's current certification requirements. <u>Id</u>.

The Project will utilize a fluidized bed boiler to produce superheated steam that will drive the steam turbine generator. TR 247 The Project will be equipped with a bag house to control emissions of particulate matter and an aqueous ammonia injection selective catalytic reduction ("SCR") system to control emissions of nitrogen oxides. <u>Id</u>.

The Project's electrical output will be produced at nominal generator voltage and then stepped-up through an on-site substation for transmission through aerial transmission lines to the interconnection with GRU's 138-kilovolt ("kV") transmission system. <u>Id</u>. GRU's transmission system is interconnected with the transmission systems of both Progress Energy Florida and Florida Power & Light Company. <u>Id</u>.

GREC LLC expects that the Project will provide full service over its entire 42-year projected useful life. TR 246-47 GREC LLC guarantees the overall availability of the Project at 95 percent for the 4 summer months, June through September, and at 90 percent on an annual basis. TR 248 The Project can be operated at any output level between 70 percent and 100 percent of its maximum output in order to meet economic or operational conditions on GRU's system, and pursuant to the PPA, EXH 7, Item 5, Bates pages 000387-88, GRU may take the unit completely off line. TR 247-48 However, GRU's estimated dispatch costs for the GREC Project are projected to be less than those of GRU's other generating resources, including the Deerhaven coal unit, such that the GREC Project is expected to always be dispatched when available. See TR 120; EXH 24 at 5

The primary fuels that GREC will utilize will be forest residue such as the slash and brush left over from traditional forestry operations, mill residue, pre-commercial tree thinnings, used pallets and urban wood waste, which includes woody tree trimmings that are generated by landscaping contractors, power line clearance contractors, and other non-forestry related sources

of woody debris. TR 248 In addition, the GREC Project will be able to utilize opportunity fuels such as storm debris and diseased trees. TR 248 The facility is not designed for and it will not use any form of treated wood, municipal solid waste, coal, petroleum coke, construction and demolition wood, oil or tires. TR 248, 255-56 Through significant efforts already completed, GREC LLC has identified fuel suppliers in the forest industry and also wood waste suppliers in north central Florida, and through those efforts, GREC LLC is in a position, at appropriate times well before the Project comes on line, to enter into a number of long-term fuel supply contracts with favorable pricing and option provisions to ensure the availability of at least 100 percent of the Project's needed fuel supply. TR 249, 259

The biomass fuel handling system for the GREC Project will consist of truck tippers, screens and hogs, an automatic stacker-reclaimer system and a manual stacker-reclaimer system. Biomass fuels will be transported to the GREC Project by truck in processed form, i.e., already chipped or ground and ready to be put into on-site storage. TR 248 From the on-site storage, the biomass fuel will be fed into the boiler via conveyors and fuel metering bins. TR 248-49

The Project's bubbling fluidized bed technology is proven and in use throughout the world. TR 201 In the opinion of Mr. Regan, a Registered Professional Engineer, the Project's technology is not experimental but rather is proven. Id.

The GRU-GREC LLC Power Purchase Agreement. GRU and GREC LLC have entered into a 30-year PPA pursuant to which GRU will purchase 100 percent of the Project's output. Under the PPA, GRU's purchase also includes 100 percent of the renewable energy attributes, carbon credits, carbon allowances, and other environmental attributes associated with the Project's renewable energy output. TR 98-99 The plant cost component of the PPA will be fixed as of the date that the notice to commence is issued, providing price certainty and risk reduction

benefits to GRU's customers. TR 88-89, 100, 172 The PPA provides fixed pricing for roughly two-thirds of the total PPA costs, and the portion that is not fixed is not nearly as volatile as natural gas or spot coal prices. TR 92-93 The PPA has also been structured to avoid any potential for stranded costs. <u>Id</u>. Fuel pricing will be indexed, with both GREC LLC and GRU sharing the risks and benefits associated with future fuel cost fluctuations. Significantly, the PPA requires GREC LLC to adhere to sustainable forestry practices that are incorporated into the PPA. EXH 7, Item 5, Bates pages 000440-442

#### THE PETITIONERS' POSTHEARING STATEMENT OF ISSUES AND POSITIONS

This section of GRU's and GREC LLC's Posthearing Statement addresses the specific issues set forth in the Prehearing Order. In summary, Gainesville Regional Utilities and GREC LLC are proper joint applicants for the Commission's determination of need for the Gainesville Renewable Energy Center Project, and the Project, together with GRU's purchase of the Project's output pursuant to the GRU-GREC PPA, satisfies all of the enumerated criteria of Section 403.519, Florida Statutes, that the Commission is to consider in making its determination of need for the Project. Additionally, the Project will greatly reduce GRU's reliance on fossil fuels that are imported from outside Florida while simultaneously providing the extensive benefits of Florida-based renewable energy recognized by the Florida Legislature. In summary, the GREC Project represents the best, most cost-effective alternative available to meet GRU's short- and long-term needs for reliable, sustainable electricity supply, and the Gainesville City Commission recognized this in its unanimous approval of the Project and the PPA. Accordingly, the Commission should grant the requested determination of need for the Gainesville Renewable Energy Center Project.

### I. GRU AND GREC LLC ARE PROPER APPLICANTS FOR THE COMMISSION'S DETERMINATION OF NEED FOR THE PROJECT.

ISSUE 1: Are Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC proper applicants within the meaning of Section 403.519, F.S.?

### STIPULATION BY AND BETWEEN GRU, GREC LLC, AND COMMISSION STAFF:

\*Yes. GRU is a municipal electric, natural gas, water, wastewater, and telecommunications utility serving retail customers that is owned and operated by the City of Gainesville in Alachua County, located in north-central Florida and is a valid applicant under the Florida Electrical Power Plant Siting Act ("PPSA"), Chapter 403, Part II, Florida Statutes.

GREC LLC is a private renewable power producer that will own, operate, and maintain the proposed GREC biomass facility and sell 100 percent of the facility's electric power output to GRU under a 30-year power purchase agreement (PPA). GREC LLC is therefore an appropriate joint applicant pursuant to the Commission's decisions and the Florida Supreme Court's opinion in Nassau Power Corp. v. Deason, 641 So. 2d 396 (Fla. 1994).\*

#### **DISCUSSION**

GRU, as the electric utility arm of the City of Gainesville engaged in the generation, transmission, and distribution of electricity, TR 81-82, is clearly a proper utility applicant for the requested determination of need pursuant to Section 403.503(15), Florida Statutes. GREC LLC, as an electricity supplier to GRU, is also a proper joint applicant pursuant to Nassau Power Corp. v. Deason, 641 So. 2d 396, 399 (Fla. 1994), because it has entered into the PPA with GRU. Lest there be any doubt, the Commission should also note that the PPA between GRU and GREC LLC provides for the sale of 100 percent of the Project's output to GRU for 30 years, far greater than the 350 MW of the Osprey Energy Center's 529 MW sold by Calpine Construction Finance Company to Seminole Electric Cooperative, which the Florida Supreme Court noted with

approval in <u>Panda Energy Int'l v. Jacobs</u>, 813 So. 2d 46, 53, n. 8 (Fla. 2002). From the Commission's decisions and the Florida Supreme Court's precedents, it is thus clear that GRU and GREC LLC are proper joint applicants for the requested determination of need for the Gainesville Renewable Energy Center.

### II. THE GAINESVILLE RENEWABLE ENERGY CENTER SATISFIES THE NEED CRITERIA OF SECTION 403.519, FLORIDA STATUTES.

The Commission's need determination statute sets forth several specific criteria that the Commission must consider in making its determination of need for the GREC Project, including the need for system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, and whether the need for a proposed power plant can be mitigated by available renewable energy resources and conservation measures. The statute also directs the Commission to consider "other matters within its jurisdiction which it deems relevant." This section of the Petitioners' Posthearing Statement and Brief describes how the GREC Project satisfies the specific statutory criteria. The final section of the Posthearing Statement focuses on the ultimate issue – whether the Commission should grant the requested determination of need – to explain that the Commission should determine that the Project is needed because it not only satisfies the specific statutory criteria, but also because it provides extensive benefits of fuel diversity and sustainability that come with using native Florida renewable energy resources to provide GRU's electric supply as opposed to fossil fuels imported from outside Florida.

### A. Need for Electric System Reliability and Integrity

Issue 2: Is there a need for the Gainesville Renewable Energy Center, taking into account the need for electric system reliability and integrity, as this criterion is used in section 403.519, Florida Statutes?

GRU/GREC: \*Yes. GREC's capacity is needed to improve and maintain the reliability of GRU's existing system, particularly in light of the increasing age of GRU's existing generating plants, and to replace capacity from GRU's lowest cost existing fossil fueled unit, Deerhaven 2, during maintenance and forced outages.\*

#### **DISCUSSION**

The GREC Project's capacity is needed to improve and maintain the reliability of GRU's existing system. The capacity from GREC is needed to replace capacity from GRU's lowest cost existing fossil fueled unit, Deerhaven 2, during maintenance and forced outages. As an aging facility that will be 32 years old when the GREC facility goes into service in late 2013, Deerhaven 2 serves approximately 50 percent of GRU's system peak demand. TR 80, 110 With increased age, the availability of Deerhaven 2 is expected to decrease. TR 80, 114, 197 The GREC Project is also needed to provide reliable, low-cost baseload capacity in light of the fact that most of the remainder of GRU's capacity is older than Deerhaven 2 and will be retired during the term of the GREC LLC PPA. TR 97, 111, EXH 29 at 20-21 Thus, GRU needs the GREC Project's capacity to meet GRU's 15 percent reserve margin planning criterion over GRU's long-term planning horizon. TR 80

Conventional reserve margin analysis, based on current load forecasts that reflect the current economic downturn, shows that GRU will need additional capacity to meet its minimum 15 percent reserve margin criterion by 2023. EXH 27, Table 5-1 at page 5-2 Without the GREC Project, GRU will be unable to meet its summer peak demand in 2014 when its Deerhaven 2 unit is out of service. EXH 27, Table 3-1 at page 3-3 and Table 5-1 at page 5-2 Given other projected unit retirements on GRU's system, the GREC Project will enable GRU to meet its minimum reserve margin criterion through 2032, when GRU's Deerhaven 2 coal unit is scheduled to retire, EXH 27, Table 5-2 at page 5-3, and will obviously contribute needed baseload capacity from 2032 through at least 2043, when the PPA is presently scheduled to terminate. <u>Id</u>.

The GREC Project will enhance the reliability and integrity of GRU's system in several ways. First, although based on current load forecasts the Project is not needed to meet GRU's minimum reserve margin planning criterion until approximately 2023, TR 80 and EXH 27, having the GREC Project available will maintain and improve the overall reliability of GRU's system. TR 80 In short, a higher reserve margin will provide a more reliable system. TR 195 Additionally, the GREC Project will be a reliable baseload resource with a low dispatch cost that provides enhanced reliability in the event that Deerhaven 2 is unavailable for any reason. See TR 97 Deerhaven 2 represents about half of GRU's peak demand, and national data in the Generation Availability Data System indicates that older units in Deerhaven 2's class have declining reliability as they are aging. TR 114, 197

Moreover, GRU's overall decision to pursue the GREC Project, like the Commission's decision on the requested determination of need, was necessarily based on consideration of all relevant factors, including strict reserve margin criteria over the life of the Project and PPA, other reliability benefits, fuel supply diversity impacts, supply reliability effects, and the Gainesville community's commitment to addressing environmental concerns of climate change, sustainability, and energy independence. TR 92-93 The benefits that the GREC Project provides with respect to these factors – more reliable fuel supply from local resources, enhanced diversity and reduced dependence on fossil fuels imported from outside Florida, and a more sustainable electric supply system – are additional aspects of reliability, beyond a simple, traditional reserve margin analysis, that GRU and the Gainesville City Commission considered in determining to pursue the GREC Project and in executing the PPA. See TR 87

#### B. Adequate Electricity at a Reasonable Cost

Issue 3: Is there a need for the Gainesville Renewable Energy Center, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in section 403.519, Florida Statutes?

GRU/GREC: \*Yes. The GREC LLC PPA was evaluated on a levelized cost of energy ("LCOE") basis against comparable supply-side alternatives over the term of the GREC LLC PPA. These analyses demonstrate that the GREC LLC PPA is lower in cost than all gas-fired alternatives and all coal-fired options including CO<sub>2</sub> regulation.\*

#### **DISCUSSION**

This issue is closely related to the cost-effectiveness issue, which is addressed in section II.E of this Posthearing Statement below. Accordingly, the discussion here is more of a summary, with more detail provided below.

The GRU-GREC LLC PPA was initially evaluated using a LCOE approach, EXH 27, and, in discovery responses, using a cumulative present worth analysis. EXH 24 at 4 The discovery responses also showed projected bill impacts over the life of the PPA. The supply-side alternatives that were evaluated in the LCOE analyses included simple-cycle combustion turbine and combined cycle options, as well as pulverized coal options with and without Carbon Capture and Sequestration ("CCS") technology incorporated to address anticipated carbon dioxide (CO<sub>2</sub>) regulation. TR 296-97, EXH 24 The LCOE analyses considered seven different scenarios of fuel cost, capital cost, and CO<sub>2</sub> regulation. TR 296-98 On a levelized cost basis, the GREC LLC PPA is lower in cost than any of the alternatives in 23 of the 28 cases that were evaluated. TR 297-99 The GREC LLC PPA is lower in cost than any of the natural gas alternatives considered, and is also lower in cost than coal units when CO<sub>2</sub> regulation is considered. TR 298 The LCOE of the PPA is only higher than the costs of coal options without consideration of CO<sub>2</sub> regulation or

CCS. Moreover, it is doubtful that any type of coal unit could be permitted in Florida at this time. TR 294

Additionally, GRU conducted an extensive competitive solicitation — Request for Biomass Proposals — process (see TR 228-30) that led to GRU's conclusion, and the Gainesville City Commission's vote confirming, that the GREC LLC PPA was and is the most cost-effective alternative available to GRU to meet the short- and long-term needs of the Gainesville community for reliable, fuel-diverse, sustainable electric power supply that does not depend as much on fossil fuels imported from outside Florida. See TR 62, 86-88 Accordingly, the competent substantial evidence of record in this docket demonstrates that the GREC Project and the PPA will meet GRU's need for adequate electricity at a reasonable cost, and the Commission should accordingly grant the requested determination of need.

### C. Need for Fuel Diversity and Supply Reliability

Is there a need for the Gainesville Renewable Energy Center, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519, Florida Statutes?

GRU/GREC: \*Yes. The Project is needed to diversify GRU's existing fuel mix, which is dominated by coal and natural gas. Coal is at risk under future CO<sub>2</sub> emissions regulations. Natural gas prices are highly volatile, and the continuous availability of natural gas is also a risk due to GRU's reliance on a single pipeline.\*

#### **DISCUSSION**

The Gainesville City Commission considered the full range of factors relating to reliability, overall cost, bill impacts, benefits of renewable energy resources, future price risks, future regulatory risks, and other factors in reaching its decision to approve the PPA with GREC LLC to construct and operate the GREC Project at GRU's Deerhaven site. See TR 86-88; EXH 27 at 8-1 The Gainesville City Commission decided, unanimously, to pursue only biomass-

fueled power supply options on June 18, 2007, after spending several years discussing and reviewing alternatives for future power supplies, and after sponsoring and participating in extensive public outreach and community participation efforts. TR 64, 87; EXH 27 at 8-3 Many factors contributed to the City Commission's unanimous decision, which was based primarily on the basis of long-term strategic and risk reduction considerations rather than on strict, short-term economic criteria. TR 87 The City Commission and the Gainesville community were and are concerned about climate change and potential future regulations that may drive power production costs that utilize conventional fossil fuels, especially coal. <u>Id</u>. These issues were discussed thoroughly throughout the public participation processes. <u>Id</u>. Among other factors, this concern of the Gainesville community led the City to participate in the U.S. Mayors' Climate Protection Agreement to meet the requirements of the Kyoto protocols. <u>Id</u>. Exhibit 30 is Gainesville City Commission Resolution No. 050132, authorizing the Mayor to execute the Mayors' Climate Protection Agreement on behalf of the City.

The City Commission was also sensitive to the environmental emissions other than CO<sub>2</sub> associated with conventional generating fuels, which led the City Commission to prefer woody biomass over municipal solid waste. The Gainesville City Commission was fully aware of the increasing volatility of coal and natural gas prices, and the benefits of improving Gainesville's energy independence and fuel diversity. Biomass fuels are readily available from local supply sources and are generally immune from physical interruptions due to transportation blockages. TR 87 This benefit is particularly important because GRU is exposed to potential natural gas supply disruptions due to its reliance on a single gas pipeline. EXH 27 at 15-4 Finally, the City Commission was aware of the age of GRU's generation fleet. Id. The City Commission recognized and considered all of these factors in making its unanimous policy decision to invest

in a renewable, sustainable technology with substantial environmental benefits, local economic value, regulatory hedge value, and the ability to meet the long-term capacity and reliability requirements of GRU and the Gainesville community. TR 87-88

The GREC Project and PPA will enable GRU to reduce the proportion of GRU's electricity generation from coal and natural gas fuels from more than 90 percent at present, TR 98, to approximately 55 percent in 2024, assuming that the fuel diversity benefits of the PPA are shared with other Florida utilities for the first ten years of the PPA's term. TR 98, EXH 24 at 1 In the unlikely event that there would not be any resale, then the totality of these fuel diversity benefits would flow to GRU's customers beginning in 2014. Page 1 of Exhibit 24 shows that GRU obtained 92.0 percent of its total energy supply from coal, oil, and gas in 2008, but that would decline to 55.7 percent in 2014 if there were no resale, and to 74.1 percent in 2014 if, as anticipated, GRU resells half of the Project's output to other Florida utilities. When the anticipated resale would end in 2022, the percentage of GRU's power supply from gas and coal would similarly drop down to the 50-55 percent range.

In addition to the obvious enhancement to fuel diversity, the Project will also significantly enhance the fuel supply reliability of GRU's system by obtaining a substantial proportion of GRU's fuel supply from an area within 75 miles of Gainesville. EXH 29 at 27 Again, this local fuel supply benefit is particularly important because of GRU's reliance on a single natural gas pipeline. EXH 27 at 15-4

Accordingly, the GREC Project will meaningfully and substantially meet GRU's needs for fuel diversity and fuel supply reliability, and the Commission should grant the requested determination of need for the Gainesville Renewable Energy Center Project.

- D. There Are No Renewable Energy Sources or Energy Conservation Measures

  Available to GRU That Might Mitigate the Need for the Gainesville Renewable

  Energy Center.
- ISSUE 5: Are there any renewable energy sources and technologies, as well as conservation measures, taken by or reasonably available to Gainesville Regional Utilities which might mitigate the need for the proposed Gainesville Renewable Energy Center?
- GRU/GREC: \*No. The Gainesville Renewable Energy Center is needed to provide the Project's many benefits to GRU and the Gainesville community, even taking into account GRU's aggressive renewable energy initiatives and energy conservation programs.\*

#### **DISCUSSION**

GRU is considered a leader in aggressively pursuing and implementing renewable energy resources to the extent of their availability, and also in implementing aggressive, extensive energy conservation programs and measures. EXH 24 at 16-18 The combined successes of these programs and initiatives has helped to delay the need for additional capacity to beyond the proposed commercial operation date of the GREC biomass facility. See TR 90 However, the economic benefits from the American Recovery and Reinvestment Act of 2009 are significant enough to justify granting GRU's petition for determination of need at this time. See TR 93-94

With regard to its renewable energy initiatives, GRU is successfully offering the first European-style feed-in tariff for solar photovoltaic energy in the United States. This offering is designed to stimulate the photovoltaic industry in the Gainesville area and Florida in general. TR 83 GRU also utilizes landfill gas, the only other renewable resource readily available to GRU, to the extent of its availability. TR 82 Also on the energy supply side, GRU has several programs to improve the adequacy and reliability of the transmission and distribution systems, which also result in decreased energy losses. EXH 27 at 13-8 to 13-9

With regard to energy conservation measures, GRU has invested significant effort in developing the demand-side management (DSM) programs currently offered to its customers and is considered one of the leading utilities in the State in this area. See EXH 9, EXH 29 Since 1980, GRU has offered incentives and services for energy conservation and demand reduction. TR 90 DSM programs are available for all of GRU's retail customers, including commercial and industrial customers. In addition, GRU continues to offer rebates for solar water heating and net metering and rebates for solar photovoltaic energy systems. EXH 9 GRU has been offering energy conservation programs, incentives, and services to its customers since 1980, resulting in cumulative energy reductions of 151 gigawatt-hours and cumulative peak demand reductions of 30 MW. TR 90 GRU also utilizes increasing block rates to encourage energy conservation. Id. GRU adopted the Total Resource Cost ("TRC") test in 2006, providing the basis for additional, and more extensive, energy conservation programs than have been offered by Florida utilities pursuant to the Rate Impact Measure ("RIM") test. EXH 27 at 13-1.

GRU's energy conservation programs are summarized in Exhibit 9 and also in Exhibit 27 at 13-1 through 13-7. GRU's energy conservation programs include residential programs for high efficiency air conditioning, solar water heating, solar PV rebates with net metering, natural gas appliances and other appliance efficiency incentives, insulation, and lighting programs, EXH 27, Table 13-2 at page 13-5. GRU's conservation programs also include non-residential conservation programs including solar water heating, solar PV, natural gas water heating and space heating rebates, lighting measures, and custom rebates for energy efficiency retrofit projects. EXH 27, Table 13-3 at page 13-6

GRU has also installed its South Energy Center serving the Shands at UF Cancer Hospital, the first combined heat and power ("CHP") plant of its type serving a hospital in the southeastern United States. TR 91; EXH 27 at 13-6 Overall, the South Energy Center achieves 75 percent thermal efficiency, and the site may be expanded to provide services to other public facilities located nearby. <u>Id</u>. GRU has also supported the installation of highly efficient LED (light emitting diode) stoplights, crosswalk signals, and pedestrian lighting in Gainesville. <u>Id</u>. GRU's projections of its future energy conservation achievements through its energy conservation programs are incorporated into GRU's load projections upon which GRU's analyses evaluating the benefits of the GREC Project were based. TR 198

In summary, GRU has aggressively pursued renewable energy resources, including landfill gas and solar photovoltaic facilities, and it is undisputed that the GREC Project is the most cost-effective additional renewable energy opportunity available to GRU. Moreover, GRU aggressively pursues and implements all reasonably available energy conservation and demandside management measures that might otherwise mitigate the need for the GREC Project. Even though GRU's existing renewable energy and energy conservation initiatives have deferred the strict reserve-margin need for additional generating capacity by several years, GRU still needs additional reliable, cost-effective, sustainable power supply resources, and the GREC Project is the most cost-effective alternative available to meet this need. The Gainesville City Commission, through extensive public hearings and workshops and extensive deliberations over several years, has unanimously determined that the GREC Project and the GRU-GREC LLC PPA should be pursued to meet GRU's short- and long-term energy supply needs, even taking full account of GRU's aggressive renewable energy and conservation initiatives. Accordingly, the Commission should conclude that there are no additional renewable energy alternatives or energy conservation measures available that would mitigate the need for the GREC Project, and the Commission should grant the requested determination of need for the Project.

### E. The Gainesville Renewable Energy Center Is the Most Cost-Effective Alternative Available to GRU to Meet Its Needs for Reliable, Sustainable Energy.

ISSUE 6: Is the Gainesville Renewable Energy Center the most cost-effective alternative available, as this criterion is used in section 403.519, Florida Statutes?

GRU/GREC: \*Yes. The GREC is lower in cost than any of the natural gas alternatives considered, and lower in cost than coal units when CO<sub>2</sub> regulation is considered. Additionally, the Project is the most cost-effective alternative available to GRU to meet its need for reliable, sustainable electric power.\*

#### **DISCUSSION**

The economics of GRU's PPA with GREC LLC were compared to the cost of the supply-side alternatives using a levelized cost of energy ("LCOE") analytical approach. The LCOE takes into account all capital, operating, maintenance and fuel costs. A total of 28 different supply-side alternative scenarios were evaluated. The GREC LCOE was lowest in cost in 23 of the 28 scenarios. Only scenarios utilizing coal-fired options without any consideration of CO<sub>2</sub> regulation and costs were projected to be lower in cost. It is doubtful that coal units of any type can be permitted in Florida at this time, TR 294, 303, EXH 27 at 8-8, and the Gainesville City Commission and community have thoroughly considered and clearly adopted a long-range energy policy that does not include new coal-fired generation.

The LCOE screening analyses compared the costs of the GRU-GREC LLC PPA to simple-cycle gas-fired combustion turbine ("CT") and gas-fired combined cycle ("CC") technologies, and also to pulverized coal options with and without Carbon Capture and Sequestration ("CCS") technology incorporated to meet anticipated carbon dioxide/greenhouse gas regulations. The cases analyzed included cases with no CO<sub>2</sub> regulation and GRU's base, high, and low fuel price projections, cases with no CO<sub>2</sub> regulation with high and low capital costs, and two cases that included CO<sub>2</sub> costs using the mid-range and high CO<sub>2</sub> emissions

allowance cost projections based on the U.S. Energy Information Administration's ("EIA") analysis of House Resolution 2454, the American Clean Energy and Security Act (also known as the Waxman-Markey Bill) passed by the U.S. House of Representatives in June 2009. Table 12-1 of Exhibit 27 shows that all gas-fired options and all coal-fired options with either mid-range or high CO<sub>2</sub> costs were higher in cost than the GREC Project and PPA. The only cases that had LCOE values lower than the GREC Project and PPA were the coal options without assuming any CO<sub>2</sub> emissions costs or CCS.

These analyses utilized fuel price projections that are specific to Peninsular Florida, i.e., the Florida Reliability Coordinating Council ("FRCC") region. TR 292 The fuel price projections are consistent with the projections of the EIA's 2009 Annual Energy Outlook, a widely recognized source. TR 291-92 The fuel price and CO<sub>2</sub> cost assumptions are shown on page 8 of Exhibit 24.

In May 2007, the Gainesville City Commission, on its own initiative, rejected coal and petroleum coke alternatives in light of the Gainesville community's concerns regarding climate change. For all practical purposes, coal and petroleum coke technologies are no longer viable generating options in Florida because they have been effectively removed from consideration by Governor Crist's 2007 executive orders. EXH 27, page 8-8; TR 294 Thus, based on conventional LCOE analyses, the GREC Project and PPA are the lowest-cost option relative to all conventional generating options that are practically available to GRU.

Additionally, the GREC Project and PPA were chosen and executed following an extensive competitive procurement and negotiation process that began with a comprehensive evaluation of biomass resource availability by the University of Florida's School of Forest Resources. EXH 27, page 8-8 GRU's Request for Biomass Proposals ("RFP") solicitation

process was conducted in two phases, the first seeking non-binding proposals with indicative pricing, and the second seeking binding proposals from the 3 highest-ranked respondents in the first phase. These processes are discussed in detail in Section 8 of Exhibit 27. The three finalists included Covanta Energy, Nacogdoches Power (now American Renewables, the parent of GREC LLC) and Sterling Planet, Inc. EXH 27 at page 8-12. The GRU evaluation team scored the proposals and ranked the GREC Project proposal with 100 MW of capacity the highest. EXH 27 at page 8-13. The Gainesville City Commission considered the GRU team's evaluations at open meetings on April 28 and May 12, 2008, and at the May meeting, the City Commission authorized GRU to negotiate a PPA with GREC LLC for 100 percent of the output of a 100 MW net biomass facility to be constructed on GRU's Deerhaven site, i.e., a PPA for the output of what is now the GREC Project. Id. Following further public meetings, the Gainesville City Commission approved the execution of the PPA in May 2009. EXH 27 at 8-2

This comprehensive evaluation process confirmed that the GREC Project was and is the most cost-effective renewable energy project available to GRU to meet its short- and long-term power supply needs, and accordingly, the evidence of record clearly supports the finding that the GREC Project and PPA will provide adequate electricity at a reasonable cost – more cost-effective than any gas-fired alternative and more cost-effective than any renewable energy alternative available to GRU.

Additionally, through discovery, the Petitioners supplied cumulative present worth system cost analyses in their response to Interrogatory No. 57. This information was summarized in Exhibit 24. GRU and GREC LLC believe that the relevant scenario includes resale of half of the Project's output for the first 10 years of the PPA's term and that also includes CO<sub>2</sub> regulation. GRU believes that the resale scenario is more likely than the no-resale scenario

because four Florida utilities have each already expressed serious interest in purchasing up to half of the Project's output; it is normal that such purchase agreements would not have been executed yet, because the Project has not yet received its need determination and site certification. TR 89-90, 193-94, 203 GRU also believes that the resale scenario is more likely because the firm capacity and environmental attributes available from, and provided by, the Project will always have market value greater than the value of zero that is assigned in the noresale scenario. Additionally, the Petitioners believe that the CO<sub>2</sub> regulation scenario is far more likely than the no-regulation scenario because a bill has already been enacted by the U.S. House of Representatives and because climate change is an express legislative policy goal of the President of the United States and Governor Crist. Under these most likely assumptions, the cumulative net present worth of the Project and PPA becomes positive in 2027 and remain positive for the remainder of the PPA's term, providing more than \$480 Million in net present worth savings to Gainesville electric customers over the life of the PPA. EXH 124 at 4 of 8 With CO<sub>2</sub> regulation and no resale, the PPA's present worth turns positive in 2032 and provides more than \$360 Million in net benefits over the life of the PPA. Id. Additionally, under the most likely scenario, residential bill increases occur only from 2014 through 2020, with dramatic savings - between \$10 and \$60 per 1,200 kWh bill, or between \$6 and \$40 per 831 kWh bill (GRU's average residential usage is the lowest in Florida at 831 kWh/month), from 2025 through 2043. EXH 24 at 7 of 8 The Gainesville City Commission was fully aware of the short-term bill impacts, and the public was provided with this information, before the City Commission voted unanimously to approve the Project and the PPA in May 2009. See EXH 29 at 10

## III. CONSIDERING ALL RELEVANT FACTORS WITHIN ITS JURISDICTION, THE COMMISSION SHOULD GRANT THE REQUESTED DETERMINATION OF NEED FOR THE GAINESVILLE RENEWABLE ENERGY CENTER.

**ISSUE 7:** Based on the resolution of the foregoing issues, should the Commission grant the petition to determine the need for the proposed Gainesville Renewable Energy Center?

GRU/GREC: \*Yes. The Commission should grant the petition for determination of need for the Gainesville Renewable Energy Center (GREC) because it satisfies the statutory need criteria, is the most cost-effective option that allows GRU to meet future power requirements, promotes renewable energy, and provides substantial strategic benefits to GRU.\*

#### **DISCUSSION**

The Commission should grant the petition for determination of need for the Gainesville Renewable Energy Center (GREC) because the Project and the PPA meet the statutory need criteria and represent the most cost-effective option that allows GRU to meet its customers' future power requirements. Additionally, the Project and the PPA promote renewable energy and provide substantial strategic benefits to GRU's customers. TR 81, 92-93 The consequences of delaying the Project are significantly adverse to GRU and the Gainesville community. TR 93-94 GRU's planning and selection processes were thorough and provided many extensive public participation opportunities. See TR 86-87, EXH 27 at 8-3 The substantial majority of the persons who spoke at the December 9, 2009 customer hearing in Gainesville favored the project, and several complimented the process. See, e.g., CHTR 63, 91, 113 The Commission should give no credence to complaints by a very few public witnesses regarding redactions from the publicly available version of the PPA, because they created their own problems by not intervening or seeking to obtain access to the unredacted PPA following normal Commission practice and process. Following the principle of comity, GRU and the City of Gainesville respectfully ask the Florida Public Service Commission, another unit of Florida government, to

respect the extensive consideration and deliberations that the Gainesville Commission went through before deciding, unanimously, to approve the Project and the PPA with GREC LLC.

The competent substantial evidence of record in this need determination case overwhelmingly supports the conclusion that the Commission should grant the requested determination of need for the GREC Project as requested by GRU and GREC LLC. The competent substantial evidence shows that the Project and the PPA will satisfy the statutory need criteria in that they will:

- a. Enhance GRU's system reliability by improving reserve margins and providing substantial cost-effective baseload capacity for GRU's aging generation system;
- b. Provide adequate, cost-effective electric supply for GRU's electric customers, as the Project and the PPA will provide lower cost electricity than all gas options and than all coal options with carbon regulation costs included in the analyses, as well as provide cumulative present worth savings over the 30-year life of the PPA as compared to the scenario in which the Project is not constructed and the PPA is not performed;
- c. Significantly improve GRU's fuel diversity; and
- d. Significantly reduce GRU's exposure to fuel supply disruptions, enhancing fuel supply reliability.

Additionally, there are no cost-effective renewable energy resources or conservation/demand-side measures available to offset the need for the GREC.

#### A. Other Aspects of Need

Several Commission decisions establish that the Commission may properly consider, and has considered, other aspects of need besides strict reliability need as measured by reserve margins or other reliability criteria. For example, in Docket No. 810045-EU, FPL and the Jacksonville Electric Authority ("JEA") proposed the St. John's River Power Park project, two coal-fired units having projected in-service dates of 1985 and 1987. The Commission determined that the capacity of the proposed units would not be required for reliability purposes

until <u>at least 1991</u>. However, the Commission granted the petitioners' determination of need, stating as follows:

We construe the "need for power" to encompass several aspects of need . . . [including] the socio-economic need of reducing the consumption of imported oil in the State of Florida.

In Re: JEA/FPL's Application of Need for St. John's River Power Park Units 1 and 2 and Related Facilities, Docket No. 810045-EU (Fla. Pub. Serv. Comm'n, June 26, 1981), Order No. 10108 at 2.

Similarly, in the Orlando Utilities Commission's proceeding to determine need for a coal-fired power plant, OUC proposed an in-service date of November 1986 for its Stanton 1 unit. In Order No. 10320, the Commission concluded that the capacity of the proposed unit would not be needed for reliability purposes "during the 1980's." Order No. 10320 at 3. However, the Commission also examined "another aspect of the need issue . . . the socio-economic need of reducing the State's consumption of imported oil." The Commission reasoned that OUC's project " . . . will provide significant economic benefits for peninsular Florida in terms of supplying an alternative to oil-fired capacity generation." The Commission concluded that the unit would help enable electric utilities to meet and surpass the Commission's goal of reducing statewide oil consumption.

Again, in the proceeding on Tampa Electric Company's ("TECO") petition for determination of need for its Big Bend 4 generating unit, the Commission recognized the socioeconomic benefits of reducing Florida's consumption of imported oil as a basis for granting a determination of need. In Re: Application for Certification of Tampa Electric Company's Proposed 417 Megawatt Net Coal-Fired Big Bend Unit No. 4, Docket No. 800595-EU (Fla. Pub. Serv. Comm'n, Jan. 16, 1981), Order No. 9749 at 4.

By analogy here, the GREC Project will substantially reduce GRU's use of fossil fuels imported from outside the state, simultaneously meeting the specific legislative criteria of enhancing fuel diversity and local supply reliability, and also providing all of the benefits of native Florida renewable energy recognized by the Legislature in Sections 366.91 and 366.92, Florida Statutes.

### B. The Legislature's Strong Pro-Renewable Policies Support Granting the Requested Determination of Need for the Gainesville Renewable Energy Center.

Section 403.519, Florida Statutes, also directs the Commission to consider "other matters within its jurisdiction which it deems relevant." GRU and GREC LLC respectfully suggest that the Legislature's strong pro-renewable energy policies articulated in Sections 366.91 and 366.92, Florida Statutes, are exactly such matters that the Commission should consider in determining need for the Gainesville Renewable Energy Center. Specifically, the GREC Project will promote the pro-renewable energy policies set forth by the Florida Legislature by:

- reducing Florida's dependency on natural gas as a generating fuel;
- reducing Florida's exposure to fuel price volatility;
- improving environmental conditions in Florida through reduced emissions from conventional electric generation fuels and also through reduced emissions of greenhouse gases in Florida;
- increasing the use of renewable energy resources in Florida; and
- encouraging investment in Florida.

These State policy goals, articulated by the Legislature within Chapter 366, are clearly additional matters within the Commission's jurisdiction that the Commission should consider in making its determination of need for the GREC Project.

### C. The GREC Project and PPA Will Provide Substantial Strategic Benefits to Gainesville's Electric Customers.

The Commission also considers the strategic benefits to be provided by proposed power plants subject to Section 403.519, Florida Statutes. In this instance, the strategic benefits provided by the GREC Project and the PPA are substantial and significant. They include fixed pricing for roughly two-thirds of the total PPA costs, and the portion that is not fixed is not nearly as volatile as natural gas or spot coal prices. TR 92-93 The Project and the PPA will also provide value to GRU's generation portfolio by modernizing GRU's aging generating fleet. TR 92 The GREC Project will improve GRU's reliability by providing additional firm, reliable baseload capacity and by reducing GRU's exposure to potentially high replacement power costs. Id. The GREC capacity will help GRU to satisfy renewable energy portfolio standards and will also serve as a hedge against the risk of future, potentially costly, regulation of CO<sub>2</sub> emissions. Additional tangible benefits that the Project will provide to the Gainesville community include minimal exposure to construction and operating risk as compared to a GRU-self-built facility, TR 93, EXH 24, creation of more than 500 permanent jobs in the region and supporting the substantial silviculture industry in north central Florida, TR 93, reduction in emissions from the open burning of biomass, TR 93, reduced landfill requirements, TR 93, and promoting ecosystem restoration through the sustainable forestry practices required under the PPA. Id.

### <u>D.</u> <u>The Consequences of Delay Are Significantly Adverse to Gainesville's Electric Customers.</u>

Generally, delaying the operation of the GREC Project will postpone GRU's realization of all the benefits, including the reliability, regulatory hedge, and energy security benefits, associated with the Project discussed in the foregoing sections of this Posthearing Statement.

Moreover, and more specifically, if the Project has not begun commercial operation by January 1, 2014, it will not be eligible to obtain the Renewable Energy Grant provided under the American Recovery and Reinvestment Act of 2009, which will result in increased costs to GRU of \$8.10 per megawatt-hour, equivalent to approximately \$6.4 million per year. TR 93-94 Even more significantly, under the PPA, the nonfuel energy charges to be paid by GRU are adjusted up to the point in time that construction of the Project commences, but are fixed at that point. Based on an assumed cost escalation rate of 2.5 percent, the cost of delaying the Project's construction would be \$29.6 million per year of delay. TR 94 Additional consequences of delay include postponing the indirect economic stimulus benefits of the Project, which include an estimated 44 jobs for operating the Project itself, plus another 400 to 500 permanent jobs related to obtaining and delivering the Project's fuel supply. TR 94 In summary, the consequences of delay are significant and substantially adverse to GRU's customers and the Gainesville and north central Florida communities generally.

### E. The Substantial Majority of the Witnesses at the Commission's Public Hearing in Gainesville Support the Project.

The Commission conducted a 3-hour public hearing in Gainesville on December 9, 2009. Following presentations regarding the Project by Gainesville's Mayor Pegeen Hanrahan, several Gainesville City Commissioners, and the General Manager of GRU, the Commission heard from 14 public witnesses. Two of those, Mr. Walter Willard and Mr. Matt Langholtz, did not specifically articulate a position for or against the Project; of the remaining 12 witnesses, 9 favored the Project and only 3 opposed it. Among those who supported the Project were Mr. Levin Gaston, a GRU customer and an urban forester, Mr. Bryan Olmert, who operates a land and timber company, and Mr. Russ Weber, a consulting forester certified by the Society of

American Foresters. CHTR 63, 91, 113 Mr. Jeff Curry, the Alternative Energy Coordinator for Lakeland Electric, spoke in support of the Project and specifically stated Lakeland's interest in purchasing some of the Project's output from GRU. CHTR 64-66

Ms. Angela Pate, the executive director of Florida Works, the local regional workforce board, supported the Project with particular emphasis on the economic and employment benefits that the Project will provide to the community. CHTR 67-70 Mr. Andrew Walmsley, a GRU customer speaking on behalf of the Florida Farm Bureau Federation, also supported the Project. CHTR 75 Mr. Rob Brinkman, the chair of the local Sierra Club group, also supported the Project. CHTR 79-90, EXH 3 Mr. Tom Cunilio, coordinator of the local Resource Conservation and Development Council, an organization affiliated with the U.S. Department of Agriculture, related his Council's support for the Project. CHTR 125 Mr. David Bruderly supported the Project. CHTR 119-20 Mr. Langholtz did not state a position for or against the Project, but as the co-author of the IFAS study (IFAS refers to the Institute of Food and Agricultural Sciences at the University of Florida) cited by one of the Project opponents who attempted to create the impression that the Project would cause the cost of biomass fuels to increase, clarified that his study only indicated that scenario to be possible where the fuel stock would be whole pulpwood trees, and not the type of forest residue and other fuels to be used by the Project. CHTR 123-25

### F. GRU's Planning Processes Were Thorough and Provided Numerous and Extensive Opportunities for Public Input.

GRU's planning process that led to the decision to pursue biomass-fired generation and ultimately to the decisions to pursue the GREC Project and to execute the GRU-GREC LLC PPA began in 2003, when GRU projected additional capacity needs in 2011. TR 86; EXH 27 at 8-1 GRU's Integrated Resource Planning ("IRP") process included extensive public participation

sponsored by the Gainesville Energy Advisory Committee, a standing citizens' committee created by City Ordinance. <u>Id.</u> at 8-2 The public has participated in the process through more than 43 community workshops, 37 publicly noticed and televised Gainesville City Commission meetings, and several dozen less formal meetings between GRU personnel and civic groups throughout the Gainesville community. <u>Id.</u>; EXH 29 at 10-11

GRU's IRP studies included technology feasibility screening studies and full-blown generation optimization studies using the Electrical Generation Expansion Analysis System ("EGEAS") developed by the Electric Power Research Institute ("EPRI"). EXH 27 at 8-4 These analyses considered the full panoply of possible generation additions, including coal-fired, gas-fired, oil-fired, nuclear, and fuel cell options, as well as renewable options including geothermal, solar, wind, solid waste, and biomass technologies. The studies also included potential partnerships and purchases. EXH 27 at 8-5 In May 2007, the Gainesville City Commission decided not to pursue fossil fuel options, largely based on the City's environmental concerns regarding climate change. In practical terms, Governor Crist's executive orders issued in June 2007 rendered solid fossil fuel options, i.e., coal and petroleum coke, moot for all intents and purposes within the State of Florida. At that time, then, the Gainesville City Commission instructed GRU staff to pursue biomass technologies.

In summary, GRU evaluated its reliability needs alongside its economic needs and its strong desires for renewable, sustainable energy, and the Gainesville City Commission unanimously determined that it is in the best interests of the Gainesville community to pursue the GREC Project, with full recognition of its short- and long-term reserve margins. The evidence indicates, unequivocally and undisputedly, that the GREC Project will enhance GRU's system reliability and integrity, even though it is not needed to meet minimum reserve margins during

the first third of the PPA term. The evidence also indicates that the Project is needed to meet GRU's reserve margin requirements as GRU's existing power plants are retired and existing power purchase agreements terminate over the planning horizon.

### G. The Commission Should Not Give Any Credence to Public Witnesses' Secrecy Claims.

One of the witnesses at the Gainesville public hearing, and also at the public hearing that was conducted at the outset of the need determination hearing on December 16, 2009, in Tallahassee, complained about the redactions from the version of the PPA that has been made available to the public. See TR 15, 21 Other witnesses indicated that they shared this complaint. As explained below, this complaint is meritless and could easily have been avoided by the complaining witnesses following standard Commission rules and practice.

First, this complaint is a red herring: the Florida Legislature has established specific statutory procedures for the protection of confidential, proprietary business information, and GREC and GRU have fully complied with applicable Florida statutory law and the Commission's rules applicable to confidential information. See, e.g., Fla. Stat. § 366.093, Florida Statutes. GREC LLC simply seeks to protect its confidential, proprietary business information from disclosure to its business competitors and to potential future customers. The protection of information that could be used by competitors to undercut GREC LLC's offers, or by customers to curtail GREC LLC's bargaining ability in future negotiations, is the very purpose of Florida's confidential protection statutes: to protect against public disclosure of information that would harm the disclosing party's competitive business interests. See Fla. Stat. § 366.093 (1)&(3).

Second, the Commission should give no weight and no credence to the complaints about lack of public access to the redacted portions of the PPA, because none of the complaining

public witnesses even sought to intervene in the docket, and there is no evidence that any of them ever offered to execute a confidentiality agreement with GREC LLC. Had they been intervenors, it would have been standard practice for them to participate in discovery and to have access to confidential information, subject to the protections against public disclosure of confidential, proprietary business information that is routinely afforded by a confidentiality agreement.

# H. Following the Principle of "Comity," The Commission Should Give Appropriate Consideration to the Extensive Evaluation Process, Public Consideration, and Unanimous Decision by the Gainesville City Commission to Approve the GREC Project and the PPA.

The Gainesville City Commission fully considered the values of energy independence, sustainability, fuel diversity, system reliability, value as a hedge against future regulatory costs, and local economic development benefits in reaching its decision to select the Gainesville Renewable Energy Center Project and to execute the PPA with GREC LLC, and the Florida Public Service Commission should respect this decision by another unit of Florida government in making its determination of need for the GREC Project.

In law, comity specifically refers to legal reciprocity, the principle that one jurisdiction will extend certain courtesies to other nations (or other jurisdictions within the same nation), particularly by recognizing the validity and effect of their executive, legislative, and judicial acts. See, e.g., Black's Law Dictionary 261 (7th Ed. 1999). The term refers to the idea that courts should not act in a way that demeans the jurisdiction, laws, or judicial decisions of another jurisdiction. Part of the presumption of comity is that other jurisdictions will reciprocate the courtesy shown to them.

Comity is inherently a principle of courtesy and respect, not of binding application of one jurisdiction's decisions on another; of course, the jurisdiction being asked to exercise comity must follow its own statutes and is not in any way required to grant comity if doing so would violate its own laws. As discussed elsewhere in this Posthearing Statement, GRU and the City of Gainesville strongly believe that granting the requested determination of need for the GREC

Project is fully consistent with the Commission's need determination statute, Section 403.519, as well as the pro-renewable-energy provisions of the Commission's electric regulatory statute, particularly Sections 366.91 and 366.92, Florida Statutes.

The issue here is not a matter of the Florida Public Service Commission being "bound" in any way by the Gainesville City Commission's actions. Of course, the PSC is the "sole forum" for determinations of need pursuant to Section 403.519. Rather, the issue is a matter of respect for the legislative act by another unit of Florida government, here the act by the City of Gainesville, a political subdivision of the State, through its duly elected legislative body, the Gainesville City Commission. In this instance, the Gainesville City Commission worked diligently, and thoroughly considered and weighed all relevant factors, over a period of 7 years on the process that led to its unanimous decision to select the GREC Project and to approve execution of the PPA. GRU and the Gainesville City Commission simply ask the Public Service Commission to respect Gainesville's process, evaluation, and decisions.

# CONCLUSION: COMPETENT SUBSTANTIAL EVIDENCE OF RECORD OVERWHELMINGLY SUPPORTS GRANTING THE DETERMINATION OF NEED FOR THE GREC PROJECT.

The competent substantial evidence of record in this need determination case overwhelmingly supports the conclusion that the Commission should grant the requested determination of need for the GREC Project as requested by GRU and GREC LLC. The competent substantial evidence shows that the Project and the PPA will satisfy the statutory need criteria in that they will:

- a. Enhance GRU's system reliability by improving reserve margins and providing substantial cost-effective baseload capacity for GRU's aging generation system;
- b. Provide adequate, cost-effective electric supply to serve GRU's customers, as the Project and the PPA will provide lower cost electricity than all gas options and than all coal options with carbon regulation costs included in the analyses, as well as provide cumulative present worth savings over the 30-year life of the PPA as compared to the scenario in which the Project is not constructed and the PPA is not performed;

- c. Significantly improve GRU's fuel diversity; and
- d. Significantly reduce GRU's exposure to fuel supply disruptions, enhancing fuel supply reliability.

Additionally, the Project and the PPA will provide all of the benefits associated with renewable energy and recognized by the Florida Legislature in Sections 366.91 and 366.92, Florida Statutes, by:

- reducing GRU's and Florida's dependency on natural gas as a generating fuel;
- reducing GRU's and Florida's exposure to fuel price volatility;
- improving environmental conditions in Florida through reduced emissions from conventional electric generation fuels and also through reduced emissions of greenhouse gases in Florida;
- increasing the use of renewable energy resources in Florida; and
- encouraging investment in the Gainesville community and in Florida.

There is no competent, substantial, probative evidence in the record of this proceeding that is contrary to any of these points. The simple fact that GRU will have higher reserve margins than its planning target minimum of 15 percent for the first 10 years of the PPA's term does not negate the fact that the Project will, in fact, enhance GRU's system reliability, nor does it negate the many additional reliability, economic, regulatory hedge, energy security, and environmental benefits that the Project will provide to the Gainesville community. Thus, the overwhelming preponderance of the evidence in the record of this proceeding supports the conclusion that the GREC Project meets the statutory need criteria in Section 403.519, Florida Statutes, and that it promotes the State's renewable energy policy goals set forth in Sections 366.91 and 366, 92, Florida Statutes. Accordingly, based on the evidence, the Commission should grant the requested determination of need for the Gainesville Renewable Energy Center.

**ISSUE 8:** Should this docket be closed?

**GRU/GREC:** \*Yes. This docket should be closed after expiration of the time for filing an appeal of the Commission's final order granting the petition for determination of need.\*

Respectfully submitted this 6th day of January, 2010.

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### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished electronically and by United States mail this <u>6th</u> day of January, 2010, to the following:

Erik L. Sayler, Esquire
Martha Carter Brown, Esquire
Office of General Counsel
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