

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Joint petition to determine need for
Gainesville Renewable Energy Center in
Alachua County, by Gainesville Regional
Utilities and Gainesville Renewable Energy
Center, LLC.

DOCKET NO. 090451-EM
ORDER NO. PSC-10-0409-FOF-EM
ISSUED: June 28, 2010

The following Commissioners participated in the disposition of this matter:

NANCY ARGENZIANO, Chairman
LISA POLAK EDGAR
NATHAN A. SKOP
DAVID E. KLEMENT
BEN A. "STEVE" STEVENS III

APPEARANCES:

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On behalf of Dian R. Deevey.

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On behalf of Paula H. Stahmer.

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32399-0850
On behalf of the Florida Public Service Commission (Staff).

CLERK OF COMMISSION - DATE

3302 JUN 28 2010

FPSC-COMMISSION CLERK

FINAL ORDER GRANTING PETITION FOR DETERMINATION OF NEED
FOR PROPOSED BIOMASS PLANT

BY THE COMMISSION:

BACKGROUND

Gainesville Regional Utilities (GRU) is a vertically integrated electric power production, transmission, and distribution system that is wholly owned by the City of Gainesville. GRU also provides wholesale electric service to the City of Alachua and Clay Electric Cooperative.¹ GRU's distribution system serves approximately 93,000 residential and commercial customers in both the incorporated and unincorporated areas of its service territory.

In 2007, the Gainesville City Commission began an extensive solicitation for biomass power proposals, resulting in the selection of a proposal by American Renewables, LLC (American Renewables) on May 12, 2008.² American Renewables created a wholly-owned subsidiary, Gainesville Renewable Energy Center, LLC (GREC LLC) for the proposed project. On May 7, 2009, the Gainesville City Commission unanimously approved the negotiated purchased power agreement (PPA) between GRU and GREC LLC for the purchase of energy and capacity from a proposed biomass-fueled facility for a term of 30 years.

On September 18, 2009, pursuant to Section 403.519, Florida Statutes (F.S.), and Rule 25-22.080 and 25-22.081, Florida Administrative Code (F.A.C.), GRU and GREC LLC (the Joint Petitioners) filed a joint petition for determination of need for the proposed Gainesville Renewable Energy Center (GREC Project) at GRU's existing Deerhaven plant site in Alachua County, Florida. GREC LLC will build a new nominal rated 100 megawatt (MW) net biomass-fired electric generating facility with an in-service date of December 1, 2013, located on land leased from GRU. The unit qualifies as an electrical power plant requiring a determination of need, as defined by Section 403.503(14), F.S., because it exceeds 75 MW of steam electrical generation.

On December 9, 2009, we convened a public hearing in Gainesville to take public comment on the proposed GREC Project. We heard from several public witnesses with a range of concerns and comments, and collected several exhibits from those witnesses. On December 16, 2009, we conducted a technical hearing in Tallahassee. Public witnesses were also provided the opportunity to testify at that hearing, with several ratepayers participating. The Joint Petitioners filed a brief on January 6, 2010.

At the conclusion of our February 9, 2010 Agenda Conference, we approved GRU's request to re-open the record for the limited purpose of addressing concerns raised by the Commissioners during the Agenda Conference. Those concerns fell into three basic categories: (1) the Commission's role in a need determination proceeding involving a municipal utility,

¹ GRU provides wholesale electric service to Clay Electric Cooperative through a contract between GRU and Seminole Electric Cooperative, of which Clay Electric Cooperative is a member.

² American Renewables is formerly known as Nacogdoches.

(2) risk mitigation measures available to the City of Gainesville and GRU, and (3) fuel availability and sustainability.

On March 3, 2010, the Prehearing Officer convened a Status Conference to address procedures regarding the taking of additional record evidence. Ms. Deevey and Ms. Stahmer (Intervenors) were granted leave to intervene on March 8, 2010. A supplemental technical hearing was initially scheduled for April 15, 2010, but was subsequently rescheduled to May 3, 2010.

At the May 3, 2010, supplemental technical hearing, public witnesses were again provided the opportunity to testify. More than two dozen witnesses, including the Florida Commissioner of Agriculture, a State Senator, several Gainesville City Commissioners, GRU ratepayers, and other concerned persons testified. The concerns voiced by the public at the public hearing in Gainesville and the two public hearings in Tallahassee included: system reliability and integrity, reasonable cost of electricity, fuel diversity and supply reliability, renewables/conservation/demand-side management, and cost-effectiveness.

Public testimony also focused on subjects such as environmental and health concerns, local economic impacts, and traffic concerns, which are beyond our jurisdiction to consider under our authorizing statutes. The public testimony regarding environmental concerns and health issues falls under the Department of Environmental Protection's (DEP) jurisdiction and may be relevant in certification proceedings before the DEP, the Division of Administrative Hearings (DOAH), and the Governor and Cabinet presiding as the Siting Board.

On May 24, 2010, the Intervenors filed a Joint Emergency Motion to Reopen the Record and Take Official Recognition of United States Environmental Protection Agency's (EPA's) recently promulgated Title V, Greenhouse Gas Tailoring Rule (GHG Rule). On May 26, 2010, GRU and GREC LLC responded in opposition to the motion. The EPA's GHG Rule was promulgated after the record had closed but prior to our decision on this petition. After considerable discussion at the May 27, 2010, Special Agenda Conference, we denied the Intervenors' motion.

We have jurisdiction over the subject matter of this proceeding pursuant to Sections 366.04(2)(c), 366.05, 366.92, 403.507(4), and 403.519, F.S.

STANDARD OF REVIEW

Our decision regarding an application for a determination of need is an integral part of the overall site certification process as set forth in Chapter 403, F.S. We are the sole forum for a determination of need. If a need determination is granted, the process continues with reviews by the DEP and other state and local agencies. Final certification requires the approval of the Governor and Cabinet presiding as the Siting Board based on their review of the total record.

In making our determination of need, Section 403.519, F.S., requires that we take into account the following:

. . . 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. . . .

While the applicable need determination statute makes it clear that each of these factors must be taken into consideration, the statute does not prescribe what importance or weight should be given to each. Therefore, we have broad authority to determine how each of these may be weighed, and we have the discretion to determine the need for an electrical power plant based upon one or more of the qualifications above, so long as each has been considered as a component of the final decision. See Nassau Power Corp. v. Beard, 601 So. 2d 1175, 1176-77 (Fla. 1992) (noting the Commission must make findings for each of the statutory criteria); Order No. 10108, issued June 26, 1981, in Docket No. 810045-EU, In re: JEA/FPL's Application of need for St. John's River Power Park Units 1 and 2 and related facilities (considering, in addition to the statutory need criteria, the socio-economic need of reducing the consumption of imported oil in the State of Florida and the adoption of the Florida Energy Efficiency and Conservation Act (FEECA)); Order No. 10320, issued October 2, 1981, in Docket No. 810180-EU, In re: Petition for Certification of Need for Orlando Utilities Commission, Curtis H. Stanton Energy Center Unit 1 (considering, in addition to the need for power, the socio-economic need of reducing the consumption of imported oil and conservation goals established pursuant to FEECA); Order No. PSC-08-0518-FOF-EI, issued August 12, 2008, Docket No. 080148-EI, In re: Petition for determination of need for Levy Units 1 and 2 nuclear power plants, by Progress Energy Florida, Inc. (noting that the Commission also considered Section 366.93, F.S., which allows pre-construction cost recovery for nuclear power plants).

The promotion of the development of renewable energy in the State of Florida is a matter falling within our jurisdiction, and is relevant for consideration in this proceeding. The Legislature has provided guidance to us specifically related to promoting renewable energy in Section 366.92(1), F.S., which states:

It is the intent of the Legislature to promote the development of renewable energy; protect the economic viability of Florida's existing renewable energy facilities; diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence on natural gas and fuel oil for the production of electricity; minimize the volatility of fuel costs; encourage investment within the state; improve environmental conditions; and, at the same time, minimize the costs of power supply to electric utilities and their customers.

The Legislature also provided guidance to municipal utilities and rural electric cooperatives in Section 366.92(5), F.S., which states:

Each municipal electric utility and rural electric cooperative shall develop standards for the promotion, encouragement, and expansion of the use of renewable energy resources and energy conservation and efficiency measures. . . .

In this case, we have also given consideration to the fact that local governments are responsive to the people they serve and their representatives must stand for reelection. Over the course of both hearings, it became clear that the Gainesville City Commission's decision to pursue the GREC Project was the result of the community's desire to encourage the expansion of renewable energy resources. The GREC Project is also designed to provide a hedge against future regulation of carbon emissions and achieve the Gainesville City Commission's self-imposed goals for greenhouse gas reduction.

We will not review the final costs or establish rates resulting from the proposed GREC project because GRU, a municipal utility, is not rate-regulated by this Commission.³ As such, it is the Gainesville City Commission that is ultimately responsible to its citizen-ratepayers for all rate impacts associated with the project. The record indicates that both the Gainesville City Commission and GRU made many efforts to inform GRU's customers that their rates could increase when the plant is operational. We would expect that the Gainesville City Commission will continue to review the project's total costs as well as other impacts associated with the project such as increased jobs, property taxes, traffic patterns, and future off-system power sales before establishing retail electric rates for its citizens.

DECISION SUMMARY

Need for Electric System Reliability and Integrity and Fuel Diversity

GRU's current load forecast indicates that the utility does not have a strict reliability need for additional capacity until the year 2023, but the addition of the GREC Project's capacity will improve GRU's overall reliability and contribute significantly to fuel diversity on GRU's system. In the past, we have approved need determinations for cogeneration and renewable facilities for similar reasons. See Order No. 11611, February 14, 1983, in Docket No. 820460-EU, In re: Petition of Florida Crushed Stone Company for Determination of Need for a Coal-Fired Cogeneration Electrical Power Plant (approving the need because, in addition to the statutory need criteria, the proposed cogeneration facility appeared to be a cost-effective conservation measure under FEECA); Order No. 17752, issued June 26, 1987, in Docket No. 870193-EG, In re: Petition of Pasco County for determination of need for a solid waste-fired cogeneration power plant (approving Pasco County's 29 MW cogeneration facility because it would make some small contribution to electric system reliability and integrity in Peninsula Florida). We note that our decision on a need determination petition must be made several years in advance and based on the facts as they exist at the time of the filing. If conditions change from what was presented at the need determination proceeding, then a prudent utility would be expected to respond accordingly.

³ Section 366.11, F.S.

Most Cost-Effective Alternative and Risk Mitigation Measures

The purchased power from the GREC project may initially increase the cost of electricity for GRU's customers by \$3 to \$13 dollars per month. The evidence continues to indicate that the only scenario where the GREC Project would become the most cost-effective alternative would be if pending legislation regarding CO₂ emissions is enacted. While we are concerned about what risk mitigation measures have been taken or will be taken in order to minimize any adverse rate impacts, the Gainesville City Commission is ultimately responsible to its citizen-ratepayers for the rate impact associated with the project. During the supplemental hearing, witnesses described risk mitigation techniques and indicated that the Gainesville City Commission considered other aspects of the project such as additional tax revenues, local job creation, bond ratings, and other matters outside the need determination statutes. Again, if projections presented at the hearing do not materialize, then we would expect GRU and the Gainesville City Commission to respond accordingly in order to minimize any adverse rate impacts.⁴

Fuel Availability

The evidence contained in the record shows that there is an adequate supply of woody biomass available to support the output of the GREC facility. While no contracts have been signed to date, there are letters of intent and GREC LLC continues to negotiate with area suppliers. During the public testimony phase of the supplemental hearing, forestry representatives from near-by communities offered their support of the project and the resulting employment opportunities. We note that since this is a purchased power agreement, GRU's ratepayers will only pay if power can be produced. In other words, if the GREC facility were not able to secure enough woody biomass to meet its performance obligations, then GRU's ratepayers would be held harmless.

Summary of Findings

After considering all the evidence contained in the full record, we approve the application for determination of need for the GREC Project. In support of this decision, we find that the GREC Project will: enhance the overall reliability of the GRU system and can replace older, less efficient generation; satisfy a need for GRU to improve its fuel diversity and supply reliability; promote the development of renewable generation in Florida; and become the most cost-effective alternative if pending legislation regarding CO₂ emissions is enacted. This order reflects our decision and serves as our report under the Power Plant Siting Act, as required by Section 403.507(4)(a), F.S.

⁴ Florida Statutes and our Rules related to purchase power contracts provide safeguards such that regulated investor owned utility (IOU) ratepayers would not pay above avoided costs for purchases of renewable capacity and energy. See § 366.051, Fla. Stat. (2010) and Rules 25-17.0825, 25-17.0832, 25-17.240, and 25-17.250, F.A.C. Such is not the case with the current proceeding because GRU is not rate-regulated by this Commission. We note, therefore, that if the applicants were an IOU, our decision may have been different.

DECISION

To reach our decision, we have evaluated all the statutory considerations pursuant to Section 403.419, F.S., and have made specific findings as to each along with determining that GRU and GREC LLC were the proper applicants before this Commission. Our detailed analysis continues below.

PROPER APPLICANTS

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

GREC LLC is a private renewable power producer that will own, operate, and maintain the proposed Gainesville Renewable Energy Center biomass facility and sell 100 percent of the facility's electric power output to GRU under a 30-year power purchase agreement (PPA). Therefore, consistent with our prior decisions, we find that GRU and GREC LLC are the proper applicants within the meaning of Section 403.519, F.S. and the Florida Supreme Court's decision in Nassau Power Corp. v. Deason, 641 So. 2d 396 (Fla. 1994).

NEED FOR ELECTRIC SYSTEM RELIABILITY AND INTEGRITY

The Joint Petitioners contend that the capacity of the proposed GREC Project is needed to improve and maintain the reliability of GRU's existing system. The Joint Petitioners state that the capacity from the proposed GREC Project is needed to replace capacity resulting from maintenance and forced outages on GRU's Deerhaven 2 unit. In addition, the Joint Petitioners state that the GREC Project is needed by GRU to provide reliable, low-cost baseload capacity in light of the fact that most of the remainder of GRU's capacity will be retired during the term of the GREC LLC PPA. The Joint Petitioners state that GRU currently purchases baseload capacity and energy from Progress Energy Florida, Inc. (PEF or Progress) as an economic and reliability hedge, and the expiration of this contract in 2013 results in a need for baseload capacity. The Joint Petitioners assert that the overall decision to pursue the GREC Project was based on the City of Gainesville's commitment to address the environmental concerns of climate change, sustainability, and energy independence. The Joint Petitioners contend that GRU's wholesale contracts with the City of Alachua and Clay Electric Cooperative are anticipated to be renewed, and that allowing them to expire without renewal would not affect the timing of GRU's strict reserve margin need.

Intervenor Stahmer contends that that GREC Project will not enhance GRU's system reliability and integrity, that GRU does not require additional baseload capacity, and that GRU should use its projected period of excess capacity to implement additional conservation measures.

Intervenor Deevey contends that GRU could significantly delay a capacity need by electing to not renew its wholesale contracts with the City of Alachua and Clay Electric

Cooperative.⁵ In addition, Intervenor Deevey asserts that not renewing the wholesale contracts would result in significant decreases in energy needs, and result in lower CO₂ emissions by GRU. Finally, Intervenor Deevey states that by delaying a capacity need, GRU would have additional time to seek alternatives to the GREC Project.

Analysis

GRU developed forecasts for the number of customers, energy sales, and seasonal peak demands for 2009 through 2044. We reviewed GRU's forecast assumptions, regression models, and the projected system peak demands and find that they are appropriate for use in this docket. The forecast assumptions were drawn from independent sources, which we have relied upon in prior cases. The regression models used to calculate the projected peak demands conform to accepted economic and statistical practices.

GRU uses the University of Florida's Bureau of Economic and Business Research (BEBR) to develop its population projections. GRU's base case annual net energy for load forecast projects usage growth in the 2009 through 2044 period, at an average annual growth rate of approximately 0.71 percent.

GRU's existing net summer generating capacity is approximately 608 MW. The Deerhaven and John R. Kelly generating facilities are the primary sites on the GRU system. Both the Deerhaven and John R. Kelly facilities consist of steam turbine and combustion turbine units. The John R. Kelly facility also includes a combined cycle unit. Also included on the GRU system are: the South Energy Center, which provides combined heat and power services to the Shands HealthCare cancer hospital; a share of PEF's Crystal River 3 nuclear unit; and distributed generation. For 2009, GRU projected a summer peak demand of 441 MW which results in a reserve margin of 269 MW or 61 percent.

The first step in analyzing the need for new generating capacity is to determine the timing of a unit addition. Typically, such analyses attempt to project when a utility's system will fall below a predetermined planning criterion, such as reserve margin. GRU uses a 15 percent reserve margin as a planning criteria for such analyses. Assuming load growth as discussed above, GRU's existing capacity would exceed the 15 percent criteria until the year 2023. In 2023, GRU will need an additional 48 MW of capacity. This is attributed to the retirement of GRU's Deerhaven Steam Unit 1 which will result in a reduction of 83 MW of summer net capacity. Such a result indicates that from a system reliability viewpoint GRU's existing system is adequate to serve projected load for over a decade.

While not technically needed to maintain reliability of the GRU system, the addition of the GREC Project will enhance system reliability and fuel diversity for Peninsular Florida and GRU. The capacity from the proposed GREC Project will add value to GRU's generation portfolio by modernizing its generation fleet. Approximately two-thirds of GRU's existing capacity is at least 28 years old. We also note that GRU plans a 50-year unit life for most of its

⁵ GRU provides wholesale electric service to Clay Electric Cooperative through a contract between GRU and Seminole Electric Cooperative, of which Clay Electric Cooperative is a member.

current generating units. However, GRU expects the Deerhaven 2 unit will exceed its 50-year life expectancy. Some units such as coal-fired units can have a life expectancy as high as 60 years. Deerhaven Unit 2 is GRU's main generating unit; it is a 222 MW coal unit that has operated since 1981. The capacity from the proposed GREC Project would enhance reliability by replacing capacity lost during maintenance and forced outages at the Deerhaven 2 unit. Moreover, the GREC Project will improve GRU's generating system reliability from both a firmness of capacity perspective and from the perspective of exposure to high cost of replacement power. GRU's primary focus was fuel diversification and to provide a financial hedge against future carbon regulation. We discuss fuel diversification and future carbon legislation in greater detail later in this order.

GRU asserted that the GREC Project would improve system reliability by providing baseload generation, including during planned and unplanned outages of Deerhaven Unit 2. Outages during peak periods, such as the Winter 2010 cold snap, could require purchases from other utilities with limited options for GRU. Intervenors also raised questions regarding wholesale contracts and their potential impact upon GRU's need for capacity.

In developing GRU's forecasted peak demand for the contract period, GRU embedded wholesale sales resulting from contracts with the City of Alachua and Clay Electric Cooperative. These full requirements contracts include maintaining sufficient generation resources to serve the demand and provide for a reserve margin, and increase GRU's forecasted peak demand and annual net energy for load. These contracts expire before the GREC contract period begins, but are expected to be renewed on or before that date. Intervenors argue that if GRU elects to let the contracts expire without renewal, GRU would increase its reserve margin by decreasing its overall peak demand. GRU states that if the specific contracts with City of Alachua and Clay Electric Cooperative are not renewed, then the utility would attempt to market the excess capacity to maximize value for its retail customers of its existing capacity. We believe that if the wholesale contracts are allowed to expire without renewal, the GREC Project still improves GRU's system reliability.

Conclusion

Based on GRU's 15 percent reserve margin criteria and expected renewal of existing wholesale contracts, GRU's load forecast indicates that GRU does not have a reliability need for additional capacity until 2023. The expiration and expected renewal of wholesale contracts does not influence the need for the GREC Project, as it is needed for fuel diversity and as a hedge against future carbon legislation. Therefore, we find that the GREC Project would enhance the overall reliability of the GRU system, particularly during potential outages of Deerhaven Unit 2 or periods of high demand, and can replace older, less efficient generation.

NEED FOR ADEQUATE ELECTRICITY AT A REASONABLE COST

The Joint Petitioners assert that GRU performed a levelized cost of energy (LCOE) and cumulative present worth revenue requirement (CPWRR) analysis of the GREC Project. The Joint Petitioners contend that when compared to multiple alternative technologies to be constructed by 2014, the GREC Project was the most cost-effective excluding coal.

The Joint Petitioners assert that the GREC Project and PPA are cost-effective when compared to other self-build supply options and to other renewable energy options available to GRU. They also contend that an extensive and competitive solicitation process was utilized under the guidance of the Gainesville City Commission. The GREC Project also mitigates a wide variety of risks, including fossil fuel price volatility, fuel supply reliability, replacement power cost. The Joint Petitioners also contend that the contract's provisions protect GRU and its customers from issues that would exist if the GREC Project was self-build, including unit degradation, cost of outages of the GREC Project, and financial risks from increased debt.

Additionally, the Joint Petitioners state that GRU considers that future regulation of carbon emissions or renewable energy, enacted by legislation or rule, is inevitable. The Joint Petitioners argue that the GREC Project will meet the Gainesville City Commission's climate policy objectives, protect GRU's customers, and meet GRU's need for adequate electricity at a reasonable cost.

Intervenor Stahmer asserts that the GREC Project will not provide electricity at a reasonable cost and argues that the Joint Petitioners have not included the impact of forecasted price increases for the biomass fuel to be consumed by the GREC Project. Intervenor Stahmer contends that the negotiated contract between GRU and GREC LLC increased the capital costs of the GREC Project significantly compared to the original bid. Intervenor Stahmer suggests that construction indices are an insufficient explanation for the capital cost increase.

Intervenor Deevey contends that the cost effectiveness of the project hinges upon the cost of the biomass fuel to be consumed by the GREC Project. Intervenor Deevey suggests that the price of biomass proposed by the Joint Petitioners is not reasonable, as biomass prices would increase significantly with the enactment of a renewable portfolio standard (RPS), either at a state or federal level. Intervenor Deevey asserts that several studies show an RPS would increase demand for forestry products, and result in price increases. Intervenor Deevey states that the Joint Petitioners have not demonstrated that biomass fuel prices will remain indexed to inflation, but rather could face large price increases from potential RPS legislation.

Analysis

GRU conducted a LCOE analysis of the GREC Project using multiple scenarios, including several alternative units. The alternate units include a combustion turbine unit, a combined cycle unit, a pulverized coal unit, and a pulverized coal unit with carbon capture and sequestration. The GREC Project had a lower LCOE value than any of the natural gas-fired alternatives, and was more cost-effective than the coal-fired alternatives when considering carbon regulation or carbon capture and sequestration. On an annual basis the GREC Project did not always possess the lowest cost per kilowatt-hour. In the beginning years, the GREC PPA was more expensive than some of the alternative units in certain scenarios. However, the LCOE analysis demonstrated that over the 30-year term of the PPA, the GREC Project resulted in the lowest LCOE, as further discussed below.

We find that while the LCOE analysis performed by GRU is a valuable screening tool, it may have misleading assumptions for the GREC Project. While GRU's current generating fleet

is sufficient to adequately supply electricity to GRU's ratepayers until 2023, the LCOE analysis conducted assumes all units would be placed in commercial operation by 2014. As a result, we find that a more appropriate comparison would be between the GREC Project and no new construction until 2023.

At our staff's request, GRU conducted a CPWRR Analysis, comparing the GREC Project to GRU's system cost assuming no new construction until 2023. Under this analysis, GRU would receive the full capacity of the GREC Project for the entire 30-year period. Such a scenario originally resulted in a cumulative net present value cost of approximately \$100 million over the contract's term.

GRU states in its petition that it intends to resell approximately half the capacity of the GREC Project during the first ten years. As part of its analysis, GRU assumed that it will be able to resell the power from the GREC Project at the full contract rate. With this assumption, GRU originally estimated that the GREC Project would show a total savings of approximately \$62 million over the 30-year period. It is likely that GRU would be able to resell some or all of the GREC Project's capacity, though GRU may not receive the full contract price. The Joint Applicants updated this through the supplemental hearing.

Another major influence on GRU's system cost is the potential of carbon regulation, which was modeled in a series of scenarios by GRU. As discussed further later, GRU modeled the potential cost impact of future carbon regulations based on pending carbon legislation, specifically House Resolution 2545, or the Waxman-Markey Bill. The GREC Project originally showed large savings with carbon regulation.

The supplemental hearing featured significant updates, including additional information on potential carbon and renewable legislation, fuel forecasts, market sales, and other factors. Concerns of high biomass prices were a focus of the Intervenors arguments. At our staff's request, GRU updated the CPWRR analysis. In updating it, GRU provided multiple iterations of the CPWRR analysis, including multiple significant changes from the initial filing including an updated fuel forecast. This updated fuel forecast show a small initial increase in natural gas and coal prices, followed by a significant decrease in the outer years compared to the previous fuel forecast.

The update included potential profits from sales of renewable energy credits (RECs) produced by the GREC Project in the Regulated CO₂ Case. This is intended to reflect the effects of the renewable portfolio standard proposed as part of the Waxman-Markey Bill, which forms the basis of the Regulated CO₂ Case.

GRU also included the value of potential market sales from existing assets during periods of excess capacity. These serve to reduce system costs in all scenarios, including no new

construction. The underutilized existing assets, so-called stranded assets, were not considered in the initial filing.⁶

GRU considered sales from the GREC Project if GRU was unable to resell the half of the output at full contract price. A market contract price was developed based upon a sale of firm capacity and energy from 50 MW of the GREC Project, using GRU's contract with PEF as a model. All scenarios now consider the resale of half of the GREC Project's capacity for the initial ten years of operation. It is important to note that GRU currently has no signed contracts for resale of the GREC Project, either at full contract price or at a market-based.

Conclusion

There is considerable uncertainty about the economics of this project. The GREC Project could result in a loss of approximately \$56 million based on a cumulative net present worth revenue requirement analysis using current environmental regulations, fuel forecasts, and market assumptions. However, the GREC Project could result in a savings of approximately \$448 million, if currently pending environmental regulations are enacted at proposed levels and GRU resells half of the capacity at full contract price. Therefore, we find that the GREC Project acts as a hedge against potential cost increases associated with future regulation of carbon emissions and renewable energy.

NEED FOR FUEL DIVERSITY AND SUPPLY RELIABILITY

The Joint Petitioners argue that the GREC Project will significantly diversify GRU's fuel mix, which is dominated by coal and natural gas. The Joint Petitioners state that the GREC Project will also increase the amount of renewable energy on GRU's system, and the state of Florida as a whole. The Joint Petitioners contend the biomass fuel supply requirements of the GREC Project can be met sustainably on a long-term basis, with minimal impacts to existing biomass facilities. The Joint Petitioners assert the Gainesville City Commission fully considered the range of benefits offered by the GREC Project, including for fuel diversity, fuel supply reliability, and as a hedge against potential carbon regulation.

Intervenor Stahmer contends that while the GREC Project will improve the fuel diversity of GRU's system, it will not reduce coal and natural gas consumption. Intervenor Deevey took no position on this issue.

Analysis

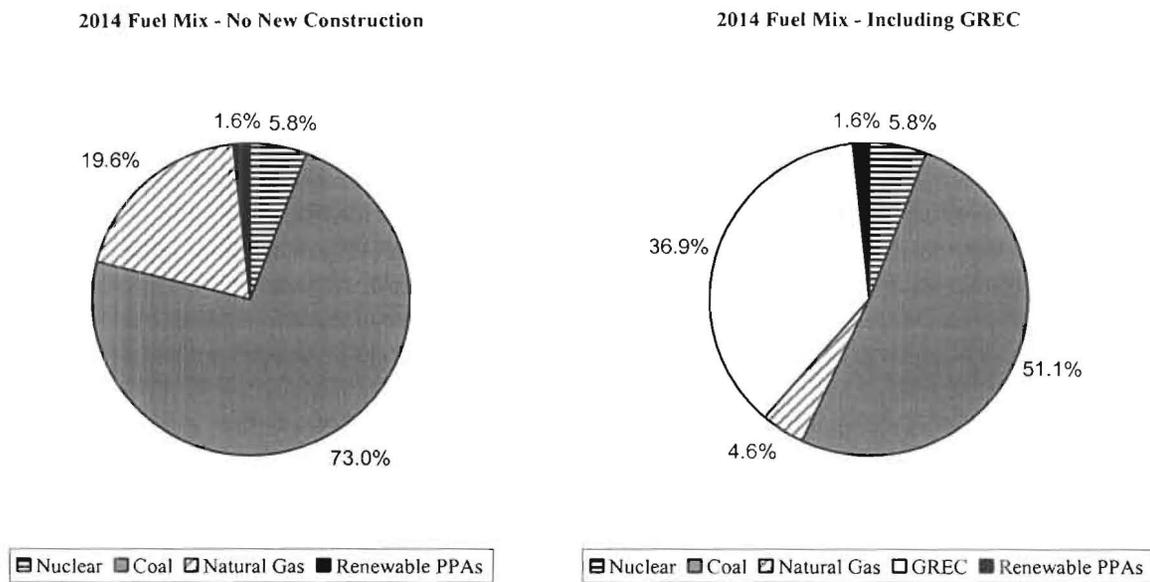
Fuel Mixture

GRU's existing system consists primarily of coal-fired baseload generation at Deerhaven Unit 2, supplemented by natural gas-fired intermediate and peaking generation from the rest of its fleet. The only non-fossil fueled unit is GRU's 1.4079 percent of ownership of the Crystal River 3 nuclear plant. GRU also receives a significant portion of its energy from purchased

⁶ For purposes of this order, stranded assets are those generating assets that are available for use for economic wholesale sales, but are not utilized.

power agreements (PPAs). GRU's largest single PPA is with PEF, through which GRU receives a portion of the utility's baseload system including coal and natural gas. GRU also receives renewable energy from other purchase agreements with a local landfill gas operation and distributed solar photovoltaic systems through its Solar Feed-in-Tariff system.

GRU's PPAs with PEF expire in 2013. Even with the expiration of PEF's PPAs, GRU has sufficient generation capacity to serve its projected needs until 2023 and GRU's existing generation fleet would have to rely more heavily upon coal, increasing its percentage share from 61.4 percent in 2008 to 73 percent of system energy by 2014. GRU's usage of natural gas is also projected to increase from 16.3 percent in 2008 to approximately 19.6 percent by 2014 without the addition of the GREC Project.



The addition of the GREC Project would significantly reduce fossil fuel consumption for GRU's customers. As illustrated in the charts above, if GRU retains all capacity from the GREC Project, the percentage of renewable generation increases from 1.6 to 38.5 percent, while coal drops from 73.0 to 51.1 percent and natural gas drops from 19.6 to 4.6 percent. The potential resale of a portion of the GREC Project's capacity reduces the fuel diversity benefits somewhat, but GRU's system would still show a notable reduction in fossil fuel usage.

Intervenor Stahmer suggests that the GREC Project will not reduce coal or natural gas usage. GRU's analysis, discussed above, shows that the GREC Project allows significant reductions in coal and natural gas as a percentage of GRU's net energy for load. However, GRU's existing fossil-fueled assets could still be utilized to make off-system sales to produce net revenues.

Fuel Transportation

In addition to having a diverse set of fuel types from which to supply electricity to its ratepayers, utilities generally desire to have diversity in transportation and delivery mechanisms for their fuels. Multiple methods of transportation limit the risk of interruption and allow flexibility in fuel delivery. As an inland utility, GRU is restricted to overland transport for its fuel. Currently, for deliveries of coal and natural gas, a single transit method is available for each fuel. With the addition of biomass, GRU would be able to use surface roads as a fuel transport system for its baseload generation, diversifying the fuel transportation methods available to GRU to satisfy its ratepayers' energy requirements.

Biomass Supply Concerns

A primary concern for development of any power plant is access to sufficient fuel supply. Unlike traditional fossil fuels, biomass would not typically be shipped for long distances from centralized production facilities. Biomass for the GREC Project would come from the GREC Project wood basket, a region approximately 75 miles in radius around the plant site. The GREC wood basket is developed as a result of economics, rather than any technological limitation. A visual display of the fuel catchment area, with forested areas highlighted, was provided as part of GRU's presentation during the public hearing. The GREC Project would use a range of biomass for fuel, including forest residue, mill residue, pre-commercial thinnings, used pallets, urban wood waste, and opportunity fuels. Opportunity fuels include trees requiring disposal from storm damage or disease, for which the GREC Project may be eligible for a tipping fee. The GREC Project will not use construction and demolition debris.

As a part of its supplemental filings, GRU introduced a number of studies analyzing biomass resources within the GREC Project's wood basket and for Florida as a whole. Witness Schroeder estimated that approximately 5.85 million green tons of suitable biomass material are produced annually in the GREC Project's wood basket. As the evidence in the record indicates, the GREC Project requires an estimated annual fuel supply of 1 million green tons, with some variability due to moisture content. Witness Schroeder identified several varieties of biomass that are candidates to be used as fuel for the GREC Project. These include urban wood waste, logging residues, mill residues, and pre-commercial thinnings.

As of the date of this decision, GREC LLC has not entered into any firm fuel contracts, but has signed a letter of intent for approximately one-third of its fuel supply with Wood Resource Recovery, LLC. GREC LLC has identified and begun negotiations with various landowners for biomass. Several contract measures serve to protect GRU in the event that sufficient biomass is unavailable, or not available at a reasonable price.

Conclusion

The GREC Project would add a sustainable biomass fuel source that would significantly reduce coal and natural gas usage on the GRU System. GREC LLC has signed a letter of intent for approximately one-third of its fuel supply with Wood Resource Recovery, LLC. Witness Schroeder also testified that the GREC Project wood basket has sufficient biomass and that

GREC LLC is in the process of identifying and beginning negotiations with various landowners for biomass. The contract between the Joint Petitioners contains some protections for GRU in the event that the GREC Project is unable to procure sufficient biomass or experiences high fuel costs. Thus, we find that the GREC Project would satisfy a need for GRU to improve its fuel diversity and supply reliability.

VII. RENEWABLE ENERGY SOURCES AND TECHNOLOGIES, AS WELL AS CONSERVATION MEASURES

The Joint Petitioners contend that GRU is a leader in aggressively utilizing renewable energy resources and energy conservation measures. The Joint Petitioners assert that GRU already utilizes a combination of solar photovoltaic energy and landfill gas generation to the extent available. The Joint Petitioners assert that GRU encourages cogeneration with a combined heat and power plant. They assert that GRU's conservation measures include a variety of programs open to all customer classes, and include government services such as traffic signals and pedestrian lighting. They argue that GRU's existing renewable energy resources and conservation efforts have delayed a strict reserve margin need for capacity, but not a need for baseload energy generation.

Intervenor Stahmer asserts that GRU should take advantage of its current period of excess capacity to invest in additional demand side management (DSM). Intervenor Stahmer argues that additional conservation and DSM measures could dramatically reduce current demand load and represent a cheaper and less risky alternative to the GREC Project.

Intervenor Deevey states that GRU has not conducted any examination of non-generational means of reducing need, as a need does not occur until 2023. Intervenor Deevey asserts that GRU's conservation efforts have significantly reduced the need for new capacity, until 2023, eight years after the proposed in-service date of the GREC Project. Also, Intervenor Deevey suggests allowing wholesale contracts with the City of Alachua and Clay Electric Cooperative to expire without renewal.

Analysis

The City of Gainesville, and by extension its municipal utility GRU, has a history of emphasizing renewable energy over conventional generation and has voluntarily entered into agreements to reduce its carbon emissions in line with the Kyoto Protocol. GRU's existing renewable programs include landfill gas to energy, solar thermal, and photovoltaic rebates, using a European style solar feed-in-tariff. Gainesville's Feed-in-Tariff, or FIT, provides a purchased power agreement for a 20-year term for fixed payments to distributed solar generators at a rate significantly above GRU's current avoided cost.

GRU's current demand side management (DSM) portfolio is based on the Total Resource Cost (TRC) test, which was adopted in 2006, and offers a wide range of conservation programs. GRU's DSM programs have resulted in cumulative energy reductions of 151 gigawatt-hours (GWh) and cumulative peak demand savings of 30 MW.

GRU asserts that its existing renewable energy and DSM programs have deferred the need for additional capacity by several years. As discussed above, GRU does not have a reserve margin based need for additional capacity until 2023. Because the decision to build the GREC Project was made to enhance fuel diversity and act as an economic hedge against future carbon regulation, GRU did not perform a formal evaluation to determine whether there are any DSM or conservation measures available that could mitigate the need for the proposed GREC biomass facility, a renewable source in and of itself.

Intervenor Stahmer proposes that GRU increase its conservation measures to significantly reduce existing load as an alternative to the GREC Project. Since there is no strict reserve margin need for capacity, additional conservation efforts would not mitigate the need for the GREC Project. Intervenor Deevey proposed that by allowing the expiration of wholesale contracts GRU could further reduce its capacity needs.

Conclusion

We take into account that, while GRU did not evaluate whether there are any conservation measures that can mitigate the need for the GREC Project, GRU has a history of promoting renewable energy development and energy conservation as illustrated by its Solar FIT program and basing its DSM portfolio on the TRC test. We note that GRU made the decision to pursue the GREC Project for other reasons. We also take into account that the GREC Project represents a renewable energy resource capable of supplying firm baseload capacity. As a renewable resource, we find that the GREC Project enhances GRU's fuel diversity, acts as an economic hedge against future carbon and renewable regulations, and furthers the Legislature's intent expressed in Section 366.92, F.S., to promote renewables by increasing Florida's renewable generating capacity.

MOST COST-EFFECTIVE ALTERNATIVE AVAILABLE

The Joint Petitioners contend that the GREC Project, when compared to multiple alternative technologies to be constructed by 2014, in a variety of cases and scenarios, was the most cost-effective alternative excluding coal. The Joint Petitioners assert that while the GREC Project is not as cost-effective in an LCOE analysis as a pulverized coal unit, it is unlikely that a coal unit would be permitted in Florida.

The Joint Petitioners assert that the CPWRR analysis shows that GRU's customers will receive significant savings, and that only unrealistic assumptions result in net present value costs. The Joint Petitioners state that, among other factors, the GREC Project frees up existing utility assets to potentially be used for economy sales by GRU to other utilities, thus, reducing costs further.

Intervenor Stahmer argues that the GREC Project is highly speculative, and that the cost-effectiveness is uncertain given the current regulatory climate. Intervenor Stahmer asserts that the GREC Project is not cost-effective for ratepayers due to the contract pricing method. Intervenor Stahmer contends that the Joint Petitioners have not included the impact of forecasted price increases for the biomass fuel to be consumed by the GREC Project. Intervenor Stahmer

asserts that the negotiated contract between GRU and GREC LLC increased the capital costs of the GREC Project significantly compared to the original bid. Intervenor Stahmer suggests that construction indices are an insufficient explanation for the capital cost increase.

Intervenor Deevey contends that the cost effectiveness of the project hinges upon the cost of the biomass fuel to be consumed by the GREC Project. Intervenor Deevey suggests that the price of biomass proposed by the Joint Petitioners is not reasonable, as biomass prices would increase significantly with the enactment of a renewable portfolio standard (RPS), either at a state or federal level. Intervenor Deevey asserts that several studies show an RPS would increase demand for forestry products, and result in price increases. Intervenor Deevey contends that the Joint Petitioners have not demonstrated that biomass fuel prices will remain indexed to inflation, but rather could face large price increases from potential RPS legislation.

Analysis

The record indicates that the Gainesville City Commission fully considered the impact of the GREC project would have on the GRU system when it rendered its unanimous decision to approve the project. It focused on the ability of biomass to provide baseload energy, and it also considered the ability of GREC to provide a hedge against future carbon legislation, given GRU's current coal heavy fuel mix. As part of its policy to encourage the development of renewable resources, the Gainesville City Commission directed GRU to solicit proposals for baseload renewable resources, eventually resulting in the selection of the GREC Project. We find that the GREC Project can reasonably be considered the least cost biomass generator commercially available. Moreover, the timing of the GREC project may make it eligible for significant economic benefits from the American Recovery and Reinvestment Act of 2009.

Contract Payment Terms and Protections

The PPA between GRU and GREC LLC is a performance agreement in which capacity payments are paid on a dollar per megawatt-hour basis, instead of the traditional kilowatt per month basis. The contract payments can be divided into two generic groups: non-fuel energy charges based upon the availability of the unit, and fuel charges based upon the dispatch of the unit.

The non-fuel energy charges can be broken down into the capacity payment, which will be adjusted based upon the construction price index difference from the signing of the contract and the beginning of construction, and the fixed operations and maintenance expenses, which will not be escalated. Prices for non-fuel energy charges are based upon the availability of the unit, which has minimum requirements outlined in the contract, and performance incentives to maintain that availability. The non-fuel energy charge will be paid regardless of the actual energy output of the facility, and are thus a 'sunk' cost when considering economic dispatch. Based upon GRU's economic analysis of the GREC Project, these charges will constitute the majority of payments to the facility for almost the entire 30-year term. In the event that the facility is unable to operate, GRU would not be responsible for any payments. However, if the facility is able to operate, but GRU opts not to dispatch it, GRU would still be required to pay the non-fuel component of the charges in the amount of energy as if the facility was dispatched. The

fuel charges are based upon a combination of the variable operations and maintenance, escalated at 2.50 percent, and the biomass fuel itself, which was escalated for analysis purposes at the consumer price index. Combined, the fuel charge would be used for dispatch purposes, and is comparable to that of a coal unit.

The PPA between GRU and GREC LLC includes multiple contractual protection mechanisms to ensure that GRU's ratepayers are safeguarded from non-performance by the GREC Project, with GRU able to draw upon financial instruments to purchase replacement power. If GREC LLC goes into default, the contract becomes void.

Levelized Cost of Electricity (LCOE) Analysis

The GREC Project was compared to several fossil-fueled alternative units in a levelized cost of electricity (LCOE) analysis. LCOE serves well to screen a variety of technologies on an 'apples to apples' basis, meaning in the case of electrical utilities that similar technologies are approximately interchangeable with an existing system. The four alternative units included a combustion turbine, a combined cycle unit, a pulverized coal unit, and a pulverized coal unit with carbon capture and sequestration (CCS) equipment. Of the four alternative units utilized in GRU's analysis, only the coal-fired units are considered baseload generation similar to the GREC Project.

The LCOE analysis included a range of scenarios, including variations in fuel prices, capital costs, and carbon regulation for the alternative units. Additional scenarios were performed for each alternative unit. For example, the analyses included multiple capacity factors for the base case, and the sensitivities on fuel, capital cost, and carbon regulation were conducted at a 90 percent capacity factor for all units as well. Based on these scenarios, the pulverized coal unit is the only alternative more cost-effective than the GREC Project, excluding both carbon cases.

This form of LCOE analysis may be misleading due to several assumptions used. GRU's LCOE analysis used the assumption that any alternative unit would be constructed so as to have a commercial in-service date identical to the proposed GREC Project, by January 1, 2014. Providing for permitting and construction time, neither of the two coal-fired units proposed as alternatives would be able to begin operation by the 2014 timeframe. Even if construction timing was not a factor, witness Kushner testified that it is unlikely that a new coal unit would be approved in Florida given the current regulatory climate. The remaining units, both natural gas-fired, likely could be constructed by 2013. However, only the natural gas-fired Combined Cycle unit is designed to operate in a similar fashion to GREC as a baseload unit.

The GREC Project was assumed for all comparisons to have a 90 percent capacity factor, which was derived from the performance requirements of the PPA. The LCOE analysis did not model possible short-term rate impacts of the units analyzed. On an annual LCOE basis, the GREC Project became more cost effective than the natural gas-fired combined cycle unit by 2027 at a 90 percent capacity factor. When compared to the combustion turbine operating at a 90 percent capacity factor, the GREC Project did not begin to produce energy at a lower cost per

kilowatt-hour until after 2021. Such results indicated that the initial capital costs of the GREC Project were not offset by fuel savings until 7 to 13 years into the contract term.

An LCOE analysis is useful as a screening tool once a decision has been made to construct a unit and can assist in selecting between similar technologies. However, the LCOE analysis conducted by GRU assumed a need exists to construct a unit of approximately 100 MW capacity by 2014. This is not the case for GRU, as no need exists until approximately 2023 based upon reserve margin criteria. If the GREC Project is not constructed, it is unlikely that one of the alternate units mentioned above would be constructed to begin service by 2014. As a result, we believe it is more appropriate to compare the GREC Project to a scenario of no new construction until 2023, which is more easily conducted using a CPWRR analysis.

Cumulative Present Worth Revenue Requirement Analysis

GRU provided a CPWRR analysis for GRU's system with the GREC Project and with no new construction until 2023. Multiple scenarios were analyzed including a resale of half of the GREC Project's capacity for ten years, and the estimated impact of pending carbon legislation.

GRU did not include any new construction for the 30-year term of the GREC PPA, but as witness Regan stated, GRU's analysis included projected market costs for capacity and energy in its projected requirements. Typically, "filler units" are used to represent future capacity additions that are outside of the utility's normal planning period. Filler units consist of natural gas-fired combustion turbines or combined cycle units dependent upon projected capacity and energy requirements. Instead, the use of market purchases for energy began in 2024 with the retirement of Deerhaven Unit 1 and increased as other units on the GRU system were retired. The most significant increase occurred in 2031, with the retirement of Deerhaven Unit 2, when market purchases for power represented approximately 30 percent of net energy for load. In addition to market purchases, the existing units on GRU's systems were heavily utilized, especially in the outer years. For example, the Deerhaven Combustion Turbine Unit 3 was modeled at a capacity factor equal to 96.3 percent in the no new construction scenario by 2032.

We believe it is unlikely that GRU would operate its units in this manner, and that it is more likely that new, efficient units would be constructed at some point during the period to meet customer demand. Also, witness Regan testified that GRU hopes to get more than 50 years out of the Deerhaven Unit 2, which would push the retirement date of this unit further into the future. Due to the lack of the use of "filler units," variability of retirement dates, high amount of market purchases, and unusually high capacity factor for peaking resources, we find that the CPWRR analyses conducted by GRU provides no clear answer to the economic viability of the GREC Project.

The analyses, however, do indicate that the primary driver of estimated savings comes from the estimated impacts associated pending environmental regulations affecting CO₂. As such, we believe that the enactment of pending carbon legislation will have the greatest impact upon the cost-effectiveness of the GREC Project. If the GREC Project is considered carbon neutral, and is able to reduce the requirement of GRU to purchase carbon credits or allocations, then the facility may provide significant economic benefit. As witness Regan testified, the

GREC Project acts as a hedge against potential carbon legislation that may have a negative effect upon the cost effectiveness of coal-fired generation, upon which GRU relies heavily.

The GREC Project's output would assist GRU in meeting its voluntary Kyoto Protocol carbon emission goals. It would also operate as a hedge against possible future regulation of carbon emissions at the federal level. House Resolution 2545, or the Waxman-Markey Bill, was used by GRU to develop the economic impact of carbon legislation. In addition, the GREC LLC PPA provides all the environmental attributes associated with the facility to GRU.

While GRU's economic analysis is based upon pending legislation, the regulation of carbon emissions and federal renewable portfolio standard are not guaranteed to remain in its current draft form, or be implemented into law. Significant changes, delays, or withdrawal of the pending legislation could impact the anticipated rate impact of the GREC Project. For example, the Waxman-Markey Bill and multiple federal and international organizations consider biomass to be a renewable and sustainable resource. In fact, the collection and combustion of biomass can serve to reduce carbon emissions by reducing methane emissions related to rotting biomass. However, biomass generation typically involves the use of fossil fuels for transport of fuel to the facility, which amounts to approximately four percent of the equivalent carbon emissions had the fuel been coal. As a result, until legislation is enacted, there will remain some uncertainty as to whether biomass facilities would be considered fully carbon neutral or partially so, dependent upon fuel source and transportation.

Resale of Capacity and Energy

GRU plans to resell 50 MW of capacity from the GREC Project for the first ten years of the contract and several utilities have expressed interest in purchasing this capacity, including Florida Municipal Power Agency, Orlando Utilities Commission, Reedy Creek Improvement District, and City of Lakeland. While these utilities, or others, may purchase portions of the GREC Project's capacity, it is not known if GRU would be able to secure resale PPAs for the full price of the contract that GREC LLC is guaranteed by GRU. We believe that it is likely that GRU would be able to resell capacity from the GREC Project and that the no resale scenario represents a worst-case situation.

Financial Assumptions

GRU's financial assumptions for the GREC Project include an anticipated capital structure consisting of 100 percent debt financing using primarily long-term tax-exempt municipal bonds. GRU structured the transaction with GREC LLC as a PPA rather than GRU obtaining an equity share in the facility. The annual costs for GRU's participation in the project are not tied to an investment in a self-build asset. GRU is the counterparty to the PPA upon which GREC LLC will obtain project financing. Standard & Poor's and Moody's have issued bond ratings to GRU of AA and Aa2, respectively.

GRU's other financial assumptions include an annual rate of 4.2 percent for the long-term tax-exempt municipal bond rate, interest during construction rate, and present worth discount rate. Additionally, a 2.5 percent annual percentage rate was used for the general inflation rate

and the escalation rate that was applied to both capital costs and O&M costs. These financial assumptions as applied are consistent and comparable with financial assumptions used in other recent need determinations that were approved by this Commission.⁷ There was no evidence presented in the record that disputes the reasonableness of these financial assumptions. Based on this review, we find that the financial assumptions used for this initial evaluation are reasonable.

Intervenor Stahmer also raises issues concerning differences in the estimated capital cost of the project between the original binding proposal and the final negotiated purchase power agreement before us in this need determination. The matter before this Commission, however, is the final negotiated purchased power agreement, signed by GRU and GREC LLC, and not the original binding proposal. The differing estimates from the original binding proposal and the final negotiated purchase power agreement are not relevant to our decision.

Updated Cumulative Present Worth Revenue Requirement Analysis

As part of the supplemental testimony process, GRU updated its CPWRR to include a new fuel forecast, off-system sales from existing assets, market sales of the GREC Project, and consideration of renewable energy credits. In addition to modifying the overall CPWRR analysis, these factors also change the rate impact of the GREC Project.

In total, there have been significant changes to each of the scenarios and cases described at the original hearing. There is considerable uncertainty about the economics of this project because the overall cost-effectiveness of the GREC Project is heavily dependent upon the cost of future carbon regulation, and the potential resale of half the project's capacity. The GREC Project could result in a loss of approximately \$56 million based on a CPWRR analysis using current environmental regulations, fuel forecasts, and market assumptions. However, the GREC Project could result in a savings of approximately \$448 million if pending environmental regulations are enacted, and GRU resells half of the capacity at full contract price.

Overall, the updated analysis featured an improvement in the cost-effectiveness of the GREC Project. The cases and scenarios described above have important assumptions that influence their cost-effectiveness. Foremost, all scenarios now assume some form of resale of the GREC Project's capacity, either at the full contract price or at a market-based price. We consider it likely that GRU would be able to resell power, but whether they are able to achieve the estimated rates will have a significant impact upon the cost of the GREC Project. As discussed above, GRU has not yet executed any contracts, though multiple utilities have expressed interest in purchasing capacity and energy from the GREC Project.

The Regulated CO₂ case described above envisions carbon and renewable legislation based upon the Waxman-Markey Bill. As a part of its supplemental filings, GRU included an

⁷ Order No. PSC-09-0111-FOF-EM, issued February 25, 2009, in Docket No. 080614-EM, In re: Petition to determine need for Greenland Energy Center Combined Cycle Conversion in Duval County by JEA (5 percent original cost rate/7 percent revised cost rate) and Order No. PSC-06-0457-FOF-EM, issued May 24, 2006, in Docket No. 060155-EM, In re: Petition for determination of need for proposed Stanton Energy Center Combined Cycle Unit B electrical power plant in Orange County, by Orlando Utilities Commission (5.25 percent cost rate including insurance costs and issuance fees).

update on this legislation, as well as multiple other legislative efforts, at a state and federal level, to regulate carbon emissions or renewable energy. Witness Regan also describes findings by the Environmental Protection Agency (EPA) that has made an Endangerment Finding regarding greenhouse gas emissions, including carbon dioxide. At this time, however, no additional environmental regulations on renewable energy or carbon emissions have passed or are set to be enforced on a federal or state level.

The Joint Petitioners suggest that the form of analysis utilized above is inappropriate, because resale of the contract at full price, and regulated CO₂ represent the most appropriate "Base Case." The term "Base Case" refers to scenarios performed under current environmental regulations only. These include a Full Contract Resale scenario, a Market Resale Scenario, and a No New Construction Until 2023 scenario. We believe that comparing the cost to GRU between No New Construction Until 2023 and scenarios with the GREC Project is an objective analysis method that demonstrates the impact of the GREC Project upon the cost-effectiveness of GRU's system.

Expected Value Analysis

During the supplemental hearing, GRU proposed an additional form of cost-effectiveness analysis, referred to as a probabilistic risk analysis, or expected value analysis. This process included estimating the potential financial cost of a series of risk factors, what impact the GREC Project may have on the risk factors, multiplying the GREC Project's impact by a percentage, and then summing the result. GRU performed two expected value analyses. With assumptions biased against the GREC Project, one expected value analysis represented a risk adjusted benefit to cost ratio of approximately 2 to 1, or approximately \$70 million. The other expected value analysis, with mid-range assumptions, resulted in a benefit to cost ratio of greater than 10 to 1, or approximately \$279 million.

We believe that the expected value analysis, while useful for risk analysis, does not reflect the fact that the outcome of a scenario is one result or another. For example, pending carbon legislation, or functionally similar legislation, will either be enacted, or it will not. Witness Regan suggests in his first scenario, described as biased against the GREC Project, that carbon regulation has a ten percent chance of occurring, and in his second scenario, described as mid-range, there is a 50 percent chance of regulation occurring. We believe that a more clear presentation of this is to compare the cost impacts of full scenarios with and without carbon regulation, as has been conducted above in the CPWRR Analysis in the Base Cases and Regulated CO₂ Cases. Thus, we the CPWRR Analysis allows us to weigh for ourselves what we believe the likelihood of these conditions will be in the future.

Updated Customer Bill Impact

With the updated CPWRR analysis, GRU provided an updated rate impact to reflect the changes discussed above. The customer impact of the GREC Project is affected greatly by the degree to which GRU will be able to resell capacity at or near the full contract price, and whether pending carbon legislation is enacted. The customer rate impact numbers are lower per average GRU customer. GRU customers use approximately 831 kWh monthly as compared to the state

average of approximately 1,200 kWh per month. In addition, GRU anticipates this value to decrease in the future.

Based on the analyses above, the purchased power from the GREC project is projected to increase the cost of electricity for GRU’s customers. As illustrated by the table below, the initial residential customer bill impact ranged from approximately \$18.75 per month in the worst case scenario to as low as \$4.36 per month in the best case scenario. The updated residential customer bill impact ranges from \$3.22 to \$13.40 per month.

Residential Monthly Bill Impact Summary

Initial Rate Impact in 2014 (\$/831 kWh-mo)				
Scenario	Revised Original Estimate		Current Estimate	
	Title	Value	Title	Value
Base Case	Resale	\$7.35	Contract Resale	\$7.13
	No Resale	\$18.75	Market Resale	\$13.40
Regulated CO₂	Resale	\$4.36	Contract Resale	\$3.22
	No Resale	\$13.18	Market Resale	\$6.41

We will not review the final costs or establish rates resulting from the proposed GREC project because GRU is not rate-regulated by us and any rate impact would be the result of the Gainesville City Commission’s policy decisions. The Gainesville City Commission is ultimately responsible to its citizen-ratepayers for all rate impacts associated with the project. The record indicates that both the Gainesville City Commission and GRU made many efforts to inform GRU’s customers that their rates could increase when the plant is operational. We would expect that the Gainesville City Commission will continue to review the project’s total costs as well as other impacts associated with the project such as increased jobs, property taxes, traffic patterns, and future off-system power sales before establishing retail electric rates for its citizens.

Biomass Supply Concerns and Contract Protections

As of the date of this decision, GREC LLC has not entered into any firm fuel contracts, but has signed a letter of intent for approximately one-third of its fuel supply with Wood Resource Recovery, LLC. Witness Schroeder also testified that GREC LLC has identified and begun negotiations with various landowners for biomass.

The GREC Project will require approximately one million green tons of biomass annually to operate. Intervenors raised significant concerns that the biomass prices utilized for the cost-effectiveness analysis are unreasonable. Several contract measures serve to protect GRU in the event that sufficient biomass is unavailable, or not available at a reasonable price. If the GREC Project is unable to find sufficient biomass to operate, it would be considered unavailable, and GRU would not be responsible for any payments, either energy or non-energy.

In the event that biomass prices are higher than projected by GRU, the cost of the GREC Project would increase, with a cost-sharing mechanism being utilized, as described above. Under the contract, GRU has the option to dispatch the GREC Project, which can reduce the unit’s output. A reduction in dispatch would reduce fuel consumption, thereby reducing fuel

costs and avoiding more expensive biomass purchases. However, GRU would still be responsible for non-energy payments, as the GREC Project would be considered available during this time period. In any of these instances, costs to GRU would increase beyond those assumed in the cost-effectiveness analysis above.

Credit Ratings

At the supplemental hearing, concerns were raised about the proposed GREC Project's potential effect on GRU's credit ratings. These concerns focused on GRU's fuel diversity, credit rating agency imputed debt, energy sales of excess capacity, and higher debt obligations. Witness Hanrahan stated that the GREC Project would secure a new fuel source giving the utility greater fuel diversity to address a stated concern of both Standard & Poor's (S&P) and Moody's. Witness Hanrahan asserted that in several meetings with both S&P and Moody's, the credit rating agencies expressed concerns about GRU's reliance on fossil fuels with regard to carbon regulations.

Witness Hanrahan testified that the additional costs that would be incurred as a result of this project are not considered debt of GRU since the proposed GREC Project is structured as a purchased power contract with no obligations to GRU in the event the power is not produced. Witness Regan testified that, based on representations made in meetings with the credit rating agencies, the imputation of debt would not be applicable to GRU. Additionally, witness Regan asserted that only a contract default would elicit security provisions estimated in the area of about six months of payments applicable to GRU.

Additional Commissioner concerns were raised about the credit rating agencies' view of the resale viability of the excess contracted power by GRU. Witness Hanrahan asserted that the perception of the credit rating agencies is that the excess contracted power is very marketable and would be easily sold.

We reviewed the most current credit rating agency reports for GRU from S&P and Moody's. In the September 2009 S&P report, the credit rating agency cited two credit concerns:

- Dependence on one generating unit to provide about 65 percent of the system's electricity.
- Additional debt burden associated with a sizable capital spending program through 2014, although rate increases and the post-2013 reduction of debt service associated with existing debt mitigate this.

In the September 2009 Moody's report, the credit rating agency placed a negative outlook on GRU's credit rating. In its analysis, Moody's asserted that the negative outlook was premised on electric rates that are projected to increase to support additional debt and that are becoming less competitive, leaving very little headroom to raise rates further. The negative outlook also considered the liquidity available to cover the variable rate debt and the future dependency on operating reserves to meet significant capital improvement and other operation and maintenance-related cost increases. Moody's stated the following five challenges for GRU:

- Six year capital improvement program puts additional pressure on currently above-average rates.
- Lack of fuel diversity could place pressure on future rates.
- Meeting regulatory requirements could result in system modifications increasing costs substantially.
- Less competitive electric rates than other utilities in the region.
- Future dependency on rate stabilization fund.

We concur with GRU witness Hanrahan that one cannot speculate as to what the actions of the credit rating agencies would be from either an approval or denial of this project. We believe that the proposed GREC Project could possibly alleviate the credit rating agencies' expressed concerns about GRU's fuel diversity and potential carbon compliance costs. However, the proposed GREC Project may exacerbate the credit rating agencies concerns regarding non-competitive electric rates and restrained liquidity. S&P and Moody's have issued bond ratings to GRU of AA and Aa2, respectively. As such, GRU is one of only 20 of approximately 2,000 utilities in the country possessing such a favorable AA rating. Based on the foregoing, we do not believe that the decision to approve or deny the GREC Project would materially affect GRU's relatively high credit ratings.

Conclusion

There is considerable uncertainty about the economics of this project because the overall cost-effectiveness of the GREC Project is heavily dependent upon the cost of future carbon regulation, and the potential resale of half the project's capacity. The GREC Project could result in a loss of approximately \$56 million based on a CPWRR analysis using current environmental regulations, fuel forecasts, and market assumptions. However, the GREC Project could result in a savings of approximately \$448 million if pending environmental regulations are enacted, and GRU resells half of the capacity at full contract price. Therefore, we find that the GREC Project could act as a hedge against potential cost increases associated with future regulation of carbon emissions and renewable energy and could become the most cost-effective alternative if pending legislation regarding CO₂ emissions is enacted.

RISK MANAGEMENT

As with most power generation projects, there are uncertainties about the economics of the proposed biomass project. Additionally, the Florida Public Service Commission does not regulate GRU electric rates. Furthermore, many of the financial, contractual, and environmental regulation aspects associated with the proposed biomass generating unit were not yet fully known or definitized at the time this case was decided.

Based on the above, it is incumbent upon GRU and the City of Gainesville to mitigate the ratepayer impact associated with the proposed biomass generating unit by considering, but not limited to, the following:

- The need to sell excess generation capacity from the proposed biomass unit at the contractual rate
- The need to continue to sell excess generating capacity associated with GRU's existing generating units on the wholesale market or through power purchase agreements
- The need to contractually source a long-term fuel supply for the proposed biomass generating unit at favorable pricing
- The need to continue to evaluate the financial viability of the proposed biomass generating unit in relation to pending environmental regulations

CONCLUSION

As discussed above, GRU does not have a capacity need until 2023. However, the addition of the capacity from the proposed GREC Project would enhance reliability of GRU's system. GRU has chosen to place more emphasis on renewable generation and therefore sought to replace its expiring purchased power contracts with generation from a renewable energy source capable of baseload operation. GRU's existing system consists primarily of coal-fired baseload generation. The addition of capacity from the proposed GREC Project will provide renewable baseload capacity while replacing purchased power, thereby reducing coal and natural gas usage on GRU's system. The GREC Project was selected by GRU as the least-cost renewable proposal during an RFP process for biomass facilities, and is a continuation of GRU and the Gainesville City Commission's efforts to encourage renewable energy.

The GREC Project would be a baseload renewable energy resource that can improve GRU's system reliability, fuel diversity, and provide an economic hedge against future carbon regulation. The updated values provided in the supplemental hearing show that the GREC Project, with market resale, is estimated to have a cumulative net present value cost of \$56 million without carbon regulation, but could also have a cumulative present worth savings of approximately \$448 million under the Regulated CO₂ Case with resale at full contract price. The Gainesville City Commission was aware that the GREC Project would have an initial rate impact and the Project could face risks related to resale and delay.

Since GRU is a municipal utility, we do not have rate-setting authority over it, and we are therefore limited in what oversight we can perform. If GREC LLC contracted with an IOU, recovery of payments made under the purchase power agreement would be subject to our approval and we would be able to prevent ratepayers from paying above avoided cost for the renewable energy and capacity of the project.⁸ We note that if the petitioner were an IOU, our decision may have been different. Here, the Gainesville City Commission is ultimately responsible for mitigating any potential rate impacts of the GREC Project. We note that our decision on a need determination petition must be made several years in advance and based on the facts as they exist at the time of the filing. If conditions change from what was presented at

⁸ Florida Statutes and our Rules related to purchase power contracts provide safeguards such that IOU ratepayers would not pay above avoided costs for purchases of renewable capacity and energy. See Florida Statutes 366.051 and Rules 25-17.0825, 25-17.0832, 25-17.240, and 25-17.250, F.A.C.

the need determination proceeding, then a prudent utility would be expected to respond accordingly.⁹ If projections presented at the hearing do not materialize, then we would expect GRU and the City of Gainesville to respond accordingly.

We note that GRU has made a strategic decision to contract with a biomass renewable resource provider for additional baseload generation. The selection of a renewable resource corresponds to the intent of the Legislature, as set forth in Section 366.92(1), F.S., to promote renewable development in the State of Florida. The GREC Project will enhance the overall reliability of the GRU system by providing an additional source of baseload generation. The GREC Project satisfies a need for GRU to improve its fuel diversity and supply reliability. The GREC Project also represents a significant investment in the development of renewable energy in Florida. Meaningful economic benefits to GRU and its ratepayers could also accrue if pending legislation regarding carbon emissions is enacted. GRU has enacted several contract provisions to minimize the cost of this renewable resource to the utility and its ratepayers. As a municipal utility, GRU is not rate-regulated by this Commission. Therefore, the Gainesville City Commission is ultimately responsible for the rate impact of the GREC Project and any potential efforts to mitigate the risks associated with that impact. For all of the reasons identified herein and based on our review of the record evidence, we approve of the determination of need for the GREC Project.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC's joint petition to determine the need for the Gainesville Renewable Energy Center, LLC, is granted. It is further

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

By ORDER of the Florida Public Service Commission this 28th day of June, 2010.



ANN COLE
Commission Clerk

(S E A L)

ELS

⁹ For an IOU, we must review the final costs for cost recovery purposes when the generating unit comes on-line. If, after review, it were found that an IOU should have stopped construction or pursued a more cost-effective alternative, we can adjust the IOU's rates accordingly. However, we do not have final rate making authority over municipal utilities and will not review the final costs or establish rates resulting from the proposed GREC project.

DISSENTS BY: CHAIRMAN ARGENZIANO
COMMISSIONER STEVENS

CHAIRMAN ARGENZIANO, dissenting:

I dissent from the decision of the majority due to improper application of the statutory scheme and improper assessment of the need for the project.

Defects in the Majority's Construction of the Relevant Statutory Scheme

The majority, without competently articulating its reasons, has created two separate and alternative levels of scrutiny for a need determination under the same exact statutory language.¹⁰ Determining which level of scrutiny now applies is solely dependent on who the petitioner is: there is apparently a demanding standard for investor-owned utilities, and a significantly slacker standard for municipalities.¹¹ The majority created such a tiered system because it misperceived the statutory backdrop to include submissive deference¹² to municipalities due to "political accountability,"¹³ a factor not addressed by statute but invented. At best this is federalism—

¹⁰ See Agenda Hr'g Tr. 42, Feb. 9, 2010 (Commissioner Edgar, opining: "I guess I would put forth . . . that balancing of circumstances and factors and criteria . . . may be different for a municipal facility than it would be for an investor-owned utility . . ."). Cf. Agenda Hr'g Tr. 42 (Staff Attorney Saylor, stating: "My understanding is that whether it's a muni or an IOU, we weigh all the factors similarly.").

¹¹ See Special Agenda Hr'g Tr. 89, May 27, 2010 (Commissioner Skop, stating: "[W]e're being asked to sign off on pretty much a blank check with a lot of things that aren't yet fully known or definitized, and that's a little bit of a leap and I think . . . it's prudent for the Commission to articulate these risks in light of giving deference to local rule and the desires of local government, as Commissioner Edgar and myself have referenced. They want to do something, and so long as we clearly and transparently state the risks and clearly the City acknowledges it has a duty and GRU has a duty, then that's fine.") (emphasis added); Special Agenda Hr'g Tr. 77, May 27, 2010 (Commissioner Skop, stating: "The difference on this one is that it is a power purchase agreement, it is with a municipality, but to otherwise approve this for an investor-owned utility would violate Commission precedent . . ."). See also Agenda Hr'g Tr. 33-34, Feb. 9, 2010 (Commissioner Skop, noting: "And I think the staff has noted that this Commission would not approve this project for an investor-owned utility based upon the record evidence."); Revised Staff Recommendation, issued May 20, 2010, in Docket No. 090451-EM, In re: Joint Petition to determine need for Gainesville Renewable Energy Center in Alachua County, by Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC at 39 ("Staff notes . . . that if the petitioner were an IOU, our recommendation may have been different."). Thus, according to at least of one the Commissioners in the majority, all that is required of a municipality during need determination proceedings is that "the City acknowledge[] it has a duty." Special Agenda Hr'g Tr. 89, May 27, 2010. The reality that Section 403.519(3), Florida Statutes, says nothing of the sort is no obstacle.

¹² See Agenda Hr'g Tr. 37, Feb. 9, 2010 (Commissioner Skop, stating: "So at least from my perspective, it's not for me to . . . impart my judgment. [A]t the end of the day it is really not for me to tell the City of Gainesville what they should do or what they should not do.")

¹³ Compare Agenda Hr'g Tr. 41, Feb. 9, 2010 (Commissioner Edgar, stating: "I do believe that it is appropriate to give deference to a local government who is obviously closer to the people who will stand for election . . .") and Agenda Hr'g Tr. 47 (Commissioner Klement, opining: "I appreciate my colleague's concern for the blame coming to us, but I believe that customers of any utility understand where their bills come from and who approved it. I don't blame the PSC if my Tallahassee power bill is higher in January. I blame Tallahassee or myself for turning the heat up too high. So I think that the Gainesville customers will understand that if they do get in the position that is

allocation of political benefits and burdens to parties responsible for legislation—in an inappropriate arena. At worst it clumsily attempts to avoid political consequences for opposing a project backed by a municipality and key legislative and executive officials,¹⁴ and waters-down need determination requirements, which are designed to prevent inefficient allocations of resources and unnecessary burdens on ratepayers, for all projects—those brought forward by both investor-owned utilities and municipalities.¹⁵

I do not believe that two cases under the exact same statutory language should be examined under fundamentally different levels of scrutiny depending on whether the petitioner is an investor-owned utility or a municipality. Numerous flaws in the majority's reasoning demonstrate why their theory is unsound.

Acknowledging the premise that investor-owned utilities and municipalities are different, the majority concludes that Section 403.519(3), Florida Statutes, conceals two very different forms of treatment based on this fact. This is in error. The Commission has the responsibility to make a need determination. The need determination is one stop along an administrative avenue. Vehicles traversing the roadway do not necessarily deserve different treatment, especially given that the travel procedure is dictated by Section 403.519(3), Florida Statutes. In this, there are no

possible that they will look to their city commissioners and mayor and say why did you do this, and they will have to defend it.”) and Agenda Hr’g Tr. 54 (Commissioner Klement, noting: “the political price of this will be paid by the City Commission and not this Commission if this proves to be a bad decision.”) with Agenda Hr’g Tr. 50 (Chairman Argenziano, reasoning: “The risk is \$100 million. That part does belong to GRU and those political -- I’m not looking at political, because, you know, politicians come and go, and by the time year 2023 is around those people won’t be around or probably won’t be around to answer to their constituents. And that’s their concern. I’m looking at what I need to look at today. . . . [T]here’s red flags all through staff’s recommendation, and I see it all through there. It would be incumbent on me to pay attention to those red flags because they mean something. After all, if they didn’t mean something . . . it wouldn’t be here in front of us today.”). See also Special Agenda Hr’g Tr. 76, May 27, 2010 (Commissioner Skop, stating: “The . . . important point of how I would distinguish this from an investor-owned utility is . . . local rule. You have a municipal government wanting to do something, and . . . the risk/reward lies in the lap of . . . the City of Gainesville . . .”).

¹⁴ Notable officials testified in favor of the project: Gainesville Mayor Hanrahan, numerous Gainesville City Commissioners; Senators Rod Smith and Steven Oelrich; Commissioner Charles Bronson.

¹⁵ Compare Special Agenda Hr’g Tr. 50, May 27, 2010 (Commissioner Edgar, suggesting that where “staff notes that if the petitioner were an IOU our recommendation may have been different . . . seems somewhat gratuitous to me to put in the final order . . .”) and Special Agenda Hr’g Tr. 51 (Commissioner Edgar, again referring to staff’s language distinguishing investor-owned utilities from municipalities as “a tad gratuitous”) with Special Agenda Hr’g Tr. 78 (Commissioner Klement, referring to staff’s language discussed by Commissioner Edgar: “And I think that Commissioner Edgar’s reference . . . at the bottom of Page 39 earlier is basically cover your rear for precedent that might be cited by an IOU, and that, to me that’s prudent also. This is a different case. It’s a municipal. It’s not the investor-owned.”). See also Revised Staff Recommendation, issued May 20, 2010, in Docket No. 090451-EM, In re: Joint Petition to determine need for Gainesville Renewable Energy Center in Alachua County, by Gainesville Regional Utilities and Gainesville Renewable Energy Center, LLC at 39 (“Staff notes . . . that if the petitioner were an IOU, our recommendation may have been different.”); Agenda Hr’g Tr. 42, Feb. 9, 2010 (Commissioner Edgar, opining: “I guess I would put forth . . . that balancing of circumstances and factors and criteria . . . may be different for a municipal facility than it would be for an investor-owned utility . . .”). Of course, it is no wonder that Commissioner Klement had difficulty following Commissioner Edgar’s implied aims; after all, from the standpoint of achieving transparency it makes little sense to recognize a distinction that one believes to be important throughout the decision-making process yet be unwilling to fully articulate that distinction in the final order.

directions to treat need determination applications from municipalities differently than those from investor-owned utilities. See § 403.519(3), Fla. Stat. Simply, if the legislature wanted them to be treated differently, it would have said so.¹⁶

Next, the majority believes that the decisions of a municipality are accountable politically, while those of a private utility company are not, and that this distinction is critical and justifies alternative levels of scrutiny under Section 403.519(3), Florida Statutes. Acknowledging the aspect of political accountability, the majority concludes that there is therefore a lower standard for municipalities than for investor-owned utilities. This conclusion is erroneous. The legislature is aware of such political accountability, and did not recognize this as deserving mention, let alone the alternative levels of scrutiny the majority envisions. The legislature crafted need determination language that treats investor-owned utilities and municipalities identically. See § 403.519(3), Fla. Stat. The majority has improperly *attached a significance* to a fact that the legislature has not.

Third, an added remedy may be only an added remedy, not a lower standard of scrutiny. This can be illustrated from the perspective of a ratepayer who is being forced to pay for an unnecessary power-plant: the result is the same whether the plant is built by an investor-owned utility or a municipality; the only difference is the value of the vote as a remedy.¹⁷ Thus the majority has accepted the unremarkable truth that residents of municipalities may vote if they so choose, and then reasoned that the added value of this remedy justifies less vigorous review on their part. The majority has correctly recognized a fact, but then assumed something further that does not follow.

Fourth, assume for the sake of argument that my two most recent points—(1) that the majority is unjustified in attaching special significance to a fact that the legislature has not, and (2) that an added remedy may mean only an added remedy, not a lower standard of scrutiny—are unconvincing. That is, assume that the majority is correct that under Section 403.519(3), Florida Statutes, the notion of political accountability is relevant to differentiating need determinations between investor-owned utilities and municipalities. The majority may still have misperceived the value of this distinction. I believe that the majority has done this: it overvalues the distinction. In my view the argument is, at best, a makeweight; it does not turn this Commission into a laundromat for poor or ill-timed plans. If the legislature had intended the Commission to abdicate its role in need determinations to local governments (as the majority in this case has in

¹⁶ The argument can be made that the legislature intended to provide the Commission with significant discretion in need determinations by including that “[t]he commission shall also expressly consider . . . conservation measures . . . and other matters within its jurisdiction which it deems relevant.” § 403.519(3), Fla. Stat. Yet the link between the political accountability of decisions made by the City of Gainesville and matters within the Commission’s jurisdiction appears fairly attenuated, and thus stretches the bounds of fair license. But regardless of whether that may be, the discretionary nature of *whether to* treat investor-owned utilities and municipalities differently under Section 403.519(3), Florida Statutes, does not undermine the claim just made that need determinations involving investor-owned utilities and municipalities *need not* be treated differently and that if the legislature wanted them treated differently it could have said as much. Furthermore, even if the discretionary aspect of the statute is admitted, one can still dispute that the majority uses this discretion appropriately.

¹⁷ Unfortunately new local regimes usually cannot simply void 30-year contracts.

fact done),¹⁸ it would have exempted municipalities from the requirement, as it has exempted municipalities from rate oversight. Compare § 403.519(3), Fla. Stat. with § 366.02(1), Fla. Stat. The legislature has not done so.

Fifth, reason counsels against the majority's conclusion that municipalities should face a lower standard of scrutiny than investor-owned utilities, for Section 366.051, Florida Statutes, and Rules 25-17.0825, 25-17.0832, 25-17.240, and 25-17.250, Florida Administrative Code, limit the risk borne by ratepayers of investor-owned utilities and shift the risk above that of avoided cost to shareholders; by contrast, with a municipal or an electric cooperative the entire risk is borne by the ratepayers. That is, Section 366.051, Florida Statutes, provides ratepayers of investor-owned utilities with a safeguard that does not exist for ratepayers of municipalities. Thus if the majority's notion of political accountability lowered the standard of scrutiny for municipalities, the comparative lack of protection that ratepayers face because Section 366.051, Florida Statutes, does not apply to municipalities should raise that standard back up (equal to or even arguably above the standard for investor-owned utilities), for it makes the Commission's approval of need pursuant to Section 403.519(3), Florida Statutes, all the more significant.¹⁹ If the majority is going to minutely compare the appropriate level of scrutiny for investor-owned utilities and municipalities, it is only fair to consider the differences between existent safeguards along with the imagined.

To sum up thus far: the majority's conclusion that Section 403.519(3), Florida Statutes, conceals two separate and alternative levels of scrutiny—one a legitimate standard for investor-owned utilities, another a slack and permissive standard for municipalities—is not supported by a plain reading of the statute; attaches an unjustified, extraordinary significance to the fact that residents of municipalities may vote; wrongly assumes that an added remedy justifies a lower standard, rather than merely being an added remedy; overvalues the importance of a distinction of its own invention; and wrongly concludes that municipalities should face a lower standard of scrutiny than investor-owned utilities even though existent safeguards indicate otherwise. Unfortunately there is still more.

After abandoning its post under Section 403.519(3), Florida Statutes, the majority tries to distance the Commission from the consequences of doing so.²⁰ Aside from the fact that this is an overt attempt to skirt accountability for their decision, the majority's approach—including a

¹⁸ E.g., Agenda Hr'g Tr. 37, Feb. 9, 2010 (Commissioner Skop, stating: "So at least from my perspective, it's not for me to . . . impart my judgment. [A]t the end of the day it is really not for me to tell the City of Gainesville what they should do or what they should not do.").

¹⁹ And it could be argued that the statutory elements of "the need for adequate electricity at reasonable cost" and "whether the proposed plant is the most cost-effective alternative available" take on added weight in such a scenario.

²⁰ Agenda Hr'g Tr. 42, Feb. 9, 2010 (Commissioner Skop, stating: "I don't feel that the Commission should take the blame if GRU and the City of Gainesville fails to execute and fails to mitigate all of this risk. Again, they are taking a huge risk with the ratepayers' money here. So I think that if the Commission does decide to move forward with granting approval of this need determination, that the Commission should clearly distance itself from some of the risk inherent with this project . . ."); Agenda Hr'g Tr. 45 (Commissioner Skop, stating: "GRU is taking the risk, but the Commission is equally taking the risk without distancing itself from this abundance of risk in terms of if the Commission were to move forward with granting approval of the need determination.").

section in the Commission's order entitled "risk management"²¹—only creates more problems. This is not "comfort language."²² It is a list of allowable deficiencies. A municipality may now receive approval for a need determination without mitigating the substantial risk associated with lack of a plan for selling excess generation capacity from the proposed unit and from existing units, for proceeding without a contractual source of long-term fuel supply, and without mitigation plans for potential changes to environmental regulations that could significantly alter the financial viability of the project.

Moreover, if one is concerned, as I am, that the majority's tiered levels of scrutiny under the same exact statutory language is untenable, then one should not be satisfied that the majority's slack and permissive standard with allowable deficiencies will be limited to cases involving municipalities. In other words, I have no confidence, as the majority does, that certain language in the order is an adequate "cover your rear for precedent that might be cited by an [investor-owned utility]" Special Agenda Hr'g Tr. 78, May 27, 2010 (Commissioner Klement, commenting). Nor am I assured that "an investor-owned utility would not take the regulatory risk of petitioning the Commission for this type of project, given the existing underlying margins, the lack of definitization of contracts and such." Special Agenda Hr'g Tr. 78-79 (Commissioner Skop, commenting).

There are significant defects in the majority's construction of the relevant statutory scheme; I cannot join their reasoning. I hope the majority's decision is only an isolated case of confusion, rather than a sign of an enduring malady.²³

²¹ Special Agenda Hr'g Tr. 86-88, May 27, 2010 ("GRU does not have a need for additional baseload generation capacity until 2023. Additionally, the Florida Public Service Commission does not regulate GRU electric rates. Furthermore, many of the financial, contractual, and environmental regulation aspects associated with the proposed biomass generating unit were not yet fully known or definitized at the time this case was decided. Based on the above, it is incumbent on GRU and the City of Gainesville to mitigate the substantial risks associated with the proposed biomass generating unit . . ."). This initial description of the project's risks was subsequently revised because the majority was uncomfortable with its honesty. See Special Agenda Hr'g Tr. 97 (Commissioner Edgar, stating: "A suggestion . . . would be in the . . . beginning of the first sentence under risk management to change the wording slightly but not the intent so that the first sentence would read, 'As with most power generation projects, there are uncertainties about the economics of the proposed biomass project.' . . . Then the second paragraph, I would slightly change the words in the middle . . . I would delete the words 'the substantial risk' and input . . . instead 'ratepayer impact.'").

²² Special Agenda Hr'g Tr. 97 (characterizing the risk management section as "comfort language").

²³ See Agenda Hr'g Tr. 36, Feb. 9, 2010 (Commissioner Skop, stating: "I'm struggling for words here, but weighing the statutory criteria, Commissioner Edgar mentioned this also, what are we supposed to do as a Commission? This one is really atypical because it involves a municipality and it is not as clear-cut."); Agenda Hr'g Tr. 41 (Commissioner Edgar, stating: "I really appreciate the comments of Commissioner Skop as to what is -- my words, what is our role, which is something that I touched on when we started this discussion today, and something that I am still grappling with. . . . Is it to basically bless a request from a municipal that comes before us because they are a local government and have all of those aspects that are different from an IOU, or is it to -- well, let me just put it there. Is our role -- and I know we have talked about this earlier, but I'm still obviously grappling with it -- what is our role . . ."); Agenda Hr'g Tr. 56-57 (Commissioner Edgar, stating: "[M]y understanding is that under the statute we have exclusive jurisdiction to determine need under the criteria that is listed in, in the statute and that is our responsibility. I still come back in my own mind to how is that responsibility the same or different for a municipal versus IOU request for need determination, which I have had come before me? . . . What is our role with a

Insufficient Conditions for Approval of Need

This project does not satisfy statutory requirements for approval of need: the evidence reflects that the project is not needed to achieve system reliability or integrity; the provision of electricity at a reasonable cost is too uncertain and constitutes an unnecessary gamble; it was not demonstrated that the proposed plant was the most cost-effective alternative available; and conservation measures would only further mitigate the need for the proposed plant. Although the plant would help achieve greater fuel diversity, this is not enough to outweigh the other factors. While I commend the City of Gainesville for its forward-thinking vision, it is taking a large and unnecessary risk with its ratepayers' money.

GRU does not have a reliability need for additional capacity until 2023. The existing system is adequate to serve the area for more than a decade. And the City has a reserve margin of 66% at the time of this request. As another Commissioner puts this, "that's like having six cars in your garage, and you only drive one car every day, and then wanting to go out and buy a brand new car that you really don't need yet." Agenda Hr'g Tr. 42, Feb. 9, 2010 (Commissioner Skop, commenting).

Whether electricity will be provided at a reasonable cost is too uncertain and constitutes an unnecessary gamble given the lack of demonstrated need. The forecasts of cost vary widely—from a loss of approximately \$56 million, to a savings of \$448 million (which will be achieved *if* pending environmental regulations are enacted, those regulations deal favorably with biomass, regional woody biomass remains relatively inexpensive for the next 30 years, and GRU sells half of the generated capacity at full contract price).²⁴ I would have been more inclined to approve the project if there were more of a reason to take such a speculative gamble, such as if there were a need for additional capacity. Additionally I would have been more amenable to the project if risk-shifting mechanisms were available to prevent the entire risk from being borne by ratepayers. Cf. § 366.051, Fla. Stat. But there is no need and there are no protections.

It was not demonstrated that the proposed plant was the most cost-effective alternative available. There is considerable uncertainty regarding the economics of this project. Under certain assumptions no plant (a completely feasible alternative) is more cost-effective than the proposed plant.

Gainesville has implemented very successful energy conservation measures, raising the question of why the City has not taken advantage of the primary economic benefit of such measures—deferring the costs of new power-plants—and instead petitioned for a new plant ahead of demand. Conservation measures taken by and reasonably available to the City mitigate the need for the proposed plant.

municipal proposal? And I am still -- I am not 100 percent yet in my own mind, so I'm glad to have the open discussion . . .").

²⁴ See also Agenda Hr'g Tr. 37, Feb. 9, 2010 (Commissioner Skop, noting that "everything has to go perfect for this project to be economically viable, otherwise it's going to cost ratepayers at least \$100 million.")

The proposed plant does help improve fuel diversity. But the favorable aspects of fuel diversity could just as easily be achieved with a smaller, less expensive plant; for example, one below the 75 megawatts threshold that triggers a need determination pursuant to Section 403.503(14), Florida Statutes. Or fuel diversity could be improved at some point in the future—such as in 2023, when there will be a supply-side need for the plant.²⁵ This matters because the Petitioners have been unable to demonstrate a significant need for fuel diversity *at this time*.²⁶ In other words, fuel diversity would be a much more important factor if it were a pressing need, one where, for example, in the absence of improvement the utility would face rapidly rising costs.²⁷ There is no such immediate need here.

The sum of the above factors indicates that this project does not satisfy sufficient conditions for approval of need.²⁸

²⁵ See also Agenda Hr'g Tr. 61, Feb. 9, 2010 (Commissioner Skop, expounding: “[I]t’s the right idea, it’s just the wrong time. If they were trying to do this in 2020, absolutely, because they’d have the need for the 100 megawatts of additional baseload generation. They don’t have that need. They’ve got so many generating assets I’m surprised half of them aren’t sitting idle right now. So, again, there’s too many red flags . . .”).

²⁶ The Petitioners argue that greater fuel diversity is needed now as a hedge against future regulations. At first blush the argument has appeal. But there is difficulty quantifying (1) the temporal limits of this argument and (2) the degree of assurance necessary regarding the content of the supposedly impending legislation. In order to accept the Petitioners’ argument some showing must be made on both of these factors. In other words, why is legislation immediately relevant as opposed to in any other case or at any other time? What is it that makes *now* the time to act in anticipation of future regulation, and how do we know this, with at least a modicum of certainty (the kind which responsible persons are accustomed to relying on in serious matters), if the content of the legislation (*i.e.*, whether it will favorably or adversely impact the circumstances in this case—the treatment of biomass) has not been disclosed, is inconsistent or unclear, or is still open to change. To respond to these concerns the Petitioners have nothing more than that a bill was proposed in Congress. If this Commission proposes to rely on “impending legislation” as a justification for the reasonableness of multimillion dollar gambles, it should define the limits of that principle, rather than let it run wild.

Furthermore, although the Petitioners imply that now is the time to act because currently they can take advantage of subsidies, this does not assess the temporal question or the level of assurance necessary regarding the content of legislation; it only lessens the cost of taking unknown risks. This is reasonable, yet it also opens the door to the Intervenor’s description of the project: as one designed “to capitalize on the availability of subsidies in a classic carpetbagger wager that will make a few people richer while . . . the ratepayers will be left to pay the bill.” (Stahmer’s Post-Hearing Br. 6.)

²⁷ Thus this case is distinguishable from need determinations made during or near after an energy crisis. Cf. Order No. 10108, issued June 26, 1981, in Docket No. 810045-EU, In re: JEA/FPL’s Application of need for St. John’s River Power Park Units 1 and 2 and related facilities; Order No. 10320, issued October 2, 1981, in Docket No. 810180-EU, In re: Petition for Certification of Need for Orlando Utilities Commission, Curtis H. Stanton Energy Center Unit 1.

²⁸ See also Special Agenda Hr’g Tr. 57-58, May 27, 2010 (Commissioner Stevens, reasoning: “[W]orking through the requirements that we need to look at for the determination of need, I think that this is a very high risk project that we’re getting into. And with that risk, even though there’s some hedging here and there, I’m not sure this is cost-effective, we’re not told that it’s cost-effective. I don’t know if it’s providing electricity at a reasonable cost. It does have fuel diversity, but I don’t think the capacity is required. And so I’ll listen to discussions from other Commissioners, but I’m . . . having a hard time with the project.”); Agenda Hr’g Tr. 36, Feb. 9, 2010 (Commissioner Skop, agreeing: “It’s a real stretch to get you there on some of the criteria. I mean, Commissioner Stevens hit that nail on the head. Some of the criteria you just can’t get there. It’s basically fuel diversity is the only thread to hang on.”); Agenda Hr’g Tr. 33, Feb. 9, 2010 (Commissioner Skop, stating: “The approval of this project

COMMISSIONER STEVENS, dissenting without opinion.

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

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

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

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

goes against every aspect of my better judgment.”); Agenda Hr’g Tr. 68, Feb. 9, 2010 (Commissioner Skop, concluding: “I’ve listened to the discussion and, again, approval of this project goes against every aspect of my better judgment given the risks that exist and all the red flags. I . . . commend GRU for their initiative. But, again, if they were better situated in terms of needing baseload generation, this would be more palatable. But when you’re asking me to approve something just because you want to be green or you’re worried about carbon legislation but there’s no real need for it because you have so much excess generation to begin with, . . . basically all that does is strand ratepayer investment with excess generation.”).
