BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of negotiated power purchase agreement with U.S. EcoGen Polk, LLC by Progress Energy Florida, Inc.	DOCKET NO. 110090-EQ ORDER NO. PSC-11-0439-PAA-EQ ISSUED: October 3, 2011

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman
LISA POLAK EDGAR
RONALD A. BRISÉ
EDUARDO E. BALBIS
JULIE I. BROWN

NOTICE OF PROPOSED AGENCY ACTION
ORDER APPROVING NEGOTIATED POWER PURCHASE AGREEMENT
BETWEEN PROGRESS ENERGY FLORIDA, INC., AND U.S. ECOGEN POLK, LLC.

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

BACKGROUND

On April 1, 2011, Progress Energy Florida, Inc., (PEF or company) filed a petition requesting approval of a negotiated contract for the purchase of firm capacity and energy (contract) between U.S. EcoGen Polk, LLC (EcoGen) and PEF, dated March 28, 2011. The negotiated contract is based on EcoGen constructing, owning, and operating a biomass electric generating facility (Facility), to be located in Polk County, Florida. EcoGen proposes to sell 60 megawatts (MW) of firm capacity and associated energy from the Facility to PEF for an approximate 30-year period from January 1, 2014, through May 31, 2043.

On May 26, 2011, PEF filed two revised negotiated contract sheets. The changes included correcting typographical errors and providing a table that had previously been omitted.

On August 17, 2011, letters were filed in support of the EcoGen Facility by the Polk County Board of Commissioners, the Polk County Manager, and the Central Florida Development Council. On August 26, 2011, Hacklake Forests, LLLP filed a letter of support, and on September 1, 2011, the Central Florida Regional Planning Council also filed a letter of support.

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We have jurisdiction over this matter pursuant to Sections 366.051, 366.81, and 366.91, Florida Statutes (F.S.).

DISCUSSION

EcoGen proposes to sell 60 megawatts (MW) of firm capacity and energy from its Facility to PEF for a term from January 1, 2014, through May 31, 2043. Rule 25-17.0832(3), Florida Administrative Code (F.A.C.), states that in reviewing negotiated firm capacity and energy contracts for the purpose of cost recovery, factors relating to the contract that would impact the utility's general body of retail and wholesale customers should be considered including: need for power, the cost-effectiveness of the contract, security provisions for early payments, and performance guarantees associated with the Facility. These factors are evaluated below.

A. Need for Power

PEF's 2011 Ten-Year Site Plan (TYSP) shows the next planned capacity addition in 2020, when it anticipates bringing into service a 178 MW natural gas-fired combustion turbine. The 2011 TYSP does not include the 60 MW of committed capacity from this contract, which has an in-service date of 2014. As the in-service date of the Facility is earlier than the avoided unit, it is important to note that the business requirements for renewable generators do not always match the reliability needs of a utility. As such, security provisions are required in purchased power contracts with early capacity payments, as discussed in Part C, below.

Although the proposed facility alone provides a relatively small reliability benefit, the accumulation of several purchased power contracts from renewable facilities may help to defer the construction of a future utility generation unit. Our policy has been to approve cost-effective contracts that use renewable resources as the primary fuel. Rule 25-17.001(5)(d), F.A.C., encourages electric utilities to:

> "Aggressively integrate nontraditional sources of power generation including cogenerators with high thermal efficiency and small power producers using renewable fuels into the various utility service areas near utility load centers to the extent cost effective and reliable."

Therefore, we find that the proposed negotiated contract will enhance PEF's system reliability, encourage the use of renewable fuels in Florida, and promote fuel diversity for PEF's ratepayers.

B. Cost-Effectiveness

Rule 25-17.0832(3)(b), F.A.C., states in part that consideration should be given as to whether the cumulative present worth of payments to a qualifying facility are no greater than the cumulative present worth of the purchasing utility's avoided cost of capacity and energy. A utility's full avoided cost is reflected in its Standard Offer Contract (Standard Offer), which is filed annually on April 1, as required by Rule 25-17.250, F.A.C. Payments in the Standard Offer

are broken into two categories: fixed capacity payments based on the unit's capital cost and fixed O&M, and variable energy rates based on as-available energy and the avoided unit's estimated fuel costs and variable O&M.

PEF and EcoGen began negotiations in early 2010. These negotiations were based on the 2010 Standard Offer, which was filed April 1, 2010, and approved July 21, 2010.[1] PEF's Petition for approval of its negotiated contract with EcoGen was filed on April 1, 2011, along with the company's TYSP and 2011 Standard Offer. When the petition was filed, the 2010 Standard Offer had already expired, based on (1) Rule 25-17.250(3), F.A.C., as the in-service date for the avoided unit had changed in the 2011 TYSP; and (2) the terms and conditions of the 2010 Standard Offer, which had an expiration date of April 1, 2011. The 2011 Standard Offer was approved on July 8, 2011.[2]

Historically, when approval of a negotiated contract stretched between years and therefore Standard Offers, both Standard Offers are considered when evaluating the contract for cost recovery purposes.[3] The practice of using the most recent fuel forecast and avoided unit is also appropriate when considering the cost-effectiveness. However, unlike several previous decisions, here, the use of more recent data causes a decline in the contract's cost-effectiveness, as discussed below.

Table 1 summarizes the three cost-effectiveness scenarios for the EcoGen contract, as discussed below.

Table 1 - Cost-Effectiveness Comparison of Scenarios

Reference	Cumulative NPV Savings	Estimated Date NPV Savings Begin
	(2011 $000)	(Year)
2010 Standard Offer w/Oct. 2009 Fuel Forecast (PEF's Petition)	$59,818	Year 4 of 30
2010 Standard Offer w/Sept. 2010 Fuel Forecast	$6,804	Year 26 of 30
2011 Standard Offer w/ Sept. 2010 Fuel Forecast	$814	Year 29 of 30

In its Petition, PEF provided a cost-effectiveness analysis based on the 2010 Standard Offer, compared to the negotiated contract's fixed capacity and energy rates. The 2010 Standard Offer has a natural gas-fired combustion turbine with a 178 MW summer rating scheduled to be in-service in 2018. The fuel forecast used in PEF's Petition was developed in October 2009, as part of the 2010 TYSP development. EcoGen's Facility was assumed to have a capacity of 60

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[1] See Order No. PSC-10-0464-TRF-EI, issued July 21, 2010, in Docket No. 100168-EI – In re: Petition for approval of amended standard offer contract, by Progress Energy Florida.

[2] See Order No. PSC-11-0295-TRF-EI, issued on July 8, 2011, in Docket No. 110092-EI – In Re: Petition for approval of amended standard offer contract, by Progress Energy Florida, Inc.

[3] See Order No. PSC-09-0562-PAA-EQ, issued August 14, 2009, in Docket No. 090150-EQ - In re: Petition for approval of a modification to existing negotiated renewable energy contract with Solid Waste Authority of Palm Beach County, by Florida Power & Light Company; and Order No. PSC-09-0851-PAA-EQ, issued December 30, 2009, in Docket No. 090371-EQ - In re: Petition for approval of amended negotiated purchase power contract with Vision / FL, LLC by Progress Energy Florida.

MW and to operate for the full duration of the contract at a capacity factor of 94 percent, producing a net savings to ratepayers of $59.8 million in net present value (NPV) over the approximate 30-year term. Based on the estimated payments, customers would begin accruing NPV savings in the fourth year of the thirty-year contract.

By fixing energy payment rates, the rates are not allowed to float with changes to the avoided unit's fuel costs. This allocates all the risk of fuel price fluctuations from EcoGen to PEF's ratepayers. For example, if fuel costs do not escalate as quickly as projected in the contract, it may result in a NPV loss. Conversely, if fuel costs escalate faster, customers would see an increased benefit. Regardless, PEF would remain obligated to pay the contracted rate and may seek to recover the costs from the ratepayers through the fuel cost recovery clause, subject to our review.

Given the fixed nature of the contract's payments, and the contract's reliance upon lower fuel payments to be cost-effective, additional scenarios were requested from PEF to provide an updated analysis.

The first scenario compares the EcoGen contract to the 2010 Standard Offer using an updated fuel forecast. The updated fuel forecast was published by PEF's fuel forecasting vendor in September 2010, as part of the development of the 2011 Ten-Year Site Plan, which was filed the same day as this Petition. While avoided capacity costs remain the same, there is a considerable downward shift in the avoided energy costs. As the contract prices are fixed, this reduces PEF's original estimate of savings by 88.6 percent, to only $6.8 million. The updated fuel forecast also pushes back the point where customers begin receiving NPV benefits from year 4 to year 26 of the contract.

The second scenario compares the EcoGen contract to the 2011 Standard Offer, which also uses the updated fuel forecast discussed above, and is considered to be the most recent estimate of avoided cost available. The 2011 Standard Offer features a later in-service date for the avoided unit by two years, in 2020, and a lower discount rate. Overall, this causes the avoided capacity costs to be reduced compared to the original analysis. Combined with the impact of the updated fuel forecast above, the contract's savings decrease significantly. When compared to PEF's most recent estimate of avoided cost, the contract's savings are marginal, at only $0.8 million, or a 98.6 percent reduction in savings from PEF's original estimate. Under this scenario customers realize NPV savings in only the last two years of the contract.

For the most recent estimate of avoided cost analysis, PEF used a long-term natural gas price forecast taken from the 2011 TYSP, which was prepared by averaging three reputable forecasts: the Ventyx Fall 2010 forecast (converted to nominal dollars at an escalation rate of 2.4 percent), the CERA forecast dated September 2010, and the Energy Information Administration (EIA) forecast dated April 2010.

A comparison was made between PEF's 2011 long-term natural gas price forecast to EIA's long-term natural gas price forecast released in April 2011. PEF's prices are higher for

the first 11 years of the project (2014 to 2025).[4] After 2025, PEF's prices are generally in line with the EIA's forecast. PEF and EIA's forecasts generally follow the same trend. Also, PEF's forecast is an average of three reputable forecasts, which equates that PEF's forecast is a reasonable long-term natural gas price forecast for purposes of a project NPV analysis.

Our rules contemplate contracts featuring fixed prices for capacity and energy; and PEF has signed, and we have approved, several contracts featuring fixed prices for capacity and energy, including combined capacity/energy payments.[5] However, the previous contracts were estimated to provide significant savings under various scenarios, as compare to this contract, which does not.

While the company does not make a return on purchased power, it is responsible for protecting the ratepayers during negotiations with renewable power providers and should include terms and conditions that minimize risk to the company's general body of ratepayers. By using fixed prices for all components of the contract, risks associated with fuel price fluctuations are shifted to the ratepayers, and away from the renewable generator. PEF should strive in its future negotiations to be diligent in protecting its ratepayers from undue or excessive risk. Notwithstanding the benefits of a negotiated purchase power agreement, in negotiating future contracts and to protect the ratepayers, utilities and companies should strive to adhere to Rule 25-17.250, F.A.C., in that only a portion of the base energy costs associated with the avoided unit shall be fixed, and prospectively, utilities should strive not to established a "100 percent fixed" or a majority fixed base energy cost.

Therefore, while the contract is only marginally cost-effective, it meets the required minimum qualifications. Since the capacity and energy payments are fixed, this contract is a form of hedging against potential increases in fuel prices. As a result, the negotiated contract requires strong security and performance provisions, discussed below, to ensure that the Facility delivers firm capacity and energy for the full duration.

C. Security Provisions for Early Capacity Payments

We recognize the need for security as a protection for contracts in which the renewable provider receives capacity payments prior to the in-service date of the avoided unit. These early capacity payments incur an early cost to ratepayers that is gradually recovered over the term of the contract with lower payments in outer years and may require several years to realize savings. Security is designed to ensure repayment of early costs that are incurred but may not be fully

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[4] Annual Energy Outlook 2011, Reference Case. This natural gas price forecast is in 2009 dollars. Our staff converted these prices to nominal dollars using a 2.4 percent assumed general inflation rate.

[5] See Order No. PSC-07-0911-PAA-EQ, issued November 9, 2007, in Docket No. 070561-EQ – In re: Petition for approval of negotiated power purchase contract for purchase of firm capacity and energy with BG&E of Florida, LLC, by Progress Energy Florida; Order No. PSC-08-0131-PAA-EQ, issued March 3, 2008, in Docket No. 070726-EQ – In re: Petition for approval of second negotiated power purchase contract for purchase of firm capacity and energy with BG&E of Florida, LLC, by Progress Energy Florida, Inc.; Order No. PSC-09-0108-PAA-EQ, issued February 24, 2009, in Docket No. 080533-EQ – In re: Petition for approval of negotiated power purchase contract for purchase of firm capacity and energy with Horizon Energy Group, LLC, by Progress Energy Florida, Inc.; and Order No. PSC-09-0852-PAA-EQ, issued December 30, 2009, in Docket No. 090372-EQ – In re: Petition for approval of negotiated purchase power contract with FB Energy, LLC by Progress Energy Florida.

recovered as a result of a default during the term of the contract. Rule 25-17.0832(3)(c), F.A.C., requires consideration of whether sufficient security is provided by the contract for these payments.

The contract has several terms for the protection of ratepayers in the case of a default including a termination fee based on the difference of the early capacity payments PEF has received and what avoided unit it would have received. There is also collateral in the form of a letter of credit. Additionally, in the case of a default, PEF is eligible to receive the collateral related to the contract, which varies based on factors including the creditworthiness of the biomass facility. Within certain creditworthiness levels, there is no risk, and that the risk varies based upon what level of credit rating there is and how far out into the contract the default takes place. Additionally, there are multiple stages that must take place within the contract process before ratepayers are exposed to any risk in the event of a default, and the possibility of exposing ratepayers to a risk in the event of a default is a "worst-case scenario." In addition, per the terms of the contract, PEF has the ability to seek and obtain additional supplemental collateral if necessary.

D. Performance Guarantees Associated with the Facility

Performance guarantees, as included in this contract, detail how a Facility is to operate and require financial penalties or other remedies should it fail to do so within the contract's terms and conditions. Rule 25-17.0832(3)(d), F.A.C., requires the consideration of whether the utility's ratepayers will be protected by the contract's terms.

The performance guarantees contained in the negotiated contract are adequate. These protections include a scaled capacity payment in which the Facility would only receive a full capacity payment when it maintains an average capacity factor of 94 percent, with reduced payments until an average capacity factor of 74 percent. The negotiated contract also requires the Facility to maintain collateral, in cash held in an interest bearing escrow account, based on reaching certain milestones and EcoGen's credit rating. This collateral may be drawn upon by PEF in the event that the Facility is unable to deliver firm capacity and energy as stated in the terms and conditions of the contract.

Conclusion

We find it appropriate to approve the negotiated contract between US EcoGen Polk, LLC and Progress Energy Florida, Inc., although marginally cost-effective, as the contract meets established minimum requirements.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the negotiated contract between US EcoGen Polk, LLC and Progress Energy Florida, Inc., is hereby approved. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that in the event this Order becomes final, this docket shall be closed.

By ORDER of the Florida Public Service Commission this 3rd day of October, 2011.

ANN COLE
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399
(850) 413-6770
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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 that is available under Section 120.57, 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 will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This

petition must be received by the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on October 24, 2011.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.