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COMMISSION CLERK

-M-E-M-O-R-A-N-D-U-M-

DATE: May 12, 2011

TO: Office of Commission Clerk (Cole)

FROM: Division of Regulatory Analysis (Ma, Matthews)
Division of Economic Regulation (Franklin)
Office of the General Counsel (Brown)

Handwritten initials and signatures: JMC, TW, MR, PJ, CMB, MCB, M, BMY, @

RE: Docket No. 110047-EQ – Petition for approval of negotiated purchase power contract with Trans World Energy LLC by Progress Energy Florida, Inc.

AGENDA: 05/24/11 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: ~~Administrative~~ *Brown (corrected 5/13/11) ac*

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\RAD\WP\110047.RCM.DOC

Case Background

On February 3, 2011, Progress Energy Florida, Inc. (PEF) filed a Petition requesting approval of a negotiated contract for the purchase of firm capacity and energy between Trans World Energy LLC (Trans World) and PEF, dated January 20, 2011. The negotiated contract is based on Trans World constructing, owning, and operating a biomass electric generating facility (Trans World Facility or Facility) in Citrus County, Florida, with an in-service date of July 1, 2013. Trans World proposes to sell 40 Megawatts (MW) of firm capacity and associated energy from the Trans World Facility to PEF for a term of 20 years.

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The proposed Trans World Facility will use a gasified biomass product as its primary fuel and is planned to run at a capacity factor of 94 percent for an expected annual energy production of 329,373 Megawatt-hours (MWh). Trans World has obtained a letter of intent for fuel supply, but a fuel contract has not yet been signed. Additionally, Trans World plans to outsource some of its contract obligations such as the engineering, construction, and general contractor management to other companies. Trans World estimates that 100 jobs will be created in Florida during the construction phase and 45 jobs during the operation stage of the facility. Trans World has obtained financing for the proposed project. The proposed facility will operate as a Qualifying Facility as defined by Federal Energy Regulatory Commission rules 18 C.F.R. § 292.101 – 292.207 (1980) and Rule 25-17.080, Florida Administration Code (F.A.C.).

This recommendation addresses PEF's Petition for approval of the negotiated contract with Trans World. The Commission has jurisdiction over this matter pursuant to Sections 366.051, 366.91, and 366.92, Florida Statutes (F.S.).

Discussion of Issues

Issue 1: Should the Commission approve the Petition submitted by PEF requesting approval of a negotiated contract with the qualifying facility, Trans World Energy LLC?

Recommendation: Yes. The Negotiated Contract between PEF and Trans World provides PEF with a viable source of electric capacity and energy that meets all requirements and rules governing renewable energy producers. Payments for energy and capacity are expected to produce savings between \$61.6 million and \$28.5 million over the term of the contract. The performance security required in the contract sufficiently protects ratepayers in the event of default. (Ma, Matthews)

Staff Analysis: Trans World proposes to sell 40 MW of firm capacity and energy from the Facility to PEF for a 20-year term from the in-service date of July 1, 2013. Rule 25-17.0832(3), F.A.C., states that in reviewing a negotiated firm capacity and energy contract for the purpose of cost recovery, the Commission shall consider factors relating to the contract that would affect the utility's general body of retail and wholesale customers, including; need for power, cost-effectiveness of the contract, security provisions for early capacity payments, and performance guarantees associated with the generating facility. Each of these factors is evaluated below.

A. Need for Power

PEF's 2011 Ten-Year Site Plan shows the next planned capacity addition in 2020. However, it is important to note that the business requirements for renewable generators do not always match the reliability needs of a utility. The Negotiated Contract is proposed to provide capacity from 2013 through 2033 and overall payments have been found to be cost effective, as discussed 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. It has been the Commission's policy 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, staff believes 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

PEF provided an analysis in the Petition that compared the negotiated contract payments to the payments pursuant to the 2010 Standard Offer Contract, a 178 MW natural gas-fired combustion turbine that would come into service on June 1, 2018, with a 94 percent capacity factor. The negotiated contract payments were estimated to provide a Net Present Value (NPV) savings of \$61.6 million compared to the 2010 Standard Offer Contract. On April 1, 2010, PEF

filed a Petition for approval of its 2011 Standard Offer Contract that included a new avoided unit, a 178 MW natural gas-fired combustion turbine that would come into service on June 1, 2020.¹ Upon staff's request, PEF provided an additional analysis that compared the negotiated contract payments to the 2011 Standard Offer Contract. Given the later in-service date of the new avoided unit, the negotiated contract payments were estimated to produce NPV savings of \$28.5 million. These values are summarized in the table below:

Comparison of Projected NPV Savings from Negotiated Contract		
	Estimated Savings When Compared to:	
	2010 Standard Offer	2011 Standard Offer
NPV Total	\$61,597,000	\$28,453,000

These savings begin to accumulate from the start of the in-service date and produce savings each year for the life of the Facility.

Traditionally, payments to Qualifying Facilities have been divided into two parts, capacity and energy, and are based on the cost of capacity and energy from the designated avoided unit. The capacity portion (\$/kilowatt-month) is based on a specific rate and payment stream (levelized, normal, early, or early levelized). The energy portion (\$/MWh) is based on the current forecasted energy price of the avoided unit and is adjusted as actual fuel costs become known. PEF and Trans World, however, have agreed upon a fixed increasing rate payment (\$/MWh) method that combine both energy and capacity costs, so that the general contract payment rate includes both capacity and energy payments. This method of payment provides Trans World a predictable revenue stream that removes the risk of fuel cost fluctuations which would typically affect energy generation costs, but the benefit to the ratepayers will depend more heavily on overall changes in the cost of fuel. For example, if fuel costs decline in the future, PEF ratepayers would still be obligated to pay the possibly higher-cost fixed payments of the proposed contract through the fuel cost recovery clause. If fuel costs increase in the future, the benefits to PEF's ratepayers will increase from paying for relatively lower-cost fixed payments of the proposed contract.

Because of this general energy price dependency, staff requested fuel forecast sensitivity analyses of the contract to estimate the range of its fixed price. PEF provided a cost comparison of the negotiated contract payments to both the 2010 and 2011 Standard Offer avoided unit given base, low (15 percent decrease), and high (15 percent increase) natural gas price forecasts. These forecasts were based upon a reasonable natural gas price forecast provided by PIRA Energy Group. These cost analyses are summarized in the table below:

¹ See Docket No. 110092-EI - In re: Petition for approval of amended standard offer contract, by Progress Energy Florida, Inc.

Negotiated Contract Savings Versus Varying Fuel Forecast Scenarios						
	2010 Standard Offer			2011 Standard Offer		
	Low (-15%)	Base	High (+15%)	Low (-15%)	Base	High (+15%)
NPV Total Savings	\$29,330,000	\$61,597,000	\$93,864,000	\$(2,912,000)	\$28,453,000	\$59,819,000

The 2011 Standard Offer fuel forecast shows a projected savings from the negotiated contract of up to approximately \$59.8 million given a high fuel cost scenario, but also noted a risk of having a projected net cost of approximately \$2.9 million given a low fuel cost scenario. The Negotiated Contract payments in the early years of service track the beginning of the 2011 Standard Offer payments, therefore, when a sudden drop in fuel pricing in the immediate future is assumed, such as in the low fuel cost scenario, it is reasonable to expect the payments to the Trans World Facility to be above PEF's avoided costs.

Although there is a risk of overpaying given the specific scenario mentioned above, staff believes the risk is relatively small; and, the terms of the Negotiated Contract will allow PEF's customers to potentially have a much greater economic benefit from prices that may be lower than payments under either the 2010 or 2011 Standard Offer Contract.

C. Completion/Performance Security

Section 5 of the Negotiated Contract contains certain condition precedents in order for the contract to be fulfilled. For example, Trans World must obtain transmission service, finance documents, and proof of insurance, by January 20, 2013, or else the Negotiated Contract will terminate and neither Party shall have any further obligation to the other. Prior to January 20, 2013, Trans World will be required to deliver to PEF performance security collateral based upon the amount of committed capacity and Trans World's credit rating. In the event of a default, PEF is permitted to draw from the performance security to recover any damages to which PEF is entitled to. If Trans World is unable to meet the proposed in-service date of July 1, 2013, PEF is entitled to draw from the performance security in full.

When the Trans World Facility is operational, the expected annual energy produced will be 329,373 MWh, based upon a 94 percent capacity factor. The energy payment has been fixed and combined with the capacity payment, and the combined payment depends solely on the performance of the Trans World Facility for each individual month. Performance security provisions of the Negotiated Contract also require the proposed facility's Annual Billing Factor² (ABF) to be calculated monthly. In the event that the ABF for any rolling 12-month period is less than 74 percent, payment to Trans World for that month will be reduced by 5 percent. If

² The Annual Billing Factor is defined as the total amount of energy received, divided by the sum of the products of committed capacity and the number of hours for each of the most recently completed Monthly Billing Periods. This calculation shall be performed at the end of each Monthly Billing Period until enough Monthly Billing Periods have elapsed to calculate a 12-month rolling average.

Trans World fails to maintain an ABF of at least 74 percent for 12 consecutive months, it will be considered an event of default and PEF will receive the performance security discussed above.

Additionally, the Negotiated Contract requires Trans World to maintain a Termination Security through letter of credit covering a Termination Fee. The cumulative Termination Fee is calculated on a monthly basis as the difference between the Negotiated Contract and PEF's Standard Offer. If the ABF is maintained at or above 74 percent, a reduction value is applied on a sliding scale that reduces the cumulative Termination Fee. If the ABF of the Facility is less than 74 percent, the Termination Fee will accrue with no reduction. Upon any termination of the Negotiated Contract, PEF is entitled to receive the full amount of the Termination Security. This system compensates for payments to the proposed facility before the in-service date of the Standard Offer avoided unit.

Staff recommends that the provisions contained in the contract are sufficient to protect PEF's ratepayers if Trans World fails to deliver capacity and energy as specified by the Negotiated Contract or in the event Trans World defaults on its obligations.

Conclusion

The Negotiated Contract between PEF and Trans World provides PEF with a viable source of electric capacity and energy that meets all requirements and rules governing renewable energy producers. The contract is shown to be cost-effective under both the 2010 and 2011 Standard Offer Contract avoided units and beneficial to PEF ratepayers given varying natural gas fuel price scenarios. If a portion of the planned renewable generation cannot be implemented under the terms of this contract, the security provisions effectively mitigate the risk to the ratepayer. Considering these facts, staff recommends that the contract should be approved.

Docket No. 110047-EQ

Date: May 12, 2011

Issue 2: Should this docket be closed?

Recommendation: Yes. This docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (Brown)

Staff Analysis: This docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action.