## State of Florida



# Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

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

**DATE:** July 1, 2009

**TO:** Office of Commission Clerk (Cole)

**FROM:** Office of Strategic Analysis and Governmental Affairs (Garl, Marr)

Office of the General Counsel (Brubaker, Williams)

**RE:** Docket No. 090169-EI – Petition for approval of purchased power agreement

between Gulf Power Company and Shell Energy North America (US), L.P., dated

March 16, 2009.

**AGENDA:** 07/14/09 – Regular Agenda – Proposed Agency Action – Interested Persons May

Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER: Edgar

CRITICAL DATES: None

**SPECIAL INSTRUCTIONS:** None

FILE NAME AND LOCATION: S:\PSC\SGA\WP\090169.RCM.DOC

## **Case Background**

On April 6, 2009, Gulf Power Company (Gulf) filed a Petition requesting approval of a negotiated Power Purchase Agreement (PPA) for the purchase of firm capacity and energy between Shell Energy North America (US), L.P. (Shell) and Gulf, dated April 3, 2009. Gulf also requests recovery of costs to be incurred under the agreement and associated transmission delivery costs through Gulf's Purchased Power Capacity and Fuel and Purchased Power Cost Recovery Clauses.

The contract is based on Shell having contracted the rights, through 2023, to the capacity and energy output from the Tenaska Central Alabama natural gas-fired electric generating plant

near Montgomery, Alabama. Shell will sell 885 megawatts (MW) of capacity and energy from the facility to Gulf for a 14-year term from the date of Commission approval in 2009 through May 24, 2023.

This recommendation addresses Gulf's petition for approval of the agreement with Shell and cost recovery. To preserve its ability to negotiate, Gulf has requested confidentiality on some aspects of the contract, as noted in this recommendation. The Commission has jurisdiction over this matter pursuant to Sections 366.04, 366.041, and 366.076, Florida Statutes.

# **Discussion of Issues**

<u>Issue 1</u>: Should the petition submitted by Gulf, requesting approval of a purchased power agreement with Shell be approved?

**Recommendation**: Yes. Payments for capacity and energy are expected to yield over \$442 million in net present value savings to Gulf's ratepayers over the term of the contract when compared to Gulf's avoided unit. The performance security provisions in the agreement sufficiently protect ratepayers in the event of default. (Garl, Marr)

Staff Analysis: Pursuant to the terms of the agreement, Shell will sell firm capacity and energy to Gulf for a term from the date of Commission approval in 2009 through May 24, 2023. The energy will be generated at an existing facility, the Tenaska Central Alabama combined cycle generating facility north of Montgomery, Alabama. Shell contracted with Tenaska for the rights to all output from the facility beginning in 2003. Prior to the proposed agreement with Gulf, the Tenaska facility operated at low capacity factors due to transmission interconnection limitations. Energy was sold on the spot market. Under the proposed agreement, Gulf will purchase the facility's full output from Shell. The generation facility will be fueled by natural gas or oil supplied by Gulf. The committed capacity of the facility is 885 MW, with the firm capacity to be determined by annual testing of the facility. For the comparative avoided unit, Gulf used a planned 840 MW combined cycle gas-fired plant, Crist 8 (the Crist Unit), with an estimated inservice date of June 2014, as reflected in Gulf's 2009 Ten-Year Site Plan.

Neither statutes nor rules specifically address requirements to be met for power purchase agreements for energy from generation plants using a non-renewable fuel. However, Rule 25-17.0832(3), F.A.C., specifies requirements for a renewable-fueled source and provides a rational evaluation tool for non-renewable fueled generation as well. The Rule requires consideration of the need for power, the cost-effectiveness of the contract, security provisions for capacity payments, and performance guarantees. Each of these factors is evaluated below.

## A. Need for Power

Gulf's generating capacity will fall short of the projected load beginning in 2010 after considering demand-side management and a 15 percent reserve margin. Between 2010 and 2013 the shortfall is expected to increase from 51 MW to 410 MW. As a participant in the Southern Electric System (SES) Integrated Resource Planning (IRP) process, however, Gulf's capacity shortages in this four-year period are offset by surplus capacity from others in the SES. Projected surpluses within the SES become insufficient to offset all of Gulf's projected capacity shortage of 976 MW to meet a 15 percent reserve margin in 2014.

The IRP process had identified the need for more generation capacity within Gulf's system in 2014, which prompted Gulf to initiate the Request for Proposal (RFP) process required by Rule 25-22.082, F.A.C., better known as the "Bid Rule." In September 2008, shortly before the RFP was to be issued, Gulf became aware of an opportunity to purchase the required capacity from Shell. Gulf, therefore, postponed issuance of its RFP and began exploring the possibility of an agreement with Shell. Initial review of Shell's requirements revealed that Shell wished to have a contract signed and delivery begin in 2009 for the term of Shell's contract with Tenaska,

through May 2023. Had Gulf opted to await a response from Shell to Gulf's RFP for capacity in 2014, Gulf was convinced that Shell would have bid a higher price for capacity in 2014 and beyond, if they had bothered to bid at all. Gulf continued negotiations with Shell for about six months to reach an agreement. The resulting purchased power agreement, signed on March 16, 2009, will provide Gulf with 885 MW of capacity in 2014, versus a self-build option providing 840 MW beginning service the same year.

During the period from 2009 until 2014, Gulf intends to use the existing Central Alabama unit as a non-firm energy resource until firm transmission service is available because of the transmission limitations. Gulf will not be relying on capacity from the existing Central Alabama unit for reliability purposes prior to the summer of 2014. Gulf expects to be able to receive energy (and projected energy cost savings) during the 2009 to May 2014 period prior to completion of the transmission system upgrades and purchase of annual firm gas and pipeline transportation.

Stated succinctly, Gulf needs an additional 976 MW of generation capacity in 2014, and Gulf can purchase 885 MW from Shell beginning that same year. The remaining 91 MW may be available from the SES.

#### **B.** Cost-Effectiveness

In many purchased power agreements, cost-effectiveness is often impacted by projected fuel costs. The Gulf-Shell PPA, however, is not impacted by fuel costs, because Gulf will purchase and deliver natural gas to the generation plant. The difference in the commodity price of natural gas prices is negligible between the Central Alabama plant and Gulf's avoided unit. Transportation costs for delivery of the fuel, however, are a factor. Due to greater pipeline competition in central Alabama, the estimated cost to deliver natural gas to the existing Central Alabama plant is \$10.4 million less than delivering the same gas to the planned Crist unit.

Another cost considered in Gulf's analysis is a requirement for \$69 million of associated transmission upgrades. The Federal Energy Regulatory Commission Transmission Facility Cost-Allocation Tariff provides for payments between the operating companies that are members of the SES for incremental transmission costs associated with one operating company (Gulf) locating or purchasing resources within the service area of another operating company (Alabama Power). Through these payments, a retail operating company (Gulf) appropriately bears incremental transmission costs attributable to such a resource procurement decision made on behalf of its customers. In reality, the transmission upgrades will be performed by and owned by Alabama Power. Alabama Power will have full responsibility for operation and maintenance of the transmission facilities. Gulf, in essence, will be renting the upgraded capability for the duration of the PPA. Upon reaching the term of the agreement, Alabama Power will retain ownership, and Gulf will cease paying the rental fee. Gulf estimates even higher transmissions costs would be incurred if the planned Crist unit were to be built.

The PPA term is 2009 to 2023. Gulf's proposal is to proceed with the PPA, subsequently building the Crist unit to begin operation at the end of the PPA term. Staff analyzed both the (confidential) cumulative net present worth total costs and customer bill impacts. The analysis

compared the last full year point for the Crist unit only versus the PPA followed by the Crist unit for the PPA term ending in 2022.

# **Cost-effectiveness Analysis**

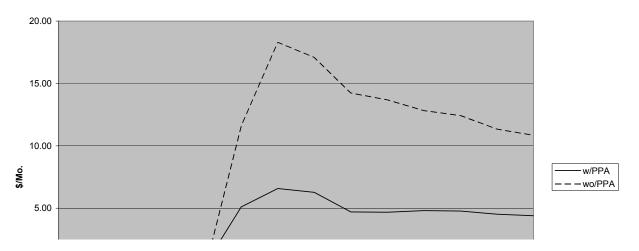
Scenario	Years	Duration	Difference in Cum. NPW of Total Costs from Crist only (\$000; 2009\$)	Customer Bill Impact @1,000kWh/mo	
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Crist Unit to 2022	2009-2022	13	\$0	\$	10.85
PPA Term	2009-2022	13	\$ (442,023)	\$	4.40

Table 1

As Table 1 displays, Gulf and its customers realize a substantial savings with the PPA providing energy from an existing facility and delaying construction of the Crist unit. In the last full year of the PPA term, 2022, the savings in cumulative net present worth (CNPW) of total costs is projected to be over \$442 million, while the typical customer bill will be \$6.45 less with the PPA.

The points-in-time data clearly favors election of the PPA. The full spectrum of data, over time, shows much the same result, as Figure 1 shows below:

## **Customer Bill Impact**



The graphic picture clearly shows the cost of constructing the Crist unit for 2014 operation creates a sharp rise in customer bill impact in the 2013 to 2015 time frame. With the PPA providing capacity from 2014 through 2023, the construction cost of a new plant is delayed.

# C. Security for Capacity Payments

Since Gulf will pay Shell early capacity payments that are less than avoided cost, security for capacity payments is not required. Nonetheless, provisions in the agreement regarding undelivered energy having a negative impact on Shell's "availability factor" has the effect of reducing Shell's capacity payment. These provisions offer greater protection to Gulf and its customers than an outage event at a self-owned plant. Were a forced outage event to occur at a self-owned plant, Gulf would either have to use energy from the SES pool or go to the market for the needed power.

Staff believes the provisions contained in the contract are sufficient to protect Gulf's ratepayers in the event that Shell defaults on its obligations.

## **D. Performance Guarantees**

The agreement contains performance mechanisms that provide for reduced payments by Gulf to Shell for performance below established targets.

Gulf Power has the right to terminate the agreement in the event of certain defaults by Shell, including the failure of Shell to make required payments, post any required collateral, maintain certain minimum capacity and availability requirements, maintain required insurance or perform other material obligations under the agreement. Also, Gulf Power can terminate the agreement if the energy conversion agreement with Tenaska is terminated or the plant's interconnection agreement between Tenaska and Alabama Power Co. is terminated.

Shell may terminate the agreement in the event of certain defaults by Gulf Power, including the failure of Gulf Power to make required payments or to post any required collateral. In the event of an early termination of the agreement, the non-defaulting party will be entitled to certain damages as provided in the agreement. If either Gulf Power or Shell experiences certain credit rating downgrades, that company will be required to provide a letter of credit or certain other collateral.

Staff believes the provisions contained in the contract are sufficient to protect Gulf's ratepayers if Shell fails to deliver firm capacity and energy as specified by the contract.

#### Conclusion

The contract between Gulf and Shell provides Gulf with an existing source of electric capacity and energy that meets Gulf's forecasted demand need. The contract is shown to be cost-effective. If a portion of the planned generation cannot be delivered under the terms of this contract, the security provisions effectively mitigate the risk to Gulf's ratepayers. For these reasons, staff recommends that the agreement be approved.

<u>Issue 2</u>: Should Gulf be permitted to apply for recovery of costs to be incurred under the agreement and associated transmission delivery costs through Gulf's Purchased Power Capacity and Fuel and Purchased Power Cost Recovery Clauses?

**Recommendation**: Yes. Upon a showing by Gulf that expenses incurred under the agreement and associated transmission delivery costs are reasonable and prudently incurred, the company should be permitted to recover those costs through appropriate cost recovery clauses. (Garl, Marr)

<u>Staff Analysis</u>: Existing procedures and precedents provide utilities the opportunity to petition the Commission for recovery of expenditures for fuel, purchased power, and associated services, such as transmission costs. Staff believes that, upon a showing by Gulf that expenses incurred under the agreement and associated transmission delivery costs are reasonable and prudently incurred, the company should be permitted to recover those costs through appropriate cost recovery clauses.

**Issue 3**: 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. (Williams, Brubaker)

<u>Staff Analysis</u>: If no timely protest to the proposed agency action is filed within 21 days, this docket should be closed upon issuance of the Consummating Order.