

**Diamond Williams**

100154-EG

**From:** Marchman, Vickie L. [VLMARCHM@southernco.com]  
**Sent:** Monday, January 03, 2011 2:10 PM  
**To:** Filings@psc.state.fl.us  
**Subject:** Gulf Power Company's Response to Staff's Fifth Data Request  
**Attachments:** 1-3-11 Response to Staff's 5th Data Req.pdf

- A. s/Susan D. Ritenour  
Gulf Power Company  
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- B. Docket No. 100154-EG.
- C. Gulf Power Company
- D. Document consists of 39 pages.
- E. The attached document is Gulf's response to Staff's Fifth Data Request.

*Vickie Marchman*

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January 3, 2011

Ms. Ann Cole, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Fl. 32399-0850

Dear Ms. Cole:

Re: Docket No. 100154-EG

Enclosed is Gulf Power Company's response to Staff's Fifth Data Request, filed by electronic mail in the above docket.

Sincerely,

A handwritten signature in cursive script that reads "Terry A. Davis".

vm

Enclosures

cc: Beggs & Lane  
Jeffrey A. Stone, Esq.  
George Cavros, Esq.  
Suzanne Brownless, PA  
Katherine E. Fleming, Esq.  
Rick Chamberlain  
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General

1. How did Gulf determine the proportion of the rebate dollars to allocate to each program?

ANSWER:

The amount of dollars budgeted for rebates for Gulf's Solar Thermal Water Heating program is based on Gulf's experience with rebate levels of and actual customer participation in Gulf's 2009 Solar Thermal Water Heating Pilot program.

The amount of dollars budgeted for rebates for Gulf's Solar PV program is based on Gulf's experience with actual customer participation and installed capacity data collected through Gulf Power's Net Metering program.

The amount of dollars for the Solar for Schools program is based on an estimate of the funds required to support the installation of at least one 10 kW PV system per year including battery back-up and data acquisition equipment.

After subtracting the above three budget items from the cost cap, the remaining dollars allow Gulf to incorporate a low income component to the renewable program offerings and cover the administrative costs of these programs.

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2. How much money will be available for rebates in 2011, and what is the planned date that customers can apply for rebates? Please provide breakdowns for each program.

ANSWER:

Gulf has budgeted its annual renewable expenditure cap of \$900,338 which is broken down into each of the following categories:

Solar PV incentives: \$435,000

Solar Thermal Water Heating incentives: \$100,000

Solar for Schools incentives: \$140,000

Low-Income Solar Thermal Water Heating incentives: \$75,000

Program Administration: \$150,338

The total amount of money budgeted specifically for incentives in 2011 is, therefore, \$750,000. The date on which customers are able to apply for these incentives is ultimately a function of the timing of the Commission's approval of Gulf's program standards, the final content of the program standards and Gulf's implementation of a computer-based reservation process. Barring unforeseen circumstances, Gulf estimates that customers will be able to apply for these incentives no later than the second quarter of 2011.

3. Please explain whether and how administrative and marketing costs for each pilot program will be counted against the annual incentive cap for each pilot program.

ANSWER:

As indicated in the response to question #2, administrative and marketing costs are budgeted separately and will not be counted against the budgeted incentive amounts for each program.

- 4.
- a. Please explain whether administrative and marketing costs for the solar pilot programs will be commingled with similar costs of other demand-side management programs and recovered through "Common Expenses" in the Energy Conservation Cost Recovery Clause.
  - b. Gulf has stated that the IT costs for the pilot programs will diminish over time. Please provide yearly expenditures for the IT costs described in the DSM plan.
  - c. As the IT costs fall, how will that money be re-allocated?

ANSWER:

- a. Administrative and marketing costs for the solar pilot programs will not be commingled with similar costs of other demand-side management programs. They will be tracked separately and charged to the Program Administration budget for the renewable pilot programs.
- b. Gulf is in the process of evaluating the IT costs associated with the initial implementation of the renewable pilot programs and has not developed specific annual budget projections for IT. It is anticipated that a majority of the IT costs will be incurred during the initial development phase and that there will be a reduction in annual IT expenditures to maintain the programs.
- c. Gulf will evaluate incentive budgets as well as the Program Administration budget at least annually. Based on this evaluation of past expenditures, market conditions, customer participation, and equipment costs, Gulf will take appropriate budget action.

- 5.
- a. Please explain how Gulf will manage the requests for rebates that exceed the amount of rebates available in a given year.
  - b. Will customers who have applied to participate in a program whose funds have been exhausted retain their place in the queue for the next year when funds become available?
  - c. How will customers/installers be informed about the remaining funds available?

ANSWER:

- a. Reservations for a particular year's funding will begin October 1st of the previous year and close September 30th of the funding year. Reservations will be awarded to customers on a first come - first served basis but will only be awarded as long as funds are available. Once program funding for a year has been depleted, no additional reservation applications will be accepted for that year. Customers that are not able to apply for an incentive due to program funding being exhausted, are encouraged to apply early for the following year.
- b. See response to question #5a.
- c. Customers and installers will be informed of available funding through Gulf Power's website.

6. If upgrades to the grid are required for the interconnection of a photovoltaic system that will receive a solar rebate, who will be responsible for the costs?

ANSWER:

Per the terms of section 1(c) of Gulf's Standard Interconnection Agreement for Customer-Owned Tier 1 Renewable Generation, if a customer's system does not meet the requirements of section 1(a)-(b) of the Agreement, the customer would be responsible for all costs associated with additional design review, testing and/or equipment required by the Company. Upgrades outside of those contemplated by Gulf's Standard Interconnection Agreement would be handled on a case-by-case basis in accordance with applicable company procedures governing customer contributions in aid of construction.



7. How will the company treat any excess rebate funds from a program year?

ANSWER:

Gulf will evaluate incentive budgets as well as the Program Administration budget at least annually. Based on this evaluation of past expenditures, market conditions, customer participation, and equipment costs, Gulf will take appropriate budget action.

- 8.
- a. Please explain why a participating customer must have an energy audit after the application for the rebate.
  - b. Please explain whether Gulf will require a participating customer to have an audit, even if an audit has been done within the year previous to their rebate application.
  - c. Please explain whether customers will schedule audits when making reservations for rebates.
  - d. Please explain whether the audit must be completed before Gulf approves the application.
  - e. Would exempting customers who have had an energy audit within the year previous to their rebate application negatively impact the pilot programs or the company and its customers?

ANSWER:

- a. Requiring an energy audit after applying for an incentive benefits the customer and the effectiveness of the program. Energy audits help customers understand how they are using energy and how they can use that energy more efficiently to maximize the effectiveness of a renewable energy installation. Having the energy audit after applying for the incentive will also allow Gulf to provide the customer valuable information regarding the installation of their planned solar system and will also allow Gulf to verify that the customer is eligible for a rebate.
- b. Yes.
- c. When a customer applies for an incentive reservation, a request for an energy audit will automatically be generated for that customer.
- d. No. Gulf's approval of the application for an incentive reservation is not contingent upon completion of an energy audit.
- e. Yes. A customer may mistakenly believe they are eligible for a rebate. The energy audit performed after the application for the rebate eliminates confusion at this point.

9. Does Gulf intend to allocate audit costs required for rebates to the pilot program costs?

ANSWER:

No.

10. How will Gulf verify final installation and adherence to program standards? Will all systems have on-site company inspections?

**ANSWER:**

Adherence to program standards will be tracked and managed through a tracking system database and workflow management tool and will be verified by the program administrator. All final system installations will be verified by an on-site company inspection.

11. Please explain who will have ownership of renewable energy credits for each of the pilot programs.

ANSWER:

Recognizing that there is presently no Florida or federal renewable portfolio standard or similar legislation in place, and the attendant uncertainty surrounding the value of environmental attributes associated with the renewable pilot programs, it is possible that those environmental attributes could provide value to Gulf Power's general body of customers in the future. Given that Gulf's general body of customers will be funding a significant portion, or in the case of the Solar for Schools Program all, of the purchase price for the solar systems, Gulf believes that the environmental attributes associated with the energy generated by those systems should belong to Gulf for the benefit of its general body of customers.

12. Please explain how excess money within a program will be treated if money has been exhausted within another program in a single year.

ANSWER:

Gulf will evaluate incentive budgets as well as the Program Administration budget at least annually. Based on this evaluation of past expenditures, market conditions, customer participation, and equipment costs, Gulf will take appropriate budget action.

13. Please explain what obligations will be passed to the next owner of a system that has received rebates. For example, renewable energy credits, access to the system, data from the system.

**ANSWER:**

If the initial owner of the system executed a Standard Interconnection Agreement for Customer-Owned Renewable Generation Systems, the subsequent owner will be required, per the terms of section 14 of the Tier I Agreement or section 15 of the Tier II or Tier III Agreement, to assume in writing the prior owner's duties under the Agreement, or execute a new agreement. If the renewable technology at issue does not require a Standard Interconnection Agreement, the subsequent owner would have no additional obligations, other than the obligation to transfer ownership of environmental attributes to Gulf Power, beyond those imposed on similarly situated customers by Gulf's Tariff-based Rules and Regulations Governing Electric Service.

Solar Photovoltaic

14. Please explain why the equipment and installation specifications do not reference Rule 25-6.065, Florida Administrative Code, regarding interconnection and net metering of customer-owned renewable generation.

ANSWER:

To be eligible for Gulf's solar photovoltaic incentive, Gulf's proposed program standards require customers to execute a Standard Interconnection Agreement for Customer-Owned Renewable Generation Systems. This agreement implements the terms and conditions of Rule 25-6.065, Florida Administrative Code. It is expected that the solar PV systems and installations adhere to Rule 25-6.065, Florida Administrative Code.



15. Please explain whether the program participation standards should require the customer to sign a standard interconnection agreement and participate in net metering pursuant to Rule 25-6.065, Florida Administrative Code.

ANSWER:

Yes. Gulf's program participation standards do require the customer to sign a standard interconnection agreement and participate in net metering pursuant to Rule 25-6.065, Florida Administrative Code.

16. Please explain the justification of the 2 kW minimum rating for residential photovoltaic systems.

ANSWER:

The 2 kW minimum rating for photovoltaic systems is the same minimum system size requirement used to define eligible systems under the State of Florida's Solar Rebate Program. The minimum size requirement increases the overall administrative efficiency of a program.

17. Please define "premise" and "customer" as used in the incentive section of the Solar PV Program standards.
- a. Will a company or a customer with multiple properties and separate meters be able to receive rebates for multiple locations?
  - b. Would a customer be unable to receive a rebate if someone else at their premise received a rebate even if they had separate accounts, for example, customers of a strip mall or a business park?

ANSWER:

The term "premise" or "premises" is defined by Gulf's Tariff as a contiguous area, building or group of buildings, or portion of a building, joined together electrically as may be permitted by the applicable rules and regulations of the Company, occupied by one Customer and served through one meter. The term "customer" is defined by Gulf's Tariff as an individual, firm or organization that purchases service or is interconnected at one location under one rate classification, contract or schedule.

- a. Yes. Separate meters are distinct (separate) customers. Please see the definition of "customer" above.
- b. No. Separate accounts are distinct (separate) customers, and a premise is only occupied by one customer. The language, "someone else at their premise," used in the question is inconsistent with the definition of "premise." A premise is occupied by one customer.

18. Why is Florida Solar Energy Center certification not required for photovoltaic systems?

ANSWER:

Gulf is requiring PV systems to meet the same terms and conditions required in the Standard Interconnection Agreement for Customer-Owned Renewable Generation Systems as approved by the Florida Public Service Commission pursuant to Rule 25-6.065, F.A.C., which does not require Florida Solar Energy Center certification for PV systems. Gulf believes that PV systems meeting the terms and conditions of Gulf's Standard Interconnection Agreement provide adequate protection against poor performance and unsafe conditions.

Solar Thermal Water Heating

19. Please explain why Florida Solar Energy Center certification and approval of solar thermal systems is a prerequisite for participating in the Solar Thermal Water Heating pilot program.

ANSWER:

Gulf's experience with its Solar Thermal Water Heating Pilot in 2009 confirmed the benefit of requiring certification of solar thermal systems. Water heating systems, by their very nature, are composed of many components that need to be appropriately balanced with each other. Each component must be sized and fitted correctly to attain proper flow, temperature and pressure differentials, safety parameters, freeze protection, and optimum energy efficiency. Because of this need to properly balance a variety of components (tanks, pumps, tubes, sensors, collectors, etc.), the Florida Solar Energy Center (FSEC) provides some measure of benefit to consumers through their certification of solar thermal water heating systems.

20.

- a. Please explain the justification for having the customer schedule the energy audit after the application for the rebate.
- b. Will the company re-audit customers who have recently had an audit?
- c. How would the program be affected by having the 90 day clock start with the energy audit?

ANSWER:

- a. When a customer applies for an incentive reservation, a request for an energy audit will automatically be generated for that customer. Having the energy audit after applying for the incentive will serve as verification that the systems are not installed prior to the program effective date and that the incentive program is promoting the deployment of new solar systems.
- b. Yes.
- c. Having the 90 day clock start with the energy audit would negatively impact the program by allowing customers an opportunity to intentionally delay their availability for an audit and potentially hold reservations that may not be utilized.

21. The program standards for the Solar Thermal Water Heating Program state that “an eligible solar thermal water heating system may qualify to receive a \$1,000 maximum incentive.”
- a. Please explain whether rebates will be \$1,000 per installation?
  - b. If not, please provide the calculation that will be used to determine the rebate.
  - c. What will the minimum rebate be?

ANSWER:

- a. Rebates will be \$1,000 per installation initially. Equipment costs are projected by the solar industry to decline. As that and other market fluctuations occur, rebates may be adjusted accordingly.
- b. Not applicable.
- c. Not applicable.

Solar for Schools

22. Will operations and maintenance costs for photovoltaic systems installed on schools be recovered from the pilot program's annual incentive budget? If not, please explain how such costs will be recovered or whether the school will be responsible for operation and maintenance.

ANSWER:

The annual Solar for Schools program budget includes provision for the proper operation and maintenance of the solar systems over the period of Gulf's ownership of those systems. Schools will be responsible for the operation and maintenance expenses of the systems immediately upon transfer of ownership to the schools.



23. Please define "competitive criteria" as used in the eligibility section of the Solar for Schools pilot program? Please provide the competitive criteria.

ANSWER:

Competitive criteria are standards upon which Gulf's selection of participating schools will be based. Selection and prioritization of participating schools will be based on the following criteria: geographic information, school/shelter information, educational interests and support, and commitment to energy efficiency and renewable education.

24.

- a. Who will make the decision to add battery back-up to the installation?
- b. What criteria will be used in making the decision?
- c. Will all systems get battery back-up?

ANSWER:

- a. Gulf Power will make the final decision whether or not to add battery back-up to an installation.
- b. The installation of battery back-up will be based upon whether or not the selected school serves as an emergency shelter, whether emergency generation back-up is already provided at the school, and whether or not there are any structural or physical limitations at the school site that may not be conducive to the installation of battery back-up.
- c. Only selected schools that are classified as emergency shelters will have the option of receiving battery back-up.

25. Will photovoltaic systems installed in the Solar for Schools Pilot Program comply with Rule 25-6.065, F.A.C.? If so, please explain whether application fees and costs associated with the interconnection will be included in the incentive.

**ANSWER:**

Yes. Photovoltaic systems installed in the Solar for Schools Pilot Program will comply with Rule 25-6.065, F.A.C. There are no application fees or costs associated with the interconnection of the systems that Gulf proposes to install under Solar for Schools Pilot Program.

26. Please explain who will own the renewable energy credits associated with the energy generated by systems installed in the Solar for Schools Pilot Program.

ANSWER:

Recognizing that there is presently no Florida or federal renewable portfolio standard or similar legislation in place, and the attendant uncertainty surrounding the value of environmental attributes associated with the Solar for Schools Program, it is possible that those environmental attributes could provide value to Gulf Power's general body of customers in the future. In the case of the Solar for Schools Program, Gulf's general body of customers will be funding the entire purchase price of the solar systems and the operating and maintenance costs of such systems for a period of five years. Gulf therefore believes that all of the environmental attributes associated with the energy generated by those systems should belong to Gulf for the benefit of its general body of customers.

27. Please explain if the company will be participating in the Sun Smart Schools program, administered by the Florida Solar Energy Center.
- a. If so, explain whether the Solar for Schools pilot program funds will be used to supplement funding of the planned projects in the Sun Smart Schools program or to fund additional projects.
  - b. If so, please explain if the company plans to coordinate the selection of schools with the Sun Smart Schools program.

ANSWER:

Gulf Power's Solar for Schools Pilot Program is independent of the Sun Smart Schools program but will effectively extend the educational reach of the Sun Smart Schools program by increasing the number of schools in the state receiving similar types of PV systems.

- a. Not applicable.
- b. Not applicable.

Solar Water Heating for Low-Income Residential Customers

28. Please identify the entity that approves the non-profit builders/agencies.

ANSWER:

Gulf will approve the non-profit builders/agencies participating in Gulf's Solar Thermal Water Heating for Low-Income Pilot Program.

29. Please provide a list of the non-profit builders/agencies.

ANSWER:

Gulf has not developed a list of builders/agencies qualified to participate in Gulf's Solar Thermal Water Heating for Low-Income Housing program. The non-profit builders/agencies would include entities qualifying to construct or administer Low-Income Public Housing, Section 8 Low-Income Housing, or Habitat for Humanity.

30. Will the program provide for a standard capacity solar water heating system for each installation? If so, please provide the capacity, in gallons per hour. If not, please explain why a standard capacity system will not be used.

ANSWER:

No. System capacities will vary based on number of occupants, hot water usage, available solar resource, and other design considerations at each selected residence.



31. Please explain the requirement that a home have a minimum of 4 residents.

ANSWER:

A minimum of four residents is being required to ensure systems are being installed at locations that will maximize the water usage of the systems anticipated being installed, which helps to maximize the effectiveness of the installation.

32. What percentage of household hot water use is the program targeting?

ANSWER:

Gulf's program standards did not target a specific level of household water usage.

33. Why is Florida Solar Energy Center certification and approval of solar water heating systems a prerequisite for participating in the Solar Thermal Water Heating for Low Income Housing program?

ANSWER:

Please see response to question #19.

Data Collection

34. Please explain how Gulf will measure and verify energy production and savings from devices funded through the pilot programs.

ANSWER:

Gulf will utilize customer and system information collected during the application and final approval process to calculate energy production and savings from the systems funded through the pilot programs.

35. Please explain how Gulf will determine cost effectiveness.

ANSWER:

Gulf will utilize the Commission's prescribed methodology for determining program cost-effectiveness.

36. Please explain what criteria Gulf plans to use to determine if the pilot program has been successful.

ANSWER:

The following program performance indicators will be monitored and evaluated to determine the impact of the renewable pilot programs: the number of qualified participating customers, the total amount of incentive payments made, the number of disqualified applications or installations, the number of contractors installing eligible systems, and the quantity, type, and cost of systems installed over the period of the pilot.

37. Does Gulf plan to collect data from the solar devices installed through the pilot programs?
- a. If so, what is Gulf's plan for presenting the data to the FPSC?
  - b. If not, please explain

**ANSWER:**

Gulf does not plan to install any additional metering equipment on the solar devices installed through the Solar PV and Solar Thermal Water Heating programs. Energy and demand savings for these programs will be calculated using engineering estimates and customer/system information collected when the systems are installed. PV Systems installed under the Solar for Schools program will include data acquisition systems. Data collected pursuant to the Solar for Schools program will be used primarily for educational purposes at participating schools.

- a. Gulf will report annual energy and demand savings associated with all programs pursuant to Rule 25-17.0021(5), F.A.C. Data concerning interconnected renewable generation will be reported pursuant to Rule 25-6.065(10). Additional data will be presented to the FPSC as requested.
- b. See above.

38. Please explain what access Gulf will have to systems to gather data for the pilot programs.

ANSWER:

Gulf will have full access to systems installed under the Solar for Schools program during the period of Gulf's ownership of those systems.