Susan D. Ritenour Secretary and Treasurer and Regulatory Manager

One Energy Place Pensacola, Florida 32520-0781

Tel 850.444.6231 Fax 850.444.6026 FIECEIVED-FPSC

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> COMMISSION CLERK



November 23, 2010

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

# RE: Docket 100154-EG Gulf Power Company's Demand-Side Management Plan

Dear Ms. Cole:

In accordance with Commission Order Nos. PSC-10-0608-PAA-EG and PSC-10-0646-CO-EG, enclosed for filing and administrative approval are an original and five copies of Gulf Power's program standards for its Solar Pilot Programs.

Sincerely,

Susan D. Riterous

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СОМ	Attachment	
APA ECR	cc w/attach:	Beggs & Lane Jeffrey Stone
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ADM OPC		

DOCUMENT NUMBER-DATE 09591 NOV 24 2 FPSC-COMMISSION CLERK

#### IN RE: Petition for Approval of Demand-side Management Plan) Of Gulf Power Company

#### Docket No.: 100154-EG November 23, 2010

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing was furnished by U.S. mail this 23rd day of November, 2010, on the following:

)

RICK D. CHAMBERLAIN BEHRENS, TAYLOR, WHEELER & CHAMBERLAIN 6 N.E. 63<sup>RD</sup> STREET, SUITE 400 OKLAHOMA CITY, OK 73105 RDC\_LAW@SWBELL.NET

AUSLEY LAW FIRM

JAMES D. BEASLEY

POST OFFICE BOX 391

TALLAHASSEE, FL 32302

JBEASLEY @AUSLEY.COM

GEORGE CAVROS, ESQ. 120 E. OAKLAND PARK BLVD, STE. 105 FORT LAUDERDALE, FL 33334 GEORGE @ CAVROS-LAW.COM

SUZANNE BROWNLESS, PA 1975 BUFORD BLVD. TALLAHASSEE, FL 32308 SUZANNEBROWNLESS@COMCAST.NET Progress Energy Service Company John T. Burnett P.O. Box 14042 St. Petersburg, FL 33733-4042 JOHN.BURNETT@PGNMAIL.COM

KATHERINE E. FLEMING, ESQ. SENIOR ATTORNEY FL PUBLIC SERVICE COMMISSION 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FL 32399-0863 KEFLEMIN@PSC.STATE.FL.US

FLORIDA POWER & LIGHT COMPANY JESSICA A. CANO 700 UNIVERSE BOULEVARD JUNO BEACH, FL 33408-0420 JESSICA.CANO@FPL.COM

JEFFR

Florida Bar No. 325953 **RUSSELL A. BADDERS** Florida Bar No. 007455 **STEVEN R. GRIFFIN** Florida Bar No. 0627569 **BEGGS & LANE** P. O. Box 12950 Pensacola FL 32591-2950 (850) 432-2451 Attorneys for Gulf Power Company

## Solar PV Program

## **Program Standards**

Availability: This program is available to all Gulf Power customers meeting program eligibility requirements.

#### **Eligibility:**

- Customers must pre-qualify for the program by submitting a reservation application to Gulf Power prior to the installation of a solar PV system. Gulf's approval of this application is not a guarantee of incentive payment. The payment of an incentive will not be made until the final verification by Gulf personnel that all program standards have been met.
- The customer applying for the incentive must be the Gulf Power customer of record for the location at which the solar PV system will be installed.
- After Gulf's approval of the reservation application and prior to installation of the solar PV system, customers must participate in Gulf Power's Energy Audit program and must have an on-site Energy Audit performed.
- Systems must be installed by an eligible contractor and inspected by the local building code authority within 90 days of Gulf Power approving the reservation application.
- Systems must be installed by a State of Florida licensed electrician or solar contractor. Self-installations or do-it-yourself installations do not qualify.
- Systems must be rated at a minimum of 2 kW (DC power rating at standard test conditions). Systems less than 2 kW do not qualify.
- All major solar PV system components must be new (not previously used or refurbished).

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• Retrofits or upgrades to existing solar PV systems do not qualify.

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- Systems must comply with all local, state, and federal codes and standards.
- Systems must meet all applicable IEEE, UL, and NFPA Standards for solar PV system components and grid interconnection that are in effect at the time of installation including the following standards and their successors:
  - IEEE 1547 "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems"
  - UL 1741 "Standard for Safety for Static Inverters and Charge Controllers for use in Distributed Resources"
  - o UL 1703 "Standard for Safety: Flat Plate Photovoltaic Modules and Panels"
  - o NFPA 70 "The National Electric Code"
- Systems must be available for verification by Gulf Power personnel to ensure compliance with all program standards. Any inspection or observation by Gulf Power personnel shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Gulf Power of the safety, durability, suitability, or reliability of the system.
- Systems must be interconnected to Gulf Power's electric distribution system and meet all Gulf Power interconnection requirements.
- Customers must submit a Standard Interconnection Application for Customer-Owned Renewable Generation Systems and execute the appropriate Standard Interconnection Agreement for Customer-Owned Renewable Generation Systems.

**Incentive:** Customers installing an eligible solar PV system may qualify to receive a maximum incentive payment of \$2.00 per watt up to a total incentive amount of \$10,000. The incentive will be based on the installed DC power rating of the system at standard test conditions.



- The incentive will be limited to one solar PV incentive per premise and will be limited to one per customer.
- After final eligibility for participation has been verified by Gulf Power personnel, the incentive will be paid as a check to the active account customer of record at the time of payment.

Administration: The program will be administered by Gulf Power through an application and reservation process. Reservations for the incentive will be funded annually and will be awarded to customers on a first come – first serve basis. Reservations will be limited to the number of incentives supported by the renewable program funding allocated annually to the Solar PV Program.

# **Reservation Process:**

- The customer must complete a reservation application prior to installation of the solar PV system. The application will include information such as, but not limited to:
  - Customer information: name, address, account number, telephone number, and email address.
  - o Contractor information: name, license number, address, and telephone number.
  - System information: component manufacturers and model numbers, system DC
     power rating, system orientation, estimated annual kWh output, estimated
     installation date, and estimated system cost.
- Upon application approval, the customer is notified of the approval and will be assigned an incentive reservation. This is not a guarantee of incentive payment. The payment of



the incentive will not be made until the final verification by Gulf personnel that all program standards have been met.

- Within 90 days of the application approval, the customer must have the system installed and inspected by the local building code authority, and all final supporting documentation must be submitted to Gulf Power including, but not limited to: completed incentive form, proof of installation, a copy of the paid invoice, proof of passing local inspection(s), and all other required interconnection documents.
  - Failure to install the system and submit final documentation within the 90 days will result in the reservation being voided.
  - If funding is available, the customer may re-apply for the incentive, or the customer may apply for an extension beyond the 90 days. Requests for an extension must be made to Gulf Power prior to the end of the 90 day limit. Extensions will be granted on a case by case basis and based on progress of the installation.
- Reservations for a particular year's funding will begin October 1<sup>st</sup> of the previous year and close September 30<sup>th</sup> of the funding year.
- Reservation applications for a particular year's funding must be submitted by September 30<sup>th</sup> of that funding year.
- Reservation applications for a funding year will only be accepted 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.



#### Final Approval Process:

- Upon receipt of final supporting documentation, Gulf Power personnel will verify the system to ensure final eligibility and that all program standards have been met.
- Upon successful verification, the customer's incentive will be processed for payment.
- All incentives will be paid to the customer of record for the premise at which the system was installed.

Monitoring and Evaluation: Participating customer and system information will be recorded in a program reporting and tracking database. This information will include customer information, system information, and incentive processing information such as date of application receipt, date of application processing, amount of incentive paid, and issue date of the incentive. The reservation application and supporting documentation will require customer and system information useful in estimating energy and demand savings that will also be recorded in the program reporting and tracking database.

All participants will be subject to verification to validate information provided including, but not limited to:

- Verification that the customer is an eligible Gulf Power customer.
- Verification during the on-site Energy Audit that the system was not installed prior to the program effective date.
- Verification that the system installation meets program eligibility.



The following program performance indicators will be monitored and evaluated to determine the program's effectiveness:

- Number of qualified participating customers.
- Total amount of incentive payments made.
- Number of disqualified applications or installations.
- Number of installation contractors installing eligible systems.
- Quantity, manufacturers, and type of systems installed.



# **Solar Thermal Water Heating Program**

## **Program Standards**

Availability: This program is available to Gulf Power residential customers meeting program eligibility requirements.

## **Eligibility:**

- Customers must pre-qualify for the program by submitting a reservation application to Gulf Power prior to the installation of a solar thermal water heating system. Gulf's approval of this application is not a guarantee of incentive payment. The payment of an incentive will not be made until the final verification by Gulf personnel that all program standards have been met.
- The customer applying for the incentive must be the Gulf Power customer of record for the location at which the solar thermal water heating system will be installed.
- After Gulf's approval of the reservation application and prior to installation of the system, customers must participate in Gulf Power's Energy Audit program and must have an on-site Energy Audit performed.
- Systems must be installed by an eligible contractor and inspected by the local building code authority within 90 days of Gulf Power approving the reservation application.
- Systems must be installed by a State of Florida licensed plumber or solar contractor. Self-installations or do-it-yourself installations do not qualify.
- Systems must be solar thermal water heating systems used for domestic water heating. Solar pool heaters do not qualify.
- All systems must be approved and certified by the Florida Solar Energy Center (FSEC) and have an FSEC system certification number.



- All major system components must be new (not previously used or refurbished).
- Retrofits or upgrades to existing systems do not qualify.
- Systems must comply with all local, state, and federal codes and standards.
- Systems must be available for verification by Gulf Power personnel to ensure compliance with all program standards. Any inspection or observation by Gulf Power personnel shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Gulf Power of the safety, durability, suitability, or reliability of the system.

**Incentive:** Residential customers installing an eligible solar thermal water heating system may qualify to receive a \$1,000 maximum incentive toward the purchase price of that system.

- The incentive will be limited to one solar thermal water heating incentive per premise and will be limited to one per customer.
- After final eligibility for participation has been verified by Gulf Power personnel, the incentive will be paid as a check to the active account customer of record at the time of payment.

Administration: The program will be administered by Gulf Power through an application and reservation process. Reservations for the incentive will be funded annually and will be awarded to customers on a first come – first serve basis. Reservations will be limited to the number of incentives supported by the renewable program spending cap allocated annually to the Solar Thermal Water Heating Program.

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#### **Reservation Process:**

- The customer must complete a reservation application prior to installation of the solar thermal water heating system. The application will include information such as, but not limited to:
  - Customer information: name, address, account number, number of occupants living at premise, telephone number, and email address.
  - o Contractor information: name, license number, address, and telephone number.
  - System information manufacturer, model number, Florida Solar Energy Center (FSEC) certification number, estimated installation date, and estimated system cost.
- Upon application approval, the customer is notified of the approval and will be assigned an incentive reservation. This is not a guarantee of incentive payment. The payment of the incentive will not be made until the final verification by Gulf personnel that all program standards have been met.
- Within 90 days of the application approval, the customer must have the system installed and inspected by the local building code authority, and all final supporting documentation must be submitted to Gulf Power including, but not limited to: completed incentive form, proof of installation, a copy of the paid invoice, and proof of passing local inspection(s).
  - Failure to install the system and submit final documentation within the 90 days will result in the reservation being voided.
  - If funding is available, the customer may re-apply for the incentive, or the customer may apply for an extension beyond the 90 days. Requests for an extension must be made to Gulf Power prior to the end of the 90 day limit.

Extensions will be granted on a case by case basis and based on progress of the installation.

- Reservations for a particular year's funding will begin October 1<sup>st</sup> of the previous year and close September 30<sup>th</sup> of the funding year.
- Reservation applications for a particular year's funding must be submitted by September 30<sup>th</sup> of that funding year.
- Reservation applications for a funding year will only be accepted 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.

## Final Approval Process:

- Upon receipt of final supporting documentation, Gulf Power personnel will verify the system to ensure final eligibility and that all program standards have been met.
- Upon successful verification, the customer's incentive will be processed for payment.
- All incentives will be paid to the customer of record for the premise at which the system was installed.

**Monitoring and Evaluation:** Participating customer and system information will be recorded in a program reporting and tracking database. This information will include customer information, system information, and incentive processing information such as date of application receipt, date of application processing, amount of incentive paid, and issue date of the incentive. The reservation application and supporting documentation will require customer and system information useful in estimating energy and demand savings that will also be recorded in the



program reporting and tracking database. This information will include but not be limited to number of occupants in home, average water usage intensity, and system energy factor.

All participants will be subject to verification to validate information provided including, but not limited to:

- Verification that the customer is an existing Gulf Power customer.
- Verification during the on-site Energy Audit that the system was not installed prior to the program effective date.
- Verification that the system installation meets program eligibility.

The following program performance indicators will be monitored and evaluated to determine the program's effectiveness:

- Number of qualified participating customers
- Total amount of incentive payments made
- Number of disqualified applications or installations
- Number of installation contractors installing qualifying systems
- Quantity, manufacturer, and type of systems installed



## **Solar for Schools**

#### **Program Standards**

Availability: This program is available to public schools served and metered by Gulf Power.

## **Eligibility:**

- Gulf Power will select and prioritize schools based on competitive criteria that align with Florida's SunSmart E-Shelter program.
- Gulf Power will provide each selected school with a solar PV system up to 10 kW in size with an option of providing battery back-up for those systems installed on schools designated as emergency shelters. Systems will include data acquisition equipment that will collect and provide system data to be used by the schools in their energy education curriculum.
- Gulf will have the option to own and maintain each solar PV system for the first five (5) years after installation. After the five (5) years, the selected schools must be willing to accept transfer of ownership and maintenance responsibilities for the installed system and all of its components. Alternatively, should Gulf not elect to own the system, the selected school must agree to accept ownership and maintenance responsibilities for the installed system and all of its components immediately upon installation.
- Gulf Power will select the contractor and/or project facilitator for each system
  installation. Contractors must meet state licensing requirements and comply with all
  local, state, and federal rules and codes. The selected contractors and/or project
  facilitators will be responsible for all work performed, must comply with all Gulf Power
  requirements, and must certify/commission each system installation.



- All installations must be accessible to Gulf Power representatives and/or its designated contractor for verification of system installation and operation and for proper on-going maintenance for Gulf owned systems.
- Selected schools must demonstrate a commitment to energy efficiency and renewable energy education.
- Selected schools must meet Gulf Power interconnection requirements.

**Incentive:** Gulf Power will provide the full installation cost of a solar PV system up to 10 kW in size for at least one public school annually. The total installed system cost is estimated to be up to \$140,000 per system.

**Monitoring and Evaluation:** Participating schools and system information will be recorded in a program reporting and tracking database including system size, cost of system, and other relevant customer and system information. Installed systems will include a data acquisition system that will assist in monitoring system performance and output. This data along with other information regarding the school's education plan will be used to monitor and evaluate this program.

# Solar Thermal Water Heating for Low Income Housing

## **Program Standards**

Availability: This program is available for low income residential housing served and metered by Gulf Power.

# **Eligibility:**

- Gulf Power will collaborate with non-profit builders and agencies throughout Gulf
   Power's service area to select low income residences to receive domestic solar thermal water heating systems.
- Selected residences must have a minimum of four occupants living in the residence.
- Low income eligibility will be based on the requirements of the non-profit builder or agency.
- Once a low income residence has been selected, the non-profit builder or agency will be responsible for selecting a qualified contractor to install an eligible solar thermal water heating system and will be responsible for the installation of the system. The builder, agency, or low income resident will then own the installed system and be responsible for all maintenance.
- A minimum of two contractor bids will be required.
- Systems must be solar thermal water heating systems used for domestic water heating. Solar pool heaters do not qualify.
- All systems must be approved and certified by the Florida Solar Energy Center (FSEC) and have an FSEC system certification number.
- All major system components must be new (not previously used or refurbished).



- Systems must be installed by a State of Florida licensed plumber or solar contractor. Self-installations or do-it-yourself installations do not qualify.
- Retrofits or upgrades to existing systems do not qualify.
- Systems must be installed on a south facing roof with no shading obstructions.
- Systems must comply with all local, state, and federal codes and standards.
- All system installations must be inspected by and pass local building code inspection(s).
- Systems must be available for verification by Gulf Power personnel to ensure compliance with all program standards. Any inspection or observation by Gulf Power personnel shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by Gulf Power of the safety, durability, suitability, or reliability of the system.

**Incentive:** Gulf Power will provide the full installation cost of a solar thermal water heating system to the participating non-profit builder or agency.

## Incentive Processing:

- Within 30 days of an eligible solar thermal water heating system being installed at a preselected low income residence, the participating builder or agency will be required to submit a completed incentive form and supporting documentation to Gulf Power.
- Supporting documentation includes but is not limited to a copy of the contractor's invoice for the system and its installation as well as a copy of the local building code inspection report stating the system has passed local inspection.



• After final verification by Gulf Power personnel that all program standards have been met, the incentive will be paid as a check to the participating non-profit builder or agency.

Monitoring and Evaluation: Participating customer and system information will be recorded in a program reporting and tracking database, including customer information, system information, and incentive processing information such as amount of incentive paid and issue date of the incentive. The incentive form and supporting documentation will require customer and system information useful in estimating energy and demand savings. This information will include but not be limited to number of occupants in home, average water usage intensity, and system energy factor.