

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of standard interconnection agreements for expedited interconnection of customer-owned renewable generation and associated net metering tariff, by Tampa Electric Company.

DOCKET NO. 080255-EI

In re: Petition for approval of net metering tariff, new interconnection agreements, and modification of various related tariff sheets, by Progress Energy Florida, Inc.

DOCKET NO. 080257-EI

In re: Petition for approval of standard interconnection agreements for Tier 1 through Tier 3 customer-owned renewable generation systems and revisions to tariff sheets iv, 4.2, 4.16, and 9.1, by Gulf Power Company.

DOCKET NO. 080260-EI

In re: Petition for approval of net metering tariff and standard interconnection agreements, by Florida Power & Light Company.

DOCKET NO. 080265-EI

In re: Petition for approval of standard interconnection agreements for customer-owned renewable generation systems, by Florida Public Utilities Company.

DOCKET NO. 080294-EI

ORDER NO. PSC-08-0624-TRF-EI

ISSUED: September 24, 2008

The following Commissioners participated in the disposition of this matter:

MATTHEW M. CARTER II, Chairman  
LISA POLAK EDGAR  
KATRINA J. McMURRIAN  
NANCY ARGENZIANO  
NATHAN A. SKOP

ORDER APPROVING AMENDED TARIFFS  
AND INTERCONNECTION AGREEMENTS

BY THE COMMISSION:

BACKGROUND

The amendments to Rule 25-6.065, Florida Administrative Code (F.A.C.), relating to interconnection and net metering of customer-owned renewable generation became effective on

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

April 7, 2008.<sup>1</sup> We amended the rule in order to promote the development of customer-owned renewable generation up to two (2) megawatts in size by expediting the interconnection of that generation and by minimizing costs that customers might experience when attempting to interconnect to a utility system. In addition, the rule permits customers to offset electric consumption through net metering, further mitigating costs associated with self-generation.

The new rule requires each investor-owned utility (IOU) to file standard interconnection agreements and tariffs for our approval. These interconnection agreements and tariffs must specify: (1) the national safety standards for interconnection; (2) customer qualifications and fees; (3) contents of the standard interconnection agreements; (4) provisions for the manual disconnect switch; (5) administrative requirements; and (6) net metering provisions. On May 7, 2008, Florida Power & Light Company (FPL), Progress Energy Florida, Inc. (PEF), Tampa Electric Company (TECO), and Gulf Power Company (Gulf) filed tariffs as required by the rule. On May 30, 2008, Florida Public Utilities Company (FPUC) filed its tariff. By Order No. PSC-08-0468-PCO-EI, issued July 21, 2008, we suspended the tariffs filed by the IOUs.

We have jurisdiction over this matter pursuant to Sections 366.04, 366.05, 366.81, 366.82, 366.91, and 366.92, Florida Statutes. As explained below, we approve the IOUs' tariffs.

### DECISION

Rule 25-6.065, F.A.C., details the standards and qualifications for customer-owned renewable generation, the minimum contents of the standard interconnection agreement, and the administrative requirements to expedite the interconnection of customer-owned renewable generation. In reviewing the IOUs' filings, we analyzed each utility's proposed standard interconnection agreement for conformance with the rule, and compared similarities and differences among the IOUs' filings. In the review process, additional information was requested and there were several meetings with each utility to clarify the proposed agreements and gain as much uniformity in approach among utilities as practical. As a result, while each IOU's standard agreements are somewhat different, the contents are substantially the same and all are in compliance with the rule. The major difference among the IOUs' filings is in the amount and applicability of the proposed fees, which are discussed below.

#### 1. Standards and qualifications for customer-owned renewable generation

##### Requirements of Rule 25-6.065(3) and (4)(a)-(c), F.A.C.

To qualify for expedited interconnection under this rule, the customer-owned renewable generation must comply with certain interconnection standards set by the Institute of Electric and Electronic Engineers, Inc. (IEEE) and Underwriters Laboratory (UL). The renewable generation

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<sup>1</sup> See Order No. PSC-08-0161-FOF-EI, issued March 19, 2008, Docket No. 070674-EI, In re: Interconnection and Net Metering of Customer-Owned Renewable Generation.

must have a gross power rating that does not exceed 90% of the customer's utility distribution service rating and fall within one of the following ranges:

Tier 1 – 10 kW or less;

Tier 2 – greater than 10 kW and less than or equal to 100 kW; or

Tier 3 – greater than 100 kW and less than or equal to 2 MW.

Customer-owned renewable generation is considered certified for interconnection if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory and has been listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with applicable codes and standards. The customer-owned renewable generation must include a utility-interactive inverter, or other device that performs the function of automatically isolating the customer-owned generation equipment from the electric grid in the event the electric grid loses power.

#### IOU Proposed Standard Interconnection Agreements

We reviewed the standard interconnection agreements filed by each IOU, and we find that the agreements incorporate the above standards and qualifications for customer-owned renewable generation.

## 2. Fees and Charges

#### Requirements of Rule 25-6.065(4)(d)-(h), F.A.C.

The rule allows each IOU to propose for our approval a standard application fee for Tiers 2 and 3 systems and an Interconnection Study Charge for Tier 3 systems, which are cost-based and reasonable. Customers with Tier 1 systems cannot be charged any fees for interconnection of renewable generation.

#### IOU Proposed Standard Interconnection Agreements

Consistent with the rule, no IOU proposes a fee applicable to customers with Tier 1 systems. The proposed fees for Tier 2 and 3 systems are shown below:

UTILITY	TIER 2 APPLICATION FEE	TIER 3 APPLICATION FEE	TIER 3 INTERCONNECTION STUDY DEPOSIT/FEE
PEF	\$240	\$750	Included in Tier 3 application fee
FPL	\$400	\$1,000	\$2,000 deposit
Gulf	\$477	\$477	\$2,680 deposit
TECO	\$250	\$500	\$3,000 deposit
FPUC	\$350	\$350	\$2,000 deposit

#### Tier 2 Application Fees:

As required by the rule, all of the IOUs provided cost justification for the Tier 2 application fees, which are designed to recover the general and administrative, engineering, and labor costs associated with the application review, technical analysis, and on-site inspection of the customer's renewable system. We reviewed the cost data supplied by each IOU and found that they all included basically the same types of costs, although the estimated amount of time for each function varies somewhat. We find that the proposed fees for each IOU are reasonable and reflect the differences in the utilities' operations and system costs.

#### Tier 3 Application Fees:

All of the IOUs provided cost justification for the Tier 3 application fees as required by the rule. As with the Tier 2 application fees, these fees are designed to recover the general and administrative, engineering, and labor costs associated with the application review, technical analysis, and on-site inspection of the customer's renewable system. FPUC and Gulf assumed these costs would be the same as those associated with Tier 2 systems. PEF, TECO, and FPL have proposed higher fees for Tier 3 systems to recover estimated additional costs related to more extensive administrative and engineering review of the plans and facilities of these larger systems. In addition, PEF and FPL have included costs in the application fee associated with the interconnection of the Tier 3 systems.

In the case of PEF, the application fee also includes the cost of performing an interconnection study. The rule allows the IOUs to collect an interconnection study charge for Tier 3 systems. PEF plans to conduct such a study on all Tier 3 systems due to the size of the generation and the potential impact to the utility system and other customers in the general area. For ease of administration, PEF designed the Tier 3 application fee to include an average of the

costs to conduct an interconnection study, including the plan review, site visits, engineering design, and coordination studies.

The FPL Tier 3 application fee is designed also to cover the cost of FPL's Fast Track Screens, which provide an initial review of the impact on the FPL system of interconnecting the renewable system. These screens are used to determine whether an interconnection study is necessary. If the system passes the screens, no interconnection study is conducted and no further charge is assessed.

We have reviewed the cost data provided by each utility, and we find that they are based on reasonable estimates of the work that is required. We also find that while the fees vary by IOU, the difference in fees charged reflects the differences in the IOUs' operations and system costs.

#### Interconnection Study Charge:

As noted above, the rule allows the IOUs to charge an interconnection study charge for Tier 3 systems. The interconnection study entails evaluating the fault current and voltage profile of the renewable system, and analyzing the potential for back feed to the utility's grid. As mentioned above, PEF plans to conduct such a study for all Tier 3 systems and has included the estimated cost in the application fee. In order to determine whether an interconnection study is warranted, TECO, Gulf, and FPUC plan to conduct a preliminary assessment of the customer's renewable system and its potential impact on the grid. If TECO, Gulf, and FPUC determine that an interconnection study is necessary, only then will these utilities collect the deposit shown in the above table. As described above, FPL will use its Fast Track Screen to determine whether an interconnection study is warranted, and if the system passes the Fast Track Screens, an interconnection study would not be required and no deposit will be collected. The deposit amounts required by the IOUs represent the maximum amount that will be charged for the interconnection study. In all cases, if the actual cost of the study is less than the deposit, the overage will be refunded to the customer upon completion of the study. If the study costs more than the amount of the deposit, there will be no additional charge to the customer.

As required by the rule, the IOUs provided cost data supporting the proposed interconnection study charges. We have reviewed the data, and each utility has explained the cost justification and the process it plans to use. The proposed deposit amounts appear to be based on the functions and the estimated costs to complete an interconnection study. We note that the IOUs do not have significant experience with interconnecting customer-owned renewable generation. As they gain more experience, the costs involved will be more certain and the need for interconnection studies will be more easily identified. The IOUs can request revisions to the tariffs, if needed, based on the actual experience. For these reasons, we find that the cost data and the approach of each company is reasonable at this time.

### 3. Contents of Standard Interconnection Agreement

#### Requirements of Rule 25-6.065(5), F.A.C.

The standard interconnection agreements filed by the IOUs must contain, at a minimum:

(a) a requirement that customer-owned renewable generation must be inspected and approved by local code officials prior to its operation in parallel with the IOU;

(b) provisions that permit the IOU to inspect customer-owned renewable generation and necessary documents. The customer shall notify the IOU at least 10 days prior to initially placing customer equipment in service and the IOU shall have the right to have personnel present on the in-service date. If the customer subsequently modifies its renewable generation equipment to increase its gross power rating, the customer must notify the IOU by submitting a new application specifying the modifications at least 30 days prior to making the modifications;

(c) a provision that the customer is responsible for protecting the renewable generating equipment and all system components from damage from the normal and abnormal conditions and operations that occur on the IOU system in delivering and restoring power and is responsible for ensuring that customer-owned renewable generation equipment is inspected, maintained and tested to ensure that it is operating correctly and safely;

(d) a provision that the customer shall hold harmless and indemnify the IOU for all loss to third parties resulting from the operation of the customer-owned renewable generation, except where the loss occurs due to the negligent actions of the IOU. Also, a provision that the IOU shall hold the customer harmless under like conditions;

(e) a requirement for general liability insurance or sufficient guarantee and proof of self-insurance, in the amount of no more than \$1 million for Tier 2 systems and no more than \$2 million for Tier 3 systems. The IOU shall not require liability insurance for Tier 1 systems; however, the IOU may include a recommendation in the standard interconnection agreement that customers of Tier 1 systems carry an appropriate level of liability insurance; and

(f) identification of any fees or charges that we have approved.

#### IOU Proposed Standard Interconnection Agreements

We have reviewed the standard interconnection agreements filed by each IOU, and we find the agreements contain provisions consistent with the above requirements in the rule.

### 4. Manual Disconnect Switch

#### Requirements of Rule 25-6.065(6)(a), F.A.C.

For Tier 2 and Tier 3 systems, each IOU may require the installation, at the customer's expense, of a manual disconnect switch to provide a separation point between the customer-owned renewable generation equipment and any customer wiring connected to the IOU's system.

Tier 1 systems are exempt from this requirement unless the IOU elects to pay for the installation of the switch.

#### IOU Proposed Standard Interconnection Agreements

For Tier 2 and 3 systems, the standard interconnection agreements for each IOU requires the installation of a manual disconnect switch. The agreements also specify that if the IOU elects to install a manual disconnect switch for Tier 1 systems, it shall be at the IOU's expense. Only TECO's standard interconnection agreement requires Tier 1 systems have a manual disconnect switch installed at TECO's expense. The other IOUs have not required that a manual disconnect switch be installed for Tier 1 systems. For customers with Tier 1 systems who elect not to install a manual disconnect switch, if a cause for disconnection occurs, the IOU may have to pull the customer's meter. We have reviewed the standard interconnection agreements filed by each IOU, and we find the agreements contain provisions consistent with the above requirements in the rule.

#### 5. Cause for Disconnecting Customer-Owned Renewable Generation

##### Requirements of Rule 25-6.065(6)(c), F.A.C.

The rule indicates that the following conditions shall be cause for the IOU to disconnect customer-owned renewable generation from its system:

- (a) emergencies or maintenance requirements on the IOU's electric system;
- (b) hazardous conditions existing on the IOU system due to the operation of the customer's equipment as determined by the IOU;
- (c) adverse electrical effects, such as power quality problems, on the electrical equipment of the IOU's other electric consumers caused by the customer-owned renewable generation as determined by the IOU; and
- (d) failure of the customer of a Tier 2 or Tier 3 system to maintain the required insurance coverage.

#### IOU Proposed Standard Interconnection Agreements

The standard interconnection agreements filed by each IOU contain provisions for disconnection limited to the grounds stated in the rule. We believe that the grounds provided in the rule for disconnection are general enough in nature to encompass virtually every event that would warrant disconnection. We have reviewed the standard interconnection agreements filed by each IOU, and we find the agreements contain provisions consistent with the above requirements in the rule.

6. Notice of Disconnecting Customer-Owned Renewable Generation

Requirements of Rule 25-6.065(6)(b), F.A.C.

The IOU may disconnect the customer-owned renewable generation pursuant to the above conditions without prior notice to the customer. However, prior notice shall be given to the extent practicable. If prior notice is not given, the IOU shall leave a door hanger notifying the customer of the action and an explanation of the condition necessitating such action. Reconnection of the customer-owned renewable generation shall be accomplished as soon as the condition necessitating disconnection is remedied.

IOU Proposed Standard Interconnection Agreements

The standard interconnection agreements filed by each IOU contain provisions consistent with the rule requirement on notice of disconnection of the customer's renewable generation system. In the event of emergency or hazardous conditions, all of the standard agreements filed by the IOUs contain language that permits access by the utility at any time, without notice, in order to operate a manual disconnect switch. As discussed above, if a Tier 1 system does not have a manual disconnect switch, the IOUs may have to disconnect the meter. Access without notice is limited to operating the manual disconnect switch or the utility-owned equipment. In the event that a customer's renewable generation is disconnected, even temporarily, the IOU will leave a door hanger notifying the customer of the disconnection and providing an explanation of the conditions requiring such action. We find that this is a reasonable provision and is consistent with the intent of the rule, which provides that the customer is responsible for protecting its renewable generating equipment and all system components, and for ensuring that the equipment is operating correctly and safely.

7. Inspections

Requirements of Rule 25-6.065(5)(b), F.A.C.

As discussed above, the rule permits the IOUs to inspect customer-owned renewable generation at the time of initial installation and in the event the equipment is subsequently modified to increase its power rating. The rule does not specifically address or prevent inspections by the IOUs at other times. At the time this rule was promulgated, we decided that Commission staff should work with the IOUs on tariff provisions that allow for reasonable inspections.

IOU Proposed Standard Interconnection Agreements

The standard interconnection agreements filed by the IOUs have reserved the right to inspect the customer-owned renewable generation system, at the following times: (1) at the time of in-service; (2) in the event the equipment is subsequently modified to increase its power rating; and (3) after providing the customer reasonable notice, for the limited purpose to inspect the system for on-going compliance or safety concerns. The IOUs' standard interconnection agreements contain similar language to allow access to the customer's systems for inspection



purposes with as much notice as reasonably possible. The IOUs stated that none intend to perform regular inspections, but that they anticipate the need to inspect a customer's facilities in the event that there was some sort of disturbance or abnormality in the power quality that may be associated with the interconnected generator, or to meet its legal obligation to provide service to its customers. We have reviewed the inspection provisions of the standard interconnection agreements filed by each IOU, and we find these provisions are reasonable and comport with the requirements of the rule.

#### 8. Net Metering

##### Requirements of Rule 25-6.065(8), F.A.C.

The rule requires each IOU to enable an interconnected customer-owned renewable generation facility to net meter. Each IOU shall install, at no additional cost to the customer, metering equipment at the point of delivery capable of measuring the difference between the electricity supplied to the customer from the IOU and the electricity generated by the customer and delivered to the IOU's electric grid. The rule also details the net metering billing process.

##### IOU Proposed Standard Interconnection Agreements and Tariff Provisions

All of the standard interconnection agreements filed by the IOUs contain a provision allowing customers with interconnected renewable generation to net meter. The filing by FPUC contains all of the details of the net metering billing process. The filings by PEF, Gulf, TECO, and FPL advise the customer of the availability of net metering and refer the customer to the net metering tariff for the details of the billing process.

In addition to filing tariff revisions to incorporate the proposed standard interconnection agreements, the IOUs filed related tariff revisions to incorporate the net metering billing provisions and eliminate the existing standard interconnection agreement for small photovoltaic systems. We find these tariff revisions are consistent with the rule and shall be approved.

#### 9. Renewable Energy Certificates

##### Requirements of Rule 25-6.065(9), F.A.C.

A Renewable Energy Certificate (REC) is a financial instrument that represents the unbundled, separable attribute of renewable energy and is equivalent to one megawatt-hour of electricity generated by a source of renewable energy. The rule provides that the customer shall retain any RECs associated with the electricity produced by the customer-owned renewable generation equipment. Any additional meters necessary for measuring the total renewable electricity generated for the purposes of receiving RECs shall be installed at the customer's expense, unless otherwise determined during negotiations for the sale of the customer's RECs to the IOU.

IOU Proposed Standard Interconnection Agreements

We have reviewed the standard interconnection agreements filed by each IOU, and we find the agreements contain provisions consistent with the above requirements in the rule.

CONCLUSION

Based on the analysis above, we find that the revised tariffs incorporating the standard interconnection agreements and net metering provisions filed by each of the IOUs are in compliance with Rule 25-6.065, F.A.C., and we approve them, effective October 1, 2008. Since the rule requirements represent a new process for the interconnection of customer-owned renewable generation, the IOUs did not have a significant amount of actual experience in order to determine the appropriate fees. We note that as the IOUs gain experience they can request tariff revisions. In addition, pursuant to the rule, we will be receiving reports from the IOUs, as well as the municipal and cooperative utilities, detailing the net metering activity in their respective service territories. Through this reporting process, we note that we intend to monitor the fees charged by the IOUs.

The tariff approvals are intended to apply separately to each IOU. Accordingly, if a protest is filed as to the approval of any one of the IOUs' tariff filings within 21 days of the issuance of this order, the protest shall not prevent this order from becoming final at the end of the protest period as to any IOUs' tariff filings not the subject of a protest.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the amended tariffs, including the standard interconnection agreements, filed by Tampa Electric Company, are in compliance with Rule 25-6.065, Florida Administrative Code, and are approved as set forth herein. It is further

ORDERED that the amended tariffs, including the standard interconnection agreements, filed by Progress Energy Florida, Inc., are in compliance with Rule 25-6.065, Florida Administrative Code, and are approved as set forth herein. It is further

ORDERED that the amended tariffs, including the standard interconnection agreements, filed by Gulf Power Company, are in compliance with Rule 25-6.065, Florida Administrative Code, and are approved as set forth herein. It is further

ORDERED that the amended tariffs, including the standard interconnection agreements, filed by Florida Power & Light Company, are in compliance with Rule 25-6.065, Florida Administrative Code, and are approved as set forth herein. It is further

ORDERED that the amended tariffs, including the standard interconnection agreements, filed by Florida Public Utilities Company, are in compliance with Rule 25-6.065, Florida Administrative Code, and are approved as set forth herein. It is further

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ORDERED that the tariff revisions for all of the IOUs shall become effective on October 1, 2008, and remain in effect, with revenues subject to refund pending the outcome of any protest, as set forth herein. It is further

ORDERED that the tariff approvals are intended to apply separately and are severable if a protest is filed as to the approval of any one of the IOUs' tariff filings within 21 days of the issuance of this order, and the protest shall not prevent this order from becoming final at the end of the protest period as to any IOUs' tariff filings not the subject of a protest. It is further

ORDERED that this docket shall be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by our decision files a protest within 21 days of the issuance of this order.

By ORDER of the Florida Public Service Commission this 24th day of September, 2008.

  
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ANN COLE  
Commission Clerk

( S E A L )

MCB

NOTICE OF FURTHER PROCEEDINGS

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, 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 or judicial review 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 Commission's decision on this tariff is interim in nature and will become final, unless a person whose substantial interests are affected by the proposed action files 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 15, 2008.

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 docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.