

RUC ITEM #061214
MARCH 19, 2008

Net Metering Customer Owned Renewable Generation

Regional Utilities Committee

March 19, 2008



PURPA: Net Metering

Presentation Outline

- Definitions
- Regional Utilities Committee History
- Public Service Commission (FPSC) History
- Requirements under Public Utility Regulatory Policies Act (PURPA)
- Results of GRU PV Rebate Program
- Draft considerations

Definitions



- Net Metering/Billing
 - Avoid purchasing electricity at retail rate
 - Sell excess electricity to utility at retail rate
 - Simulate meter turning backwards

- Dual metering
 - Avoid purchasing electricity at retail rate
 - Sell excess electricity to utility at utility's cost of generation



GRU Current Metering Policy

- Dual metering
 - Single meter with two registers
 - Energy purchased from GRU at retail rate
 - Excess energy produced by customer is purchased by GRU for 7.42¢

UTILITY CHARGES	METER READINGS			CONSUMPTION		AMOUNT DUE
	PREVIOUS	CURRENT	TYPE			
ELECTRIC CHARGE	941	1434	ACTUAL	493	KWH	\$ 52.25
PHOTOVOLTAIC SYSTEM CREDIT				191	KWH	\$ 4.62
PV SYSTEM FUEL ADJ CREDIT						\$ 9.55
GAS CHARGE	2031	2039	ACTUAL	8	THERMS	\$ 18.76
WATER CHARGE	1093	1098	ACTUAL	5	KGALS	\$ 13.15
PROJECT SHARE						\$ 5.00

$52.25 / 493 = 10.59 \text{ ¢ / kWh}$

$14.17 / 191 = 7.42 \text{ ¢ / kWh}$

\$ 24.65 OF YOUR ELECTRIC CHARGE IS EXEMPT FROM UTILITY TAX
 \$ 7.96 OF YOUR NATURAL GAS CHARGE IS EXEMPT FROM UTILITY TAX

RUC History – Net Metering

- April 23, 2007 – CC referred review GRU's Photovoltaic Policies to RUC for review
- June 12, 2007 and July 10, 2007 – RUC discussed referral
- August 27, 2007 RUC recommended that
 - 1) GRU maintain existing rebate levels and dual metering policies through FY07
 - 2) Retain item on RUC referral list

Public Service Commission (FPSC) Net Metering History

- January 2007 – workshop to explore opportunities to develop renewable energy in Florida – identified two issues: expedited interconnection and net metering
- April 2007 – workshop to gather further information on identified issues
- August 2007 – rule development workshop
- October 2007 – rule development workshop
- December 2007 – staff submitted a proposed amendment of Rule 25-6.065
- December 2007 – FPSC initiated a rulemaking to amend Rule 25-6.065 – Requires Investor Owned Utilities to offer net metering – requires all utilities to meet reporting requirements



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PURPA: Net Metering

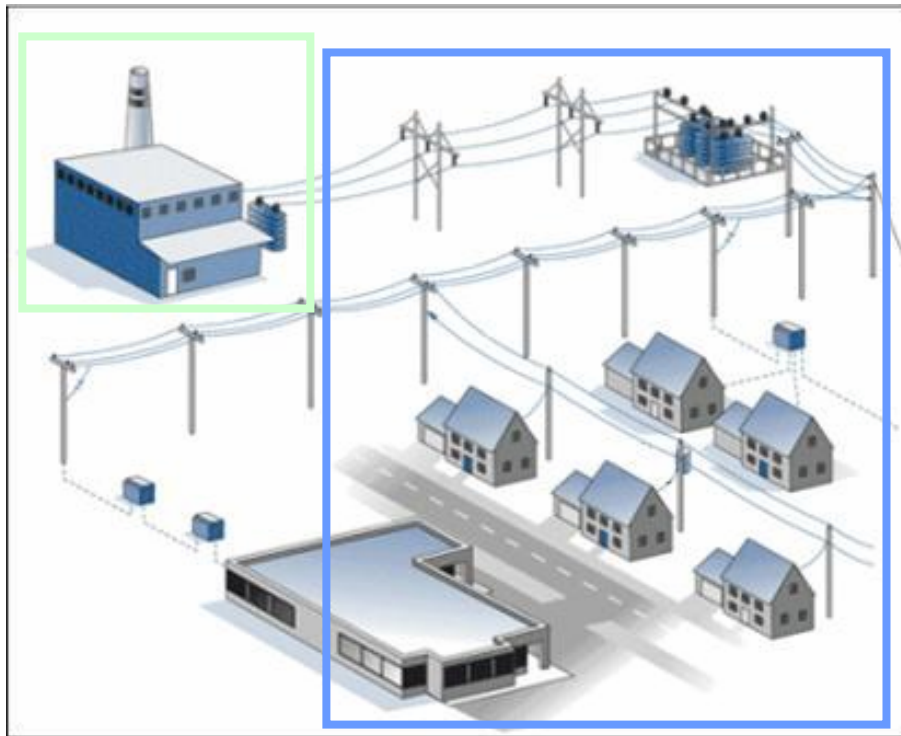
Public Utilities Regulatory Policy Act Standard for Consideration

Standard 11 – *Net Metering* section 1251, Subtitle E – Amendments to PURPA of EAct 2005. Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves. For purpose of this paragraph, the term “net metering service” means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.

Proposed PURPA Schedule

- March 19, 2008 – RUC recommend that the City Commission hold a public hearing to receive staff’s considerations and determinations and public input at the April 21, 2008 City Commission meeting
- April 21, 2008 – City Commission hold a public hearing and staff prepare findings for final consideration and determination and adoption at the May 19, 2008 City Commission meeting
- May 19, 2008 – City Commission adopt, modify or reject findings regarding net metering at the May 19, 2008 City Commission meeting

Costs



PV Credit
7.42 ¢
Avoided
Costs

- Fuel – 5.65
- Generation – 0.177¢
- Primary Line – 1.1¢
- Substation – 0.4¢
- Line Transformers – 0.47¢
- Distribution Line – 0.7¢
- Electric Service – 0.22¢

- Total – 10.31¢

Distribution Costs
2.89 ¢
Network Costs

PV Rebate Program Results

- January 2007 – February 2008
 - 109 kW installed (9.65% of state)
 - 31kW Business, 78 kW Residential
 - \$163,560 rebates
- State program July 2006 – February 2008
 - 1,129 installed
 - 736kW Business, 392kW Residential
 - \$4,516,949 rebates

Draft Considerations

- GRU currently offers a distributed resources credit rate for distributed resource(s) of less than or equal to ten (10) kW. Energy is credited at the prevailing generation component of the General Service Demand Energy charge plus prevailing retail fuel adjustment. Distributed resource(s) greater than ten (10) kW have energy credited at avoided cost as negotiated by contract.
- While customer owned generation does have an economic value to GRU this value can and does vary significantly with time which is not reflect by the concept of net metering.
- Under GRU's residential and general service non-demand electric rates the value of GRU's distribution facilities is not reflected by the concept of net metering. Under these rates costs associated with construction and maintenance of distribution facilities are not collected. Two part rates that collect for distribution costs through a demand charge account for the necessary collection of distribution costs.

Draft Considerations

- Customers with on-site generation utilize GRU's distribution system as backup and supplemental power when on-site generation is either not running or insufficient to meet 100% of needs.
- When on-site generation produces excess energy above and beyond customer's requirements energy must be stored in batteries, transported to over GRU's electric grid or wasted.
- Florida Public Service Commission (FPSC) findings: Between January 2007 and December 2007 the FPSC held workshops and took comments from the public regarding net metering and interconnection of customer owned renewable generation. The findings from these efforts are available in a memo to the Office of the Commission Clerk dated December 7, 2007. The entirety of this memo should be adopted as part of the findings of the Gainesville City Commission in its own consideration of net metering under PURPA. The memo is attached as attachment A.

Draft Considerations

- Federal law and Florida law do not require unregulated utilities such as GRU to provide net metering to interconnected customers.
- Customer's utilizing customer owned generation to offset some or all of their electric usage helps GRU avoid fuel costs and helps to offset the need for new generation.
- Currently the only widely available form of customer owned renewable generation is solar photovoltaic (PV). GRU values renewable generation from a cost avoidance perspective as well as a green house reduction perspective. This value is reflected in GRU's \$1.50 / watt PV rebate.
- On March 4th, 2008 the FPSC (Florida Public Service Commission) ratified a rulemaking to amend Rule 25-6.065, Florida Administrative Code, relating to Interconnection and Net Metering of Customer-Owned Renewable Generation. The amendment calls for Investor Owned Utilities in Florida to offer net metering to customers.

Draft Considerations

- Net metering is available in 42 states and the District of Columbia. (dsireusa.org)
- The following municipal utilities offer net metering: City of Tallahassee, Florida Keys Electric Cooperative, JEA, Lakeland Electric, New Smyrna Beach Utilities and OUC. (dsireusa.org)
- The City of Gainesville wants to remain consistent with other utilities in the State of Florida.
- Net metering creates an incentive for distributed renewable energy resources
- Gainesville as a community wants to provide incentives to help promote the adoption of customer owned, distributed, renewable generation resources.
- The financial impacts of offering net metering for customer owned, distributed, renewable generation facilities are minimal.
- Some forms of customer owned generation can be powered by renewable sources and may result in lowering the green house gas emissions of the City of Gainesville.

Conclusions

- The Gainesville City Commission adopt net metering as incentive to promote the adoption of customer owned, distributed, renewable generation resources.
 - Gainesville as a community wants to provide incentives to help promote the adoption of customer owned, distributed, renewable generation resources.
 - The financial impacts of offering net metering for customer owned, distributed, renewable generation facilities are minimal.
 - The City of Gainesville wants to remain consistent with other utilities in the State of Florida.
 - Net metering creates an incentive for distributed renewable energy resources
 - Customer's utilizing customer owned generation to offset some or all of their electric usage helps GRU avoid fuel costs and helps to offset the need for new generation.
 - Some forms of customer owned generation can be powered by renewable sources and may result in lowering the green house gas emissions of the City of Gainesville.



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Recommendation

Direct staff to prepare considerations and determinations for presentation at a public hearing on April 21, 2008

Recommend that the City Commission hold a public hearing to receive considerations, determinations and public input at the April 21, 2008 City Commission meeting

Background on PURPA

Requirements under Public Utility Regulatory Policies Act (PURPA)

- Energy Act of 2005 added five PURPA standards – including net metering
- Initiate proceedings within one/two years upon public notice and by conducting hearings
- Complete the consideration within two/three years and make determination
 - In writing
 - Based upon findings included in determination and evidence at hearings
 - Available to the public



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PURPA: Net Metering

What is PURPA?

- Adopted as part of National Energy Act of 1978
- Congressional Purpose for PURPA:
 - Promote Conservation of Energy
 - Optimization of Efficient Use of Electric Utility Resources
 - Equitable Rates to Electric Consumers
- Most recently Energy Policy Act of 2005 made substantial changes and additions