Florida Public Service Commission Staff Rule Development Workshop on Renewable Portfolio Standard Docket No. 080503-EI

August 20, 2008 9:30 a.m. – 5:00 p.m. Betty Easley Conference Center Room 148, 4075 Esplanade Way Tallahassee, Florida

The purpose of the workshop is to discuss draft Rules 25-17.400, 25-17.410 and 25-17.420, F.A.C., on a Renewable Portfolio Standard as required by HB 7135 (Chapter Law No. 2008-227). The new law requires the Commission to adopt rules for a renewable portfolio standard requiring each investor-owned utility to supply renewable energy to its customers directly, by procuring, or through renewable energy credits. The Commission must submit a draft rule for ratification by the Legislature by February 1, 2009. The staff will present a strawman draft rule proposal for discussion at the rule development workshop. The topics in the strawman proposal for discussion at the workshop include: (1) Renewable Portfolio Standard Design, (2) Renewable Energy Credit Market and (3) Reporting Requirements for municipal electric and rural electric cooperatives.

Agenda

9:30 -	10:00	Opening remarks by staff
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10:00 – 12:00 Review of the draft rules – Open discussion¹

- A. Rule 25-17.400, F.A.C., Renewable Portfolio Standard
- B. Rule 25-17.410, F.A.C., Florida Renewable Energy Credit Market
- C. Rule 25-17.420, F.A.C., Municipal and Rural Electric Coop Reporting

12:00 -	1:00 J	Lunch
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1:00 – 4:00 Continuation of section by section discussion of the draft rules

4:00-4:30 Public comment

4:30 Next steps

5:00 Adjourn

¹ Note: Staff intends to proceed through the discussion of the draft rule on a section by section basis.

August 20, 2008 Rule Development Workshop

<u>Docket No. 080503-EI</u> Establishment of Rule on Renewable Portfolio Standard

Summary of Draft Rule

During the 2008 regular session, the Legislature enacted HB 7135, (Chapter Law No. 2008-227), which directs the FPSC to adopt rules to establish a renewable portfolio standard (RPS) requiring each investor-owned electric utility (IOU) to supply a percentage of their retail electricity sales from renewable energy sources located in Florida. The FPSC is required to submit the rule to the Legislature for ratification by February 1, 2009.

As a first step in the rulemaking process, staff has prepared a draft RPS strawman which consists of three rules. Rule 25-17.400, F.A.C., establishes a procedure for the initial setting and subsequent updating, not less than every 5 years, of renewable portfolio standards for each investor-owned electric utility. Rule 25-17.410, F.A.C., requires investor-owned utilities to establish and administer a transparent renewable energy credit (REC) trading market. Finally, Rule 25-17.420, F.A.C., establishes reporting requirements for municipal and cooperative electric utilities. The following is a discussion of the major topics covered by the draft rules.

I. Rule 25-17.400, F.A.C. - Renewable Portfolio Standard

RPS Process and Proceedings – The draft rule establishes a process for setting the initial renewable portfolio standards for each investor-owned electric utility with subsequent updates not less than every 5 years. The Commission on it own motion, or upon petition by a substantially affected person or a utility, may initiate a proceeding to review and, if appropriate, modify the renewable portfolio standards at any time. In such a proceeding, the renewable portfolio standards are to be based on an analysis of the technical and economic potential for Florida renewable energy resources.

<u>Initial Renewable Portfolio Standards</u> – As a starting point, staff has proposed certain long-term renewable portfolio standards based on a percentage of each utility's retail energy sales. Within 90 days after the rule is ratified by the Legislature and becomes effective, each IOU is required to submit proposed annual standards designed to meet or exceed the long-term standards. The initial proposed long-term standards are:

- 1. By January 1, 2010: 2 percent of the prior year's retail sales;
- 2. By January 1, 2017: 3.75 percent of the prior year's retail sales;
- 3. By January 1, 2025: 6 percent of the prior year's retail sales; and
- 4. By January 1, 2050: 20 percent of the prior year's retail sales.

The starting point of 2 percent by January 1, 2010 is based on Florida's existing renewable capacity of approximately 1,500 megawatts, which currently supplies approximately 2 percent of Florida's energy needs. The target years 2017, 2025, and 2050 mirror the timeline established in Executive Order Number 07-127 for greenhouse gas emission reduction goals. The specific numeric standards of 3.75 percent by 2017, and 6 percent by 2025, were discussed during the 2008 regular session of the Legislature and appear reasonable as a starting point for the RPS. In absolute terms, supplying 3.75 percent of 2016's expected retail electric sales with renewable energy will more than double the state's current production of renewable energy from 3,759 gigawatt-hours (GWH) in 2010 to 8,575 GWH in 2017. Similarly, achieving 6 percent renewables by 2025 would represent another doubling from 8,575 GWH in 2017 to 17,201 GWH in 2025. The proposed standard of 20 percent by 2050 is based on Section 3 of Executive Order Number 07-127.

These initial long-term renewable portfolio standards are preliminary and should be contingent on an analysis of the technical and economic potential for Florida renewable energy resources. On July 25, 2008, a staff technical meeting was held to begin the process of analyzing the technical and economic potential of Florida renewables. Working groups of renewable and utility representatives were formed to collect Florida-specific data on each existing and potential renewable technology applicable to Florida through 2020. Commercial availability, cost, performance, and environmental data for each Florida renewable technology will be developed by the working groups. In addition, the Commission staff is working with the Governor's Energy Office (GEO) and the Lawrence Berkeley National Laboratory (LBNL) to retain Navigant Consulting, Inc. to analyze the technical and economic potential for renewable energy technologies currently available in Florida or that could be developed through the year 2020. The results of this analysis are expected to be completed prior to the culmination of the rulemaking process and be available to verify the reasonableness of the initial RPS timing and percent standards.

Once the Legislature ratifies the RPS rules, the investor-owned utilities will file for FPSC review and approval annual standards to comply with the initial long-term standards contained in the rule. After the initial RPS is established the first 5 year review would occur in the 2014 time frame. This will allow the Commission to determine the continued reasonableness of the 2017 and subsequent year standards based on 5 years of actual experience.

<u>Renewable Energy Credits</u> – Section 366.92(2), F.S., defines renewable attributes as separate from the associated renewable energy (kWh). Therefore, the draft rule requires RECs to be the sole means by which to comply with the RPS. The requirements for a Florida REC market are contained in draft Rule 25-17.410, F.A.C., and discussed in the next section of this summary.

<u>Florida Renewable Energy Resources</u> – The draft rule includes renewables as defined in Section 366.92(2), F.S., and promotes renewable energy resources that produce electrical, mechanical, and thermal energy from hydrogen, biomass, solar, geothermal, wind, ocean, waste heat or hydroelectric power. Pursuant to Section 366.92(2), F.S., only in-state renewables are eligible to be used for compliance under the draft rule.

Encouragement of Wind and Solar – Section 366.92(3)(b)(3), F.S., states that the FPSC's rule may provide added weight to energy produced by wind and solar photovoltaic generation. Staff believes it is appropriate to provide additional encouragement in the rule for these zero-greenhouse gas emitting resources. At the FPSC's RPS workshops, both set-asides and multipliers were advocated by interested parties to promote wind and solar renewable resources. Staff believes both of these approaches may have merit and deserve further discussion in the rulemaking proceedings. Accordingly, the draft rule establishes two tiers of renewables. Tier I includes wind and solar; Tier II includes all other Florida renewables. For Tier I, staff has proposed three alternative policy options, two of which use set-asides and a third which uses multipliers, to encourage solar and wind resources.

Excusal for Noncompliance — Section 366.92(3)(b)(2), F.S., requires the RPS rule to provide conditions under which utilities may be excused for noncompliance, including insufficient supply of Florida renewable energy resources or prohibitive cost. Initially, both the potential supply and economic cost of Florida renewables will be addressed in the technical and economic potential studies used to establish the renewable portfolio standards. Since the cost of certain renewables is likely to be higher than conventional generating technology, particularly in the early years of development, staff has proposed a cost cap in the draft rule such that utilities may be excused for noncompliance if their cost for renewables, in aggregate, exceeds one percent of annual retail revenues. This cost cap should only apply to those costs for an RPS which exceed a utility's avoided cost for obtaining traditional resources. Staff believes this cost cap will protect ratepayers from undue rate increases associated with the RPS, particularly in the early years as the market for renewables develops in the state. A one percent rate cap translates to approximately 0.1 cents per kilowatt-hour (kWh) or a \$1.20 monthly bill increase for a typical Florida residential ratepayer with 1,200 kWh monthly energy usage.

Alternative Compliance Payments and/or Penalties – Several interested parties in the FPSC's workshops advocated that the rule should allow compliance through alternative compliance payments (ACPs) if sufficient renewables were not available or were cost prohibitive. The revenues from ACPs are typically used to support renewable projects or rebate programs. Several parties also advocated penalties for noncompliance, with revenues used to support renewables. In developing the draft rule, staff followed the directive of the Legislature in HB 7135. Staff does not believe that Section 366.92, F.S., provides the FPSC with the express authority to establish ACPs or penalties to fund the development of additional renewables in the RPS rule. The statute does not provide for the use of any such funds by the FPSC, another state agency, or third party to support renewable programs.

<u>Cost Recovery</u> – Section 366.92(3)(b)(1), F.S., provides the FPSC with rulemaking authority for annual recovery of costs associated with the RPS. The draft rule provides for cost recovery of reasonable and prudent costs associated with the purchase of RECs, including administrative costs, through the Environmental Cost Recovery clause. Cost recovery for utility-owned renewable facilities and power purchase agreements will be handled through normal ratemaking procedures.

Incentives - Section 366.92(3)(b)(1), F.S., provides the FPSC with rulemaking authority for incentive-based adjustments to authorized rates of return on common equity to IOUs to

encourage renewable energy. Staff has not addressed incentives in the draft rule. Staff notes that, as evidenced by the one percent rate cap on RPS expenditures, the rule provides for the IOUs to recover costs in excess of avoided cost as long as these costs are associated with the purchase of RECs and administering the RPS. Recovery of costs for utility-owned renewable projects and power purchase agreements including rewards and penalties should be addressed through normal ratemaking proceedings. The FPSC will examine the merits of an IOU's request for incentives in these proceedings.

<u>Reporting Requirements</u> – Pursuant to Section 366.92(3)(c), F.S., each investor-owned utility is required to provide an annual report to the FPSC by April 1. The rule lists the specific data to be provided by each IOU. These reports will facilitate the FPSC's evaluation of utility efforts and costs associated with the RPS.

II. Rule 25-17.410, F.A.C. - Renewable Energy Credit Market

<u>REC Compliance</u> – Section 366.92(2), F.S., defines RECs as the unbundled, separable, renewable attributes of the associated renewable energy. Hence, compliance with the RPS under the draft rule is accomplished solely with RECs. The separation of the renewable attributes as RECs, along with compliance with the RPS through RECs, allows for payments for renewable resources above avoided costs. Staff believes there will be increased efficiency in tracking compliance if only RECs are used, rather than a combination of energy and RECs.

<u>IOUs Must Establish a REC Market</u> – Section 366.92,(3)(b)(7), F.S., requires the FPSC to include in its rule procedures to track and account for RECs. The draft rule addresses this requirement by directing the IOUs to establish and administer an electronic REC market. Florida's municipal and cooperative electric utilities are encouraged to participate in the formation and operation of the renewable energy credit market. Further, in order to reduce compliance costs, the IOUs are encouraged to contract with a non-profit third party to administer the REC market. The selection and functions of a REC market administrator are subject to FPSC approval. The IOUs must submit a compliance filing within 90 days for FPSC approval of the REC market. Staff believes the IOUs have the expertise to most efficiently establish a REC market in Florida. For example, the process of establishing a REC market is similar to the utilities' recent efforts to reestablish a cost-based broker system for economy energy sales.

<u>Full Transparency</u> – The draft rule provides for full oversight of the REC market by the FPSC in two ways. First, the draft rule requires FPSC approval of all of the REC market administrator's practices and procedures. Second, the draft rule requires that all transactions and records of the REC market must be fully transparent and open for FPSC inspection and audit.

<u>Eligible Facilities</u> – Renewable facilities that are eligible to produce RECs must be certified by the renewable energy credit market administrator. The rule lists eligible facilities, which include all utility-owned Florida renewable energy resources and non-utility owned renewables for which the energy is under contract to IOUs. Staff notes that the revisions to the Florida Energy Efficiency and Conservation Act in HB 7135 include utility-supported customer-owned renewables less than 2 megawatts toward conservation goals. Therefore, the draft rule excludes

these facilities from eligibility under the RPS. Renewable facilities will have access to the FPSC's dispute resolution process if they believe they have been excluded from eligibility from the renewable energy credit market without cause.

<u>Prevention of Double Counting</u> – Section 366.92(3)(b)(6), F.S., requires the FPSC to include in its rule provisions to ensure that energy credited toward compliance is not credited toward any other purpose. To prevent double counting, the draft rule requires that RECs or renewable energy that have otherwise been used to comply with Florida's RPS or any other state's RPS may not be used for compliance.

<u>REC Price Cap</u> – Encouraging renewables is one important element in the overall strategy to reduce greenhouse gases (GHGs). Until the state or the federal government adopts a cap and trade system to reduce GHGs, staff believes it is appropriate for the RPS rule to include a methodology to account for the reduction in GHGs associated with renewable energy. As such, and as an additional ratepayer protection, the draft rule initially caps the price of RECs at \$16 per ton of GHGs avoided by renewable resources relative to utility emissions. The price cap is to be reevaluated or phased out after adoption of a state or federal cap and trade system.

Staff prepared initial estimates of the total costs of the RPS if RECs are capped based on \$16 per ton of avoided GHGs. Staff obtained the \$16 per ton value from Docket No. 070650, Florida Power & Light Company's (FPL) need determination for the Turkey Point nuclear generating units. (See the carbon cost per ton assumption for year 2017 in the ENV II exhibit.) This value is a starting point for discussion purposes only. Staff used the \$16 per ton to develop an equivalent cents per kWh rate for each utility, based on each utility's 2004 actual carbon emissions and retail energy sales. These rates ranged from 0.6 to 1.6 cents per kWh. It appears that with a \$16 per ton REC price cap, FPL, Progress Energy and Tampa Electric Company's compliance costs would be below the one percent revenue cap, while Gulf Power Company's costs may exceed the revenue cap by 2025. A higher REC price cap would result in higher potential compliance costs for each utility, resulting in compliance costs which may exceed the one percent revenue cap more quickly.

III. Rule 25-17.420, F.A.C. - Municipal and Rural Electric Cooperative Reporting

Reporting Requirements - Section 366.92(5), F.S., requires each municipal and cooperative electric utility to develop standards for the promotion, encouragement, and expansion of the use of renewable energy resources and energy conservation and efficiency measures. These utilities are required to submit an annual report to the FPSC identifying these standards. The draft rule specifies the annual reporting requirements for municipals and cooperatives. These reports will facilitate the FPSC's efforts to track municipal and cooperative policies regarding renewable energy and energy efficiency, as well as any resulting increase in renewable resources in Florida.

1	I. Renewable Portfolio Standard
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3	17.400 Florida Renewable Portfolio Standard
4	(1) Application and Scope.
5	(a) The Commission shall establish numerical portfolio standards for each investor-owned
6	electric utility that will promote the development of renewable energy, protect the economic
7	viability of existing renewable energy facilities, diversify the types of fuel used to generate
8	electricity in Florida, lessen Florida's dependence on fossil fuels for the production of
9	electricity, minimize the volatility of fuel costs, encourage investment in the state, improve
10	environmental conditions, and minimize the costs of power supply to electric utilities and their
11	<u>customers.</u>
12	(b) After approval of the initial renewable portfolio standards, the Commission shall review
13	and set renewable portfolio standards for each investor-owned electric utility at least once
14	every five years. The Commission on its own motion, or upon petition by a substantially
15	affected person or a utility, shall initiate a proceeding to review and, if appropriate, modify the
16	renewable portfolio standards. All modifications of the approved renewable portfolio
17	standards and the associated compliance plans shall only be on a prospective basis.
18	(c) In a proceeding to establish or modify the renewable portfolio standards, each investor-
19	owned electric utility shall propose numerical renewable portfolio standards based on an
2021	analysis of the technical and economic potential for Florida renewable energy resources to
22	provide reasonably achievable and affordable annual energy (KWH) savings.
23	(2) Definitions.
24	(a) "Florida renewable energy resources," means electrical, mechanical, or thermal energy
25	produced from a method that uses one or more of the following fuels or energy sources:
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1	hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat,
2	or hydroelectric power that is produced in Florida.
3	(b) "Renewable energy," means electrical energy produced from a method that uses one or
4	more of the following fuels or energy sources: hydrogen produced from sources other than
5	fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, and
6	hydroelectric power. The term includes the alternative energy source, waste heat, from
7	sulfuric acid manufacturing operations.
8	(c) "Biomass," means a power source that is comprised of, but not limited to, combustible
9	residues or gases from forest products manufacturing, waste, or co-products from agricultural
10	and orchard crops, waste or co-products from livestock and poultry operations, waste or
11	byproducts from food processing, urban wood waste, municipal solid waste, municipal liquid
12	waste treatment operations, and landfill gas.
13	(d) "Class I renewable energy source," means Florida renewable energy resources derived
14	from wind or solar energy systems.
15	(e) "Class II renewable energy source," means renewable energy derived from Florida
16	renewable energy resources other than wind or solar energy systems.
17	(f) "Renewable Energy Credit," means a financial instrument that represents the unbundled,
18	separable, renewable attribute of renewable energy or equivalent solar thermal energy
19	produced in Florida and is equivalent to one megawatt-hour of electricity generated by a
20	source of renewable energy located in Florida.
21	(g) "Renewable Portfolio Standard," means the minimum percentage of total annual retail
22	electricity sales by an investor-owned electric utility to consumers in Florida that shall be
23	supplied by renewable energy produced in Florida.
24	(h) "Solar Energy System," means equipment that provides for the collection and use of
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1	incident solar energy for water heating, space heating or cooling, or other applications that
2	would normally require a conventional source of energy such as petroleum products, natural
3	gas, or electricity that performs primarily with solar energy. In other systems in which solar
4	energy is used in a supplemental way, only those components that collect and transfer solar
5	energy shall be included in this definition.
6	(i) "Solar Photovoltaic System," means a device that converts incident sunlight into electrical
7	<u>current.</u>
8	(j) "Solar thermal system," means a device that traps heat from incident sunlight in order to
9	heat water.
10	(k) "Equivalent Solar Thermal Energy," means the conversion of the thermal output, measured
11	in British Thermal Units, of a solar thermal system to equivalent units of one megawatt-hour
12	of electricity otherwise consumed from or output to the electric utility grid.
13	(3) Renewable Portfolio Standard. Within 90 days of the effective date of this rule, and not
14	less than every five years thereafter, each investor-owned electric utility shall file for approval
15	by the Commission proposed renewable portfolio standards based on an analysis of the
16	technical and economic potential of Florida renewable energy resources for each utility's
17	service area.
18	(a) Initially, each investor-owned utility shall submit proposed annual renewable portfolio
19	standards which meet or exceed the following long term standards through the production or
20	purchase of renewable energy credits pursuant to Rule 17.410, F.A.C.:
21	1. by January 1, 2010: 2 percent of the prior year's retail electricity sales;
22	2. by January 1, 2017: 3.75 percent of the prior year's retail electricity sales;
23	3. by January 1, 2025: 6 percent of the prior year's retail electricity sales;
24	4. by January 1, 2050: 20 percent of the prior year's retail electricity sales.
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2	Options for Wind & Solar Preference:
3	OPTION I:
4	(b) By January 1, 2017, a minimum of 25% of the renewable portfolio standard shall be
5	provided from Class I renewable energy sources;
6	OPTION II:
7	(b) By January 1, 2017, a minimum of 20% of the renewable portfolio standard shall be
8	provided from Class I solar photovoltaic or solar thermal systems and 5% of the renewable
9	energy portfolio standard shall be provided by Class I wind energy systems;
10	OPTION III:
11	(b) For purposes of compliance with the renewable portfolio standards, a multiplier of 5 shall
12	be applied to all renewable energy credits produced from Class I renewable energy sources
13	until the first year in which they represent, in aggregate, 25% of the annual Renewable
14	Portfolio Standard.
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16	(c) Each investor-owned electric utility proposed renewable portfolio standard filing shall, at a
17	minimum, contain the following:
18	1. Current and ten-year forecast of installed capacity in kilowatts for each Florida
19	renewable energy resource;
20	2. Levelized life-cycle cost in cents per kilowatt-hour for each Florida renewable
21	energy resource;
22	3. Current and ten-year forecast of the effects of the renewable portfolio standard on
23	the reduction of greenhouse gas emissions in Florida;
24	4. Current and ten-year forecast of the effects of the renewable portfolio standard on
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1	economic development in Florida; and
2	5. Current and ten-year forecast of the estimated retail rate impact for each class of
3	customers of the proposed renewable portfolio standard.
4	(4) Compliance.
5	(a) In approving the proposed renewable portfolio standards and enforcing compliance with
6	the approved renewable portfolio standards, the Commission shall consider excusing an
7	investor-owned electric utility from compliance with any renewable portfolio standard based
8	upon a showing that:
9	1. the supply of renewable energy or renewable energy credits is not adequate to
10	satisfy the demand for such energy; or
11	2. the cost of securing renewable energy or renewable energy credits was prohibitive
12	such that the total costs for compliance with the renewable portfolio standard exceeded one
13	percent of the investor-owned electric utility's total annual retail revenues.
14	(b) Any utility requesting to be excused from meeting its renewable portfolio standard must
15	submit its request along with the annual report required by Rule 25-17.400(6), F.A.C.
16	(5) Cost Recovery. Reasonable and prudent costs associated with the provision or purchase of
17	renewable energy credits to meet the utility's renewable portfolio standards, including
18	administrative costs of the Florida Renewable Energy Credit Market, shall be recovered
19	through the Environmental Cost Recovery clause.
20	(6) Reporting Requirements. Each investor-owned electric utility shall file with the
21	Commission an annual report no later than April 1 of each year for the previous calendar year.
22	Each investor-owned electric utility's report shall include the following:
23	(a) the retail sales of the prior year in megawatt-hours;
24	(b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
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1	(c) the quantity of renewable energy purchased in megawatt-hours, separated by type of
2	ownership and fuel type;
3	(d) the quantity and vintage of self-generated renewable energy credits;
4	(e) the quantity and vintage of renewable energy credits purchased;
5	(f) the fuel type and ownership of the Florida renewable energy resource associated with each
6	renewable energy credit;
7	(g) a statement as to whether it was in compliance with the renewable portfolio standard in the
8	previous calendar year; and
9	(h) the utility's plan for additional generation or procurement to meet the renewable portfolio
10	standard for the current calendar year and the following two years.
11	
12	Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041,
13	366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History–New XX-XX-08.
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1	II. Florida Renewable Energy Credit Market
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,	17.410 Florida Renewable Energy Credit Market.
	(1) Investor-owned electric utilities shall establish and administer, subject to Commission
,	approval pursuant to subsection (4), an electronic renewable energy credit market. The
)	renewable energy credit market shall allow for the transparent production, buying, selling, and
,	trading of renewable energy credits used to comply with the renewable portfolio standards of
;	Rule 25-17.400, F.A.C. All records associated with the production of and the buying, selling,
)	or trading of renewable energy credits shall be available to the Commission for audit purposes.
)	(a) Investor-owned electric utilities are encouraged to collectively establish and contract with
	an independent not-for-profit corporation for the development, administration, and
2	maintenance of a Florida Renewable Energy Credit Market.
}	(b) Municipal electric utilities and rural electric cooperative utilities are encouraged to
1	participate in the Florida Renewable Energy Credit Market.
5	(c) The administrative costs associated with the Florida Renewable Energy Credit Market
5	shall be collected either through membership dues, certification fees, or administrative fees
	assessed to a renewable energy credit. Fees shall be fair, equitable, and cost-based.
3	(2) Each investor-owned electric utility shall comply with the renewable portfolio standards
	approved by the Commission pursuant to Rule 25-17.400, F.A.C., through the production or
)	purchase of renewable energy credits.
	(a) The following entities are eligible to produce renewable energy credits that may be
,	counted toward the renewable portfolio standard:
, L	1. Investor-owned electric utility Florida owned renewable energy resources;
	2. Municipal electric utility and rural electric cooperative utility owned Florida
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1	renewable energy resources;
2	3. Non-utility Florida renewable energy resources providing net capacity and energy
3	under a purchase power agreement to a Florida electric utility;
4	4. Non-utility Florida renewable energy resources greater than 2 megawatts providing
5	on site generation to offset all or a part of the customer's electrical needs.
6	5. Non-utility Florida renewable energy resources greater than 2 megawatts providing
7	equivalent solar thermal energy to offset all or a part of the customer's electrical needs;
8	6. Customer-owned Florida renewable energy resources, 2 megawatts or less, that have
9	not received incentives from a Commission-approved demand-side conservation program
10	pursuant to the Florida Energy and Efficiency Conservation Act, Sections 366.8085 and
11	403.519, F.S.
12	(b) A renewable energy credit is retained by the owner of the eligible Florida renewable
13	energy resource from which it was derived unless specifically sold or transferred.
14	(c) A renewable energy credit shall be valid for two years after the date the corresponding
15	megawatt-hour or equivalent solar thermal energy was generated. A renewable energy credit
16	from a customer-owned renewable system less than 2 megawatts shall be valid for two years
17	after the date the renewable energy credit is certified. However, a renewable energy credit
18	shall be retired after it is used to comply with the Florida or any other state, regional or federal
19	renewable portfolio standard.
20	(d) Renewable energy credits shall not be used for compliance with the Florida renewable
21	portfolio standard if the renewable energy credit or its associated energy has already been
22	counted toward compliance with any other state or federal renewable portfolio standard.
23	(e) Renewable energy credits shall not be used for compliance with the Florida renewable
24	portfolio standard if the renewable energy credit results from a Commission-approved
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1	demand-side conservation program pursuant to the Florida Energy Efficiency and
2	Conservation Act, Sections 366.8085 and 403.519, F.S.
3	(3) Initially, the price of each renewable energy credit shall be capped at the equivalent of \$16
4	per ton of net greenhouse gas emissions (GHG) reduced by Florida renewable energy
5	resources relative to the GHG emissions otherwise emitted by the utility. The price cap shall
6	be reevaluated or phased out upon adoption of a state or federal cap and trade system.
7	(4) Within 90 days from the effective date of this rule, the investor-owned electric utilities
8	shall file for Commission approval the structure, governance, and procedures for
9	administering the renewable energy credit market. The compliance filing shall, at a minimum,
10	provide provisions for the following:
11	(a) a mechanism to buy, sell, and trade renewable energy credits generated by utilities and
12	Florida renewable energy resources;
13	(b) the aggregation of renewable energy credits for customer-owned Florida renewable energy
14	resources;
15	(c) the certification and verification of renewable energy credits as defined in Rule 25-
16	17.400(2)(f), F.A.C., including renewable energy credits resulting from Equivalent Solar
17	Thermal Energy as defined in Rule 25-17.400(2)(k), F.A.C.;
18	(d) an accounting system to verify compliance with the renewable portfolio standard; and
19	(e) a method to record each transaction instantaneously, and to indicate whether the renewable
20	energy credit is associated with a Class I or Class II renewable energy source as defined in
21	Rule 25-17.400(2)(d) and (e), F.A.C.
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23	Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041,
24	366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History–New XX-XX-08.
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1	III. Municipal and Rural Electric Coop Reporting
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3	25-17.420 Municipal Electric Utility and Rural Electric Cooperative Renewable Energy
4	Reporting
5	(1) Each municipal electric utility and rural electric cooperative utility shall file with the
6	Commission an annual report no later than April 1 of each year for the previous calendar year
7	Each utility's report shall include the following:
8	(a) the retail sales of the prior year in megawatt-hours;
9	(b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
10	(c) the quantity of renewable energy purchased in megawatt-hours, separated by type of
11	ownership and fuel type;
12	(d) the quantity and vintage of self-generated renewable energy credits;
13	(e) the quantity and vintage of renewable energy credits purchased;
14	(f) the fuel type and ownership of the Florida renewable energy resource associated with each
15	renewable energy credit;
16	(g) a statement as to whether the utility has adopted a renewable portfolio standard, or has any
17	plans to conduct a proceeding to establish a renewable portfolio standard in the upcoming
18 19	<u>year.</u>
20	
21	Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041,
22	366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History–New XX-XX-08.
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CODING: Words <u>underlined</u> are additions; words in struck through type are deletions from existing law.

hydrogen produced from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, and hydroelectric power. The term includes the alternative energy resource, waste heat, from sulfuric acid manufacturing operations.

- (5) On or before January 1, 2009, each public utility shall develop a standardized interconnection agreement and net metering program for customer-owned renewable generation. The commission shall establish requirements relating to the expedited interconnection and net metering of customer-owned renewable generation by public utilities and may adopt rules to administer this section.
- (6) On or before July 1, 2009, each municipal electric utility and each rural electric cooperative that sells electricity at retail shall develop a standardized interconnection agreement and net metering program for customer-owned renewable generation. Each governing authority shall establish requirements relating to the expedited interconnection and net metering of customer-owned generation. By April 1 of each year, each municipal electric utility and rural electric cooperative utility serving retail customers shall file a report with the commission detailing customer participation in the interconnection and net metering program, including, but not limited to, the number and total capacity of interconnected generating systems and the total energy net metered in the previous year.
- (7) Under the provisions of subsections (5) and (6), when a utility purchases power generated from biogas produced by the anaerobic digestion of agricultural waste, including food waste or other agricultural byproducts, net metering shall be available at a single metering point or as a part of conjunctive billing of multiple points for a customer at a single location, so long as the provision of such service and its associated charges, terms, and other conditions are not reasonably projected to result in higher cost electric service to the utility's general body of ratepayers or adversely affect the adequacy or reliability of electric service to all customers, as determined by the commission for public utilities, or as determined by the governing authority of the municipal electric utility or rural electric cooperative that serves at retail.

Section 42. Section 366.92, Florida Statutes, is amended to read:

366.92 Florida renewable energy policy.—

- (1) It is the intent of the Legislature to promote the development of renewable energy; protect the economic viability of Florida's existing renewable energy facilities; diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence on natural gas and fuel oil for the production of electricity; minimize the volatility of fuel costs; encourage investment within the state; improve environmental conditions; and, at the same time, minimize the costs of power supply to electric utilities and their customers.
 - (2) As used in For the purposes of this section, the term:

- (a) "Florida renewable energy resources" means shall mean renewable energy, as defined in s. 377.803, that is produced in Florida.
 - (b) "Provider" means a "utility" as defined in s. 366.8255(1)(a).
- (c) "Renewable energy" means renewable energy as defined in s. 366.91(2)(d).
- (d) "Renewable energy credit" or "REC" means a product that represents the unbundled, separable, renewable attribute of renewable energy produced in Florida and is equivalent to 1 megawatt-hour of electricity generated by a source of renewable energy located in Florida.
- (e) "Renewable portfolio standard" or "RPS" means the minimum percentage of total annual retail electricity sales by a provider to consumers in Florida that shall be supplied by renewable energy produced in Florida.
- (3) The commission shall adopt rules for a renewable portfolio standard requiring each provider to supply renewable energy to its customers directly, by procuring, or through renewable energy credits. In developing the RPS rule, the commission shall consult the Department of Environmental Protection and the Florida Energy and Climate Commission. The rule shall not be implemented until ratified by the Legislature. The commission shall present a draft rule for legislative consideration by February 1, 2009.
- (a) In developing the rule, the commission shall evaluate the current and forecasted levelized cost in cents per kilowatt hour through 2020 and current and forecasted installed capacity in kilowatts for each renewable energy generation method through 2020.

(b) The commission's rule:

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- 1. Shall include methods of managing the cost of compliance with the renewable portfolio standard, whether through direct supply or procurement of renewable power or through the purchase of renewable energy credits. The commission shall have rulemaking authority for providing annual cost recovery and incentive-based adjustments to authorized rates of return on common equity to providers to incentivize renewable energy. Notwithstanding s. 366.91(3) and (4), upon the ratification of the rules developed pursuant to this subsection, the commission may approve projects and power sales agreements with renewable power producers and the sale of renewable energy credits needed to comply with the renewable portfolio standard. In the event of any conflict, this subparagraph shall supersede s. 366.91(3) and (4). However, nothing in this section shall alter the obligation of each public utility to continuously offer a purchase contract to producers of renewable energy.
- 2. Shall provide for appropriate compliance measures and the conditions under which noncompliance shall be excused due to a determination by the commission that the supply of renewable energy or renewable energy credits was not adequate to satisfy the demand for such energy or that the cost of securing renewable energy or renewable energy credits was cost prohibitive.

- 3. May provide added weight to energy provided by wind and solar photovoltaic over other forms of renewable energy, whether directly supplied or procured or indirectly obtained through the purchase of renewable energy credits.
- 4. Shall determine an appropriate period of time for which renewable energy credits may be used for purposes of compliance with the renewable portfolio standard.
- 5. Shall provide for monitoring of compliance with and enforcement of the requirements of this section.
- 6. Shall ensure that energy credited toward compliance with the requirements of this section is not credited toward any other purpose.
- 7. Shall include procedures to track and account for renewable energy credits, including ownership of renewable energy credits that are derived from a customer-owned renewable energy facility as a result of any action by a customer of an electric power supplier that is independent of a program sponsored by the electric power supplier.
- 8. Shall provide for the conditions and options for the repeal or alteration of the rule in the event that new provisions of federal law supplant or conflict with the rule.
- (c) Beginning on April 1 of the year following final adoption of the commission's renewable portfolio standard rule, each provider shall submit a report to the commission describing the steps that have been taken in the previous year and the steps that will be taken in the future to add renewable energy to the provider's energy supply portfolio. The report shall state whether the provider was in compliance with the renewable portfolio standard during the previous year and how it will comply with the renewable portfolio standard in the upcoming year.
- (4) In order to demonstrate the feasibility and viability of clean energy systems, the commission shall provide for full cost recovery under the environmental cost-recovery clause of all reasonable and prudent costs incurred by a provider for renewable energy projects that are zero greenhouse gas emitting at the point of generation, up to a total of 110 megawatts statewide, and for which the provider has secured necessary land, zoning permits, and transmission rights within the state. Such costs shall be deemed reasonable and prudent for purposes of cost recovery so long as the provider has used reasonable and customary industry practices in the design, procurement, and construction of the project in a cost-effective manner appropriate to the location of the facility. The provider shall report to the commission as part of the cost-recovery proceedings the construction costs, in-service costs, operating and maintenance costs, hourly energy production of the renewable energy project, and any other information deemed relevant by the commission. Any provider constructing a clean energy facility pursuant to this section shall file for cost recovery no later than July 1, 2009.
- (5) Each municipal electric utility and rural electric cooperative shall develop standards for the promotion, encouragement, and expansion of the

use of renewable energy resources and energy conservation and efficiency measures. On or before April 1, 2009, and annually thereafter, each municipal electric utility and electric cooperative shall submit to the commission a report that identifies such standards.

- (6) Nothing in this section shall be construed to impede or impair terms and conditions of existing contracts.
- (3) The commission may adopt appropriate goals for increasing the use of existing, expanded, and new Florida renewable energy resources. The commission may change the goals. The commission may review and reestablish the goals at least once every 5 years.
- (7)(4) The commission may adopt rules to administer and implement the provisions of this section.
- Section 43. Subsections (1), (2), and (6) of section 366.93, Florida Statutes, are amended to read:
- 366.93 Cost recovery for the siting, design, licensing, and construction of nuclear and integrated gasification combined cycle power plants.—
 - (1) As used in this section, the term:
- (a) "Cost" includes, but is not limited to, all capital investments, including rate of return, any applicable taxes, and all expenses, including operation and maintenance expenses, related to or resulting from the siting, licensing, design, construction, or operation of the nuclear <u>power plant</u>, including new, expanded, or relocated electrical transmission lines or facilities of any size that are necessary thereto, or of the integrated gasification combined cycle power plant.
- (b) "Electric utility" or "utility" has the same meaning as that provided in s. 366.8255(1)(a).
- (c) "Integrated gasification combined cycle power plant" or "plant" means is an electrical power plant as defined in s. 403.503(14)(13) that uses synthesis gas produced by integrated gasification technology.
- (d) "Nuclear power plant" or "plant" means is an electrical power plant as defined in s. 403.503(14)(13) that uses nuclear materials for fuel.
- (e) "Power plant" or "plant" means a nuclear power plant or an integrated gasification combined cycle power plant.
- (f) "Preconstruction" is that period of time after a site, including any related electrical transmission lines or facilities, has been selected through and including the date the utility completes site clearing work. Preconstruction costs shall be afforded deferred accounting treatment and shall accrue a carrying charge equal to the utility's allowance for funds during construction (AFUDC) rate until recovered in rates.
- (2) Within 6 months after the enactment of this act, the commission shall establish, by rule, alternative cost recovery mechanisms for the recovery of