

I. Renewable Portfolio Standard

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17.400 Florida Renewable Portfolio Standard

(1) Application and Scope.

(a) The Commission shall establish a Renewable Portfolio Standard Rule (hereafter called “RPS Rule”) that is equitable to the rate-payers, the utilities, and renewable energy resources that will protect and promote the development of renewable energy, protect the economic viability of existing renewable energy facilities, diversify the types of fuel used to generate electricity in Florida, lessen Florida’s dependence on fossil fuels for the production of electricity, minimize the volatility of fuel costs, encourage investment into the state, improve environmental conditions, and minimize the costs of power supplies to the electric utilities and their customers in all classes (residential, commercial and industrial).

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(b) After approval of the RPS Rule, the Commission shall review and the RPS Rule at least once every five years. The Commission on its own motion, or upon petition by a substantially affected person or a utility or renewable energy resource, shall initiate a proceeding to review and, if appropriate, modify the RPS Rule from time to time or at any time not less frequently than on a 5 year basis. All modifications of the approved renewable portfolio standards and the associated compliance plans shall only be on a prospective basis.

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(2) Definitions.

(a) “Florida renewable energy resources,” means electrical, mechanical, or thermal energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power that was produced in Florida or imported when and if the power has been produced with least emissions (NOx, SOx, CO, CO2, Dioxans, Furans, and carcinogens)

Deleted: (c) In a proceeding to establish or modify the renewable portfolio standards, each investor-owned electric utility shall propose numerical renewable portfolio standards based on an analysis of the technical and economic potential for Florida renewable energy resources to provide reasonably achievable and affordable annual energy (KWH) savings.¶

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1 for which stack results must be tested and supplied to the PSC by means of SCADA or semi-
2 annual settlement tests.

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3
4 (b) “Renewable energy,” means electrical energy produced from a method that uses one or
5 more of the following fuels or energy sources: hydrogen produced from sources other than
6 fossil fuels, biomass, solar energy, geothermal energy, ~~wave energy~~, wind energy, ocean
7 energy, and hydroelectric power. The term includes the alternative energy source, waste heat,
8 from sulfuric acid manufacturing operations.

9 (c) “Biomass,” means a power source that is comprised of, but not limited to, combustible
10 residues or gases from forest products manufacturing, ~~agricultural, horticultural, or industrial~~
11 BTU convertible waste streams, or co-products from agricultural and orchard crops, waste or
12 co-products from livestock and poultry operations, waste or byproducts from food processing,
13 urban wood waste, municipal solid waste, municipal liquid waste treatment operations, and
14 landfill gas.

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15 (d) “Class I renewable energy source,” means Florida renewable energy resources derived
16 from wind or solar energy systems ~~or any source that does not required an Air Permit in the~~
17 State of Florida.

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18 (e) “Class II renewable energy source,” means renewable energy derived from Florida
19 renewable energy resources ~~other than Class I renewable energy sources.~~

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20 (f) “Renewable Energy Credit,” means a financial instrument that represents the unbundled,
21 separable, renewable attribute of renewable energy or equivalent solar thermal energy
22 produced in Florida and is equivalent to one megawatt-hour of electricity generated by a
23 source of renewable energy ~~asset physically~~ located in Florida.

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Deleted: minimum percentage of total annual retail electricity sales by an investor-owned electric utility to consumers in Florida that shall be supplied by renewable energy produced in Florida.

24 (g) “Renewable Portfolio Standard,” means the ~~RPS Rule made by this committee.~~

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1 (h) “Solar Energy System,” means equipment that provides for the collection and use of
2 incident solar energy for water heating, space heating or cooling, or other applications that
3 would normally require a conventional source of energy such as petroleum products, natural
4 gas, or electricity that performs primarily with solar energy. In other systems in which solar
5 energy is used in a supplemental way, only those components that collect and transfer solar
6 energy shall be included in this definition.

7 (i) “Solar Photovoltaic System,” means a device that converts incident sunlight into electrical
8 current.

9 (j) “Solar thermal system,” means a device that traps heat from incident sunlight in order to
10 heat water.

11 (k) “Equivalent Solar Thermal Energy,” means the conversion of the thermal output, measured
12 in British Thermal Units, of a solar thermal system to equivalent units of one megawatt-hour
13 of electricity otherwise consumed from or output to the electric utility grid.

14 (3) RPS RULE:

15 (a) Each investor-owned utility shall be required to wheel any RPS energy into the
16 transmission lines for sale to rate-payers prior to wheeling any non-RPS energy to the rate-
17 payers.

18 (b) The RPS energy resource shall be paid per kwh at the rate benchmarked to the market (and
19 thus controlled by the market and market thresholds in order to protect the rate-payers of
20 Florida) in each IOU service area. Rates shall be marked to market every 15 minutes.

21 (c) RPS energy shall be transmitted without tariff, as the public (which owns the transmission
22 lines) has established a preference for clean energy, which shall be expressed as tariff-free use
23 of the transmission lines.

24 (d) Each investor-owned utility shall pay the REC for each MW placed into the transmission
25

Deleted: renewable Portfolio Standard. Within 90 days of the effective date of this rule, and not less than every five years thereafter, each investor-owned electric utility shall file for approval by the Commission proposed renewable portfolio standards based on an analysis of the technical and economic potential of Florida renewable energy resources for each utility's service area. ¶

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lines by each RPS energy resource.

For the purpose of encouraging energy with the least Air Quality negative impact, all energy from Tier 1 resources shall be placed into the transmission queue prior to any energy from a Tier 2 resource, followed by energy from all other sources.

(4) Compliance.

(a) While no fees are assigned to the Florida investor-owned utilities for failing to encourage sufficient RPS energy in their services areas, a fine of \$10,000 US (ten thousand US dollars) per MWh shall be assigned to any Florida investor-owned utility for failing to place RPS energy first in the transmission queue, failing to mark to market, or failing to purchase a REC. This fine shall be paid out of dividends from the Florida investor-owned utilities to investors, and not out of rate-payers revenues.

(b) Each Florida investor-owned utility shall offer and sign bankable contracts Power Purchase Contracts (#OCC 1051 compliant) which do not in any way pierce the 17 year protection on intellectual property by mandating inspections beyond the meter and switchgear.

(c) Each Florida investor-owned utility shall, notwithstanding the above, provide a public affirmation to obey the RPS Rule described in section 3, whether or not a PPA has been or will be signed, to any RPS energy resource to invite them to place RPS energy in the transmission lines.

(d) Each Florida investor-owned utility to waive all transmission feasibility fees and approve all requested access by an RPS energy resource to the public transmission lines in support of FERC 888. Any FL investor-owned utility found to be preventing access to the transmission lines through any dilatory procedural delay to be fined \$50,000,000 US (fifty million US dollars) which fine shall be delivered entirely to the

Deleted: submit proposed annual renewable portfolio standards which meet or exceed the following long term standards through the production or purchase of renewable energy credits pursuant to Rule 17.410, F.A.C.:
1. by January 1, 2010: 2 percent of the prior year's retail electricity sales;
2. by January 1, 2017: 3.75 percent of the prior year's retail electricity sales;
3. by January 1, 2025: 6 percent of the prior year's retail electricity sales;
4. by January 1, 2050: 20 percent of the prior year's retail electricity sales.

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Options for Wind & Solar Preference:
OPTION I:
(b) By January 1, 2017, a minimum of 25% of the renewable portfolio standard shall be provided from Class I renewable energy sources;
OPTION II:
(b) By January 1, 2017, a minimum of 20% of the renewable portfolio standard shall be provided from Class I solar photovoltaic or solar thermal systems and 5% of the renewable energy portfolio standard shall be provided by Class I wind energy systems;
OPTION III:
(b) For purposes of compliance with the renewable portfolio standards, a multiplier of 5 shall be applied to all renewable energy credits produced from Class I renewable energy sources until the first year in which they represent, in aggregate, 25% of the annual Renewable Portfolio Standard.

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(c) Each investor-owned electric utility proposed renewable portfolio standard filing shall, at a minimum, contain the following:
1. Current and ten-year forecast of installed capacity in kilowatts for each Florida renewable energy resource;
2. Levelized life-cycle cost in cents per kilowatt-hour for each Florida renewable energy resource;
3. Current and ten-year forecast of the effects of the renewable portfolio standard on the reduction of greenhouse gas emissions in Florida;
4. Current and ten-year forecast of the effects of the renewable portfolio standard on economic development in Florida; and
5. Current and ten-year forecast of the estimated retail rate impact for each class of customers of the proposed renewable portfolio standard.

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RPS energy resource from the dividends of the FL investor-owned utility.
(e) An RPS resource may choose to forward-sell electricity and/or RECs as far as twenty years in advance. If this is desired by the RPS resource, utilities must purchase the electricity and/or RECs with a futures derivative agreement that benchmarks electricity prices per the NYMEX for electricity and the Green Exchange for RECs, but marks to market at 15 minute intervals to prevent unsupportable agreements. If the RPS resource requests a cash dNPV (discounted Net Present Value) of the electricity or RECs sales agreement, the FL investor-owned utilities will provide said cash according to the discount rate set in latest rendition of the Tristone Energy Lending Price Survey (currently set at 9%)- this requirement to be modified by mutual agreement if and when any condition exists wherein a FL investor-owned utility declares the transactions to impose a financial hardship on the investor-owned utility and for relief seeks a hearing to request the assistance of the Florida DEP which can, in turn, arbitrate or mediate the financial transaction (bankable contracts) through to the US Treasury for financing with the Federal Finance Bank, or the Institutional Capital or Credit Markets in order to prevent the economic hardship from being transferred to the FL investor-owned utility's rate-payers.

Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041, 366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History--New XX-XX-08.

II. Florida Renewable Energy Credit Market

17.410 Florida Renewable Energy Credit Market (hereafter called "RECs market").

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Deleted: ~~<#>In approving the proposed renewable portfolio standards and enforcing compliance with the approved renewable portfolio standards, the Commission shall consider excusing an investor-owned electric utility from compliance with any renewable portfolio standard based upon a showing that:
1. the supply of renewable energy or renewable energy credits is not adequate to satisfy the demand for such energy; or
2. the cost of securing renewable energy or renewable energy credits was prohibitive such that the total costs for compliance with the renewable portfolio standard exceeded one percent of the investor-owned electric utility's total annual retail revenues.
(b) Any utility requesting to be excused from meeting its renewable portfolio standard must submit its request along with the annual report required by Rule 25-17.400(6), F.A.C.
(5) Cost Recovery. Reasonable and prudent costs associated with the provision or purchase of renewable energy credits to meet the utility's renewable portfolio standards, including administrative costs of the Florida Renewable Energy Credit Market, shall be recovered through the Environmental Cost Recovery clause.
(6) Reporting Requirements. Each investor-owned electric utility shall file with the Commission an annual report no later than April 1 of each year for the previous calendar year. Each investor-owned electric utility's report shall include the following:
(a) the retail sales of the prior year in megawatt-hours;
(b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
(c) the quantity of renewable energy purchased in megawatt-hours, separated by type of ownership and fuel type;
(d) the quantity and vintage of self-generated renewable energy credits;
(e) the quantity and vintage of renewable energy credits purchased;
(f) the fuel type and ownership of the Florida renewable energy resource associated with each renewable energy credit;
(g) a statement as to whether it was in compliance with the renewable portfolio standard in the previous calendar year; and
(h) the utility's plan for additional generation or procurement to meet the renewable portfolio standard for the current calendar year and the following two years.~~

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1 ~~(1) An electronic Florida RECs Market shall be established.~~ The renewable energy credit
2 market shall allow for the production, transparent buying/selling/trading of renewable energy
3 credits used to comply with the RPS Rule. All records associated with the production of and
4 the buying/selling/trading of renewable energy credits shall be available to the Commission
5 for audit purposes. All prices out to the latest-vintage sale shall be electronically posted,
6 which prices shall reflect the average price, not the highest or lowest price, per REC for that
7 quarter. The electronic platform shall allow for the option of registration of renewable energy
8 credits for sale directly and without brokers by the RPS energy resources.

9 ~~(a) The RECs Market shall be developed, administrated and maintained by an independent~~
10 ~~not-for-profit corporation, which shall be governed by a board that with representation~~
11 (roughly) as follows:
12 55% renewable energy resources, activists, technologists
13 20% renewable energy financiers, brokers, traders, market analysts
14 25% utilities and FL Public Service Commission.
15 Board membership requirements shall be strictly enforced.

16 ~~(b) Municipal electric utilities and rural electric cooperative utilities are required to participate~~
17 ~~in the Florida RECs Market inasmuch as they purchase RECs from RPS energy resources~~
18 when RPS energy is wheeled to their service areas, which shall be in exact per capita ratio as
19 the FL investor-owned utilities.

20 ~~(c) The administrative costs associated with the electronic Florida RECs Market shall be~~
21 ~~collected either through membership dues, certification fees, or administrative fees assessed to~~
22 the Florida investor-owned utilities until such time as the 20% RPS goal is met in Florida, and
23 following the achievement of that goal, the cost shall be sustained through an automatic 1%
24 removed from each REC transaction, from utility and RPS energy resource equally.
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Deleted: Investor-owned electric utilities shall establish and administer, subject to Commission approval pursuant to subsection (4), an electronic renewable energy credit market

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1 (2) The following entities are eligible to produce renewable energy credits:
 2 1. Investor-owned electric utility Florida owned renewable energy resources;
 3 2. Municipal electric utility and rural electric cooperative utility owned Florida
 4 renewable energy resources;
 5 3. Non-utility (~~distributed generator, independent operator, joint venture, public-~~
 6 ~~private enterprise, private equity or any other~~) Florida-located renewable energy resources
 7 ~~providing net capacity and energy to the Florida electric utility or to a municipal utility or to a~~
 8 ~~rural electric cooperative utility transmission lines, regardless of an existing PPA;~~
 9 4. Non-utility Florida renewable energy resources ~~or producers~~ greater than 2
 10 megawatts providing on site generation to offset all or a part of the customer’s electrical
 11 needs.
 12 5. Non-utility Florida renewable energy resources ~~greater than 2 megawatts providing~~
 13 ~~equivalent solar thermal energy to offset all or a part of the customer’s electrical needs;~~
 14 6. Customer-owned Florida renewable energy resources, 2 megawatts or less, that have
 15 not received incentives from a Commission-approved demand-side conservation program
 16 pursuant to the Florida Energy and Efficiency Conservation Act, Sections 366.80-.85 and
 17 403.519, F.S.

Deleted: 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)
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19 (3) A renewable energy credit is retained by the owner of the eligible Florida renewable
 20 energy resource from which it was derived unless specifically sold or transferred.
 21 (a) The only instance in which renewable energy may be wheeled to out-of-state rate-payers is
 22 if all energy in Florida is renewable, or during a condition of force majeure, necessitating
 23 temporary (less than 3 months) power infusion to a neighboring location or “affected area”. In
 24 this case, power generated by non-renewable sources of Florida must be deemed insufficient

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1 to meet the needs of the rate-payers of the affected area by the FERC or any federal or state
2 disaster management office, in which case the FL transmission entity (FL investor-owned
3 utility or otherwise) must mark the energy price to the destination market price and the RECs
4 may or may not be separately marketed as deemed fit by the RPS energy resource.

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5 (b) A renewable energy credit shall be valid ~~per tax legislation and shall be deemed valid for~~
6 two years after the date the corresponding megawatt-hour or equivalent solar thermal energy
7 was generated. A renewable energy credit from a customer-owned renewable system less than
8 2 megawatts shall be valid for ~~tax purposes~~ two years after the date the renewable energy
9 credit is certified. However, a renewable energy credit shall be retired after it is used to
10 comply with any regional, ~~other state's RPS~~ or federal renewable portfolio standard.

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11 (c) Any Florida rate-payer in any class (residential, commercial, industrial or other) who opts
12 to purchase a REC from the RECs Market or opts to pay any premium in rate-paying price that
13 bears any suggestion to be supporting renewable energy, must receive the tax credit associated
14 with the premium paid.

15 (3) Initially, the price of each renewable energy credit shall be capped at the equivalent of \$16
16 per ton of net greenhouse gas emissions (GHG) reduced or avoided by Florida renewable
17 energy resources relative to the GHG emissions otherwise emitted by the utility. The price
18 cap shall be ~~removed after one year and replaced by the market-based mechanism of supply~~
19 and demand in transparent transactions, with FL RECs prices no higher than 2x the national
20 compliance average REC price. ~~The REC price is also subject to any subsequent federal cap~~
21 and trade system.

Deleted: (d) Renewable energy credits shall not be used for compliance with the Florida renewable portfolio standard if the renewable energy credit or its associated energy has already been counted toward compliance with any other state or federal renewable portfolio standard.¶

Deleted: (e) Renewable energy credits shall not be used for compliance with the Florida renewable portfolio standard if the renewable energy credit results from a Commission-approved demand-side conservation program pursuant to the Florida Energy Efficiency and Conservation Act, Sections 366.80-.85 and 403.519, F.S.¶

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22 (4) Within 90 days from the effective date of this rule, the ~~not-for-profit organization to~~
23 administrate the electronic RECs Market shall file for Commission approval the structure,
24 governance, and procedures for administering the RECs market. The ~~compliance~~ filing shall,

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at a minimum, provide provisions for the following:

(a) a mechanism to buy, sell, and trade renewable energy credits generated by Florida renewable energy resources ~~regardless of ownership of the asset~~;

Deleted: utilities and

(b) the aggregation of renewable energy credits for customer-owned Florida renewable energy resources;

(c) the certification and verification of renewable energy credits as defined in Rule 25-17.400(2)(f), F.A.C., including renewable energy credits resulting from Equivalent Solar Thermal Energy as defined in Rule 25-17.400(2)(k), F.A.C.;

(d) an accounting system to verify compliance with the RPS Rule; and

Deleted: renewable portfolio standard

(e) a method to record each transaction instantaneously, and to indicate whether the renewable energy credit is associated with a Class I or Class II renewable energy source as defined ~~this RPS Rule~~.

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Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041, 366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History--New XX-XX-08.

III. Municipal and Rural Electric Coop Reporting

25-17.420 Municipal Electric Utility and Rural Electric Cooperative Renewable Energy Reporting

(1) Each municipal electric utility and rural electric cooperative utility shall file with the Commission an annual report no later than April 1 of each year for the previous calendar year.

Each utility's report shall include the following:

(a) the retail sales of the prior year in megawatt-hours;

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- 1 (b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
- 2 (c) the quantity of renewable energy purchased in megawatt-hours, separated by type of
- 3 ownership and fuel type;
- 4 (d) the quantity and vintage of self-generated renewable energy credits;
- 5 (e) the quantity and vintage of renewable energy credits purchased;
- 6 (f) the fuel type and ownership of the Florida renewable energy resource associated with each
- 7 renewable energy credit;

8 Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), (6), 366.041,

9 366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History--New XX-XX-08.

Deleted: (g) a statement as to whether the utility has adopted a renewable portfolio standard, or has any plans to conduct a proceeding to establish a renewable portfolio standard in the upcoming year.¶

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