



September 5, 2008

Florida Public Service Commission

Attn: Mr. Mark Futrell

Ms. Judy Harlow

Subject: RPS Rulemaking

Docket No. 080503-EI

Attached for your consideration is Florida Crystals' mark-up of the Staff 8/11/08 draft rule on the referenced subject.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gus R. Cepero". The signature is fluid and cursive.

Gus R. Cepero

Vice-President

Florida Crystals Corporation

Copies: PSC Clerk's Office

09/05/08 – FLORIDA CRYSTALS MARK-UP OF
DRAFT 8/11/08

I. Renewable Portfolio Standard

1
2
3 17.400 Florida Renewable Portfolio Standard

4 (1) Application and Scope.

5 (a) The Commission shall establish a uniform numerical portfolio standards ~~for each investor-~~
6 ~~owned electric utility~~ ies that will promote the development of renewable energy, protect the
7 economic viability of existing renewable energy facilities, diversify the types of fuel used to
8 generate electricity in Florida, lessen Florida's dependence on fossil fuels for the production
9 of 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 customers.

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, ~~power producer~~ or a utility ~~which makes a reasonable showing that the~~
16 ~~standards or other related mechanisms should be reviewed,~~ shall initiate a proceeding to
17 review and, if appropriate, modify the renewable portfolio standards ~~or related mechanisms.~~
18 All modifications of the approved renewable portfolio standards and the associated
19 compliance plans shall only be on a prospective basis ~~and shall not adversely affect prior,~~
20 ~~approved contracts and commitments.~~

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

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Which support the policy objectives set forth in 17.400(1)(a) above and which conform to the standards set forth in 17.400(3)(b) below.

(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 is produced in Florida.

(b) “Renewable energy,” means electrical energy produced from a method that uses one or more of the following fuels or energy sources: 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 source, waste heat, from sulfuric acid manufacturing operations.

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

(d) “Class I renewable energy source,” means Florida renewable energy resources derived from wind or solar energy systems.

(e) “Class II renewable energy source,” means renewable energy derived from Florida renewable energy resources other than wind or solar energy systems.

(f) “Renewable Energy Credit,” means a financial instrument that represents the unbundled, separable, renewable attribute of renewable energy or equivalent solar thermal energy produced in Florida and is equivalent to one megawatt-hour of electricity generated by a

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1 source of renewable energy located in Florida.

2 (g) “Renewable Energy Power Purchase Agreement” means a voluntary agreement or contract
3 between an investor owned utility and an independent power producer for the sale of
4 renewable energy and renewable energy credits. The sale of renewable energy credits can be
5 either bundled or unbundled with the sale of energy.

6 (he) “Renewable Portfolio Standard,” means the minimum percentage of total annual retail
7 electricity sales by an investor-owned electric utility to consumers in Florida that shall be
8 supplied by renewable energy produced in Florida.

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

15 (ij) “Solar Photovoltaic System,” means a device that converts incident sunlight into electrical
16 current.

17 (kj) “Solar thermal system,” means a device that traps heat from incident sunlight in order to
18 heat water.

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

22 (3) Renewable Portfolio Standard. Within 90 days of the effective date of this rule, and not
23 less than every five years thereafter, each investor-owned electric utility shall file for approval
24 by the Commission proposed renewable portfolio standards ~~based on an analysis of the~~

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technical and economic potential of Florida renewable energy resources for each utility's service area. Which support the policy objectives set forth in 17.400(1)(a) above and which conform to the standards set forth in 17.400(3)(b) below.

(a) Initially, each investor-owned utility shall submit proposed annual renewable portfolio standards which meet or exceed the following long term standards through the production of ~~or purchase of~~ renewable energy, the purchase of renewable energy, or the production or purchase of renewable energy credits pursuant to Rule 17.410, F.A.C.:

1. by January 1, 2010: ~~42~~ percent of the prior year's retail electricity sales;
2. by January 1, 2013: ~~7~~ 83.75 percent of the prior year's retail electricity sales;
3. by January 1, 2016: ~~25~~ 126 percent of the prior year's retail electricity sales;
4. by January 1, 2020: ~~50~~ 20 percent of the prior year's retail electricity sales.

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Renewable Energy Power Purchase Agreements

The Commission is specifically granted the authority to approve Renewable Energy Power Purchase Agreements. These agreements may contain provisions for the sale of renewable energy, capacity, and renewable energy credits and may be priced above avoided cost. The Commission shall exercise this authority if it determines such agreements are reasonable and prudent. In making such determination, the Commission shall consider the performance of the particular project or agreement relative to other renewable alternatives and relative to the following policy objectives:

1. Net reduction of greenhouse gas emissions
2. Diversification of Florida's fuel supply
3. Economic viability of Florida's existing renewable energy facilities
4. Promotion of investment and economic development in Florida

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1 To promote stability and predictability in transactions, any changes in the renewable portfolio
2 standards or related mechanisms which are approved subsequent to the approval of the Power
3 Purchase Agreement, shall not adversely affect the terms and conditions of approved
4 agreements.

5
6 **Options for Wind & Solar Preference:**

7 OPTION I:

8 (b) By January 1, ~~2017~~2020, a minimum of 25% of the renewable portfolio standard shall be
9 provided from Class I renewable energy sources;

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10 OPTION II:

11 ~~(b) By January 1, 202017, a minimum of 20% of the renewable portfolio standard shall be~~
12 ~~provided from Class I solar photovoltaic or solar thermal systems and 5% of the renewable~~
13 ~~energy portfolio standard shall be provided by Class I wind energy systems;~~

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14 OPTION III:

15 ~~(b) For purposes of compliance with the renewable portfolio standards, a multiplier of 3 shall~~
16 ~~be applied to all renewable energy credits produced from Class I renewable energy sources~~
17 ~~until the first year in which they represent, in aggregate, 25% of the annual Renewable~~
18 ~~Portfolio Standard.~~

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19 (c) Each investor-owned electric utility proposed renewable portfolio standard filing shall, at a
20 minimum, contain the following:

21 1. Current and ten-year forecast of installed capacity in kilowatts for each Florida
22 renewable energy resource;

23 2. Levelized life-cycle cost in cents per kilowatt-hour for each Florida renewable
24 energy resource;

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1 3. Current and ten-year forecast of the effects of the renewable portfolio standard on
2 the net reduction of greenhouse gas emissions in Florida;

3 4. Current and ten-year forecast of the effects of the renewable portfolio standard on
4 economic development in Florida; and

5 5. Current and ten-year forecast of the estimated retail rate impact for each class of
6 customers of the proposed renewable portfolio standard.

7 (4) Compliance.

8 (a) In approving the proposed renewable portfolio standards and enforcing compliance with
9 the approved renewable portfolio standards, the Commission shall consider excusing an
10 investor-owned electric utility from full compliance with ~~any the applicable~~ renewable
11 portfolio standard based upon a showing that:

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12 1. the supply of renewable energy or renewable energy credits is not adequate to fully
13 satisfy the demand for such energy; or

14 2. ~~the cost of securing renewable energy or renewable energy credits was prohibitive~~
15 ~~such that the total costs for compliance with the renewable portfolio standard exceeded one~~
16 ~~percent of the investor-owned electric utility's total annual retail revenues.~~

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17 The cost of compliance with the renewable portfolio standard was prohibitive, as defined
18 below:

19 The cost of compliance will be measured separately for Class I and Class II renewable energy
20 sources.

21 For Class I renewable energy sources, the total cost of compliance will be deemed to be
22 prohibitive if such costs exceed 2.0% of the investor owned electric utility's annual revenue.

23 For Class II renewable energy sources, the total cost of compliance will be deemed to be
24 prohibitive if such costs exceed 3% of the investor owned electric utility's annual revenue.

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- 1 The costs of projects developed pursuant to Section 366.92(4) shall not be included in the
2 above calculations of prohibitive costs.
- 3 (b) Any utility which fails to comply and does not demonstrate excusals listed in this rule.
4 shall issue a refund to ratepayers as a credit in its fuel adjustment clause. Commencing in
5 2010, the amount of the refund shall be the product of (a) \$80/Mwh and (b) the unexcused
6 shortfall from the standards established in 17.400(3) (a) for any given year, expressed in Mwh.
7 For each year after 2010, the \$80/Mwh figure shall be adjusted by the Consumer Price Index.
8 The Cost of the refund shall be the responsibility of the utility and not an expense recoverable
9 from ratepayers.
- 10 (b) Any utility requesting to be excused from meeting its renewable portfolio standard must
11 submit its request along with the annual report required by Rule 25-17.400(6), F.A.C.
- 12 (5) Cost Recovery. Reasonable and prudent costs associated with the provision or purchase of
13 renewable energy and renewable energy credits to meet the utility's renewable portfolio
14 standards, ~~excluding~~ ~~including~~ administrative costs of the Florida Renewable Energy Credit
15 Market, shall be recovered through the Environmental Cost Recovery clause.
- 16 (6) Reporting Requirements. Each investor-owned electric utility shall file with the
17 Commission an annual report no later than April 1 of each year for the previous calendar year.
18 Each investor-owned electric utility's report shall include the following:
- 19 (a) the retail sales of the prior year in megawatt-hours;
20 (b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
21 (c) the quantity of renewable energy purchased in megawatt-hours, separated by type of
22 ownership and fuel type;
23 (d) the quantity and vintage of self-generated renewable energy credits;
24 (e) the quantity and vintage of renewable energy credits purchased;

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- 1 (f) the fuel type and ownership of the Florida renewable energy resource associated with each
- 2 renewable energy credit;
- 3 (g) a statement as to whether it was in compliance with the renewable portfolio standard in the
- 4 previous calendar year; and
- 5 (h) the utility's plan for additional generation or procurement to meet the renewable portfolio
- 6 standard for the current calendar year and the following two years.

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

8 *366.05(1), 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History–New XX-XX-08.*

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II. Florida Renewable Energy Credit Market

1
2
3 17.410 Florida Renewable Energy Credit Market.

4 (1) The Commission shall, in consultation with the Governor's Action Team on Energy and
5 Climate Change, name an independent corporation for the development, administration, and
6 maintenance of a Florida Renewable Credit Market. ~~Investor-owned electric utilities shall~~
7 establish and administer, subject to Commission approval pursuant to subsection (4), an
8 electronic renewable energy credit market. The renewable energy credit market shall allow
9 for the transparent production, buying, selling, and trading of renewable energy credits used to
10 comply with the renewable portfolio standards of Rule 25-17.400, F.A.C. All records
11 associated with the production of and the buying, selling, or trading of renewable energy
12 credits shall be available to the Commission for audit purposes.

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13 (a) Funds for the administration of this Renewable Energy Credit market shall come from the
14 Public Service Commission regulatory trust fund. ~~Investor-owned electric utilities are~~
15 encouraged to collectively establish and contract with an independent not-for-profit
16 corporation for the development, administration, and maintenance of a Florida Renewable
17 Energy Credit Market.

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18 (b) Municipal electric utilities and rural electric cooperative utilities are encouraged to
19 participate in the Florida Renewable Energy Credit Market.

20 ~~(c) The administrative costs associated with the Florida Renewable Energy Credit Market~~
21 shall be collected either through membership dues, certification fees, or administrative fees
22 assessed to a renewable energy credit. ~~Fees shall be fair, equitable, and cost-based.~~

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24 (2) Each investor-owned electric utility shall comply with the renewable portfolio standards
25 approved by the Commission pursuant to Rule 25-17.400, F.A.C., through the production or

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1 purchase of renewable energy credits.

2 (a) The following entities are eligible to produce renewable energy credits that may be
3 counted toward the renewable portfolio standard:

4 1. Investor-owned electric utility Florida owned renewable energy resources;

5 2. Municipal electric utility and rural electric cooperative utility owned Florida
6 renewable energy resources;

7 3. Non-utility Florida renewable energy resources ~~greater than 2 Mw and providing~~
8 ~~net capacity and energy under a purchase power agreement delivering renewable energy to a~~
9 Florida electric utility;

10 4. Non-utility Florida renewable energy resources greater than 2 megawatts providing
11 on site generation to offset all or a part of the customer's electrical 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.

18 (b) A renewable energy credit is retained by the owner of the eligible Florida renewable
19 energy resource from which it was derived unless specifically sold or transferred.

20 (c) A renewable energy credit shall be valid for two ~~calendar~~ years after the ~~date~~ ~~calendar year~~
21 the corresponding megawatt-hour or equivalent solar thermal energy was generated. A

22 renewable energy credit from a customer-owned renewable system less than 2 megawatts shall

23 be valid for two ~~calendar~~ years after the ~~date~~ ~~calendar year~~ the renewable energy credit is
24 certified. However, a renewable energy credit shall be retired after it is used to comply with

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1 the Florida or any other state, regional or federal renewable portfolio standard.

2 (d) Renewable energy credits shall not be used for compliance with the Florida renewable
3 portfolio standard if the renewable energy credit or its associated energy has already been
4 counted toward compliance with any other state or federal renewable portfolio standard, or
5 cap and trade program.

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

10 ~~(3) Initially, the price of each renewable energy credit shall be capped at the equivalent of \$16~~
11 ~~per ton of net greenhouse gas emissions (GHG) reduced by Florida renewable energy~~
12 ~~resources relative to the GHG emissions otherwise emitted by the utility. The price cap shall~~
13 ~~be reevaluated or phased out upon adoption of a state or federal cap and trade system.~~

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14 (4) Within 90 days from the effective date of this rule, the ~~Commission shall institute investor-~~
15 ~~owned electric utilities shall file for Commission approval~~ the structure, governance, and
16 procedures for administering the renewable energy credit market. The ~~market structure,~~
17 ~~governance, and procedures compliance filing~~ shall, at a minimum, provide provisions for the
18 following:

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- 19 (a) a mechanism to buy, sell, and trade renewable energy credits generated by utilities and
20 Florida renewable energy resources;
21 (b) the aggregation of renewable energy credits for customer-owned Florida renewable energy
22 resources;
23 (c) the certification and verification of renewable energy credits as defined in Rule 25-
24 17.400(2)(f), F.A.C., including renewable energy credits resulting from Equivalent Solar

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Thermal Energy as defined in Rule 25-17.400(2)(k), F.A.C.;

(d) an accounting system to verify compliance with the renewable portfolio standard; and

(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 in

Rule 25-17.400(2)(d) and (e), F.A.C.

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;

(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;

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

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

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