

State of Florida



Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: October 2, 2008

TO: Office of Commission Clerk (Cole)

FROM: Office of the General Counsel (Miller, Cibula) *CM Miller*
Division of Economic Regulation (Hewitt) *CBH*
Office of Strategic Analysis and Governmental Affairs (Chase, Harlow, Futrell, Trapp) *QC 10/27* *MA* *RLT* *AHL*

RE: Docket No. 080503-EI – Establishment of rule on renewable portfolio standard.

AGENDA: 10/14/08 – Regular Agenda – Rule Proposal – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Argenziano

CRITICAL DATES: 02/01/09 (Section 366.92(3), F.S., requires the Commission to provide a rule to the Legislature by 2/1/2009.)

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\GCL\WP\080503.RCM.DOC

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Case Background

During the 2008 Regular Session, the Florida Legislature amended Section 366.92, Florida Statutes (F.S.), in House Bill 7135, Chapter 2008-227, Laws of Florida, to require the Florida Public Service Commission (Commission) in consultation with the Department of Environmental Protection and the Florida Energy and Climate Commission to adopt rules to establish a renewable portfolio standard (RPS). The RPS rules are to require each investor-owned electric utility (IOU) to supply a percentage of retail electricity sales from renewable energy sources located in Florida. The Commission is required to submit the rule to the Legislature for ratification by February 1, 2009.

DOCUMENT NUMBER-DATE

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Recent Legislation to Promote Renewable Energy

The 2005 Legislature established Section 366.91, F.S., requiring IOUs and two large municipal utilities to provide by January 1, 2006, a continuous offer to purchase power from renewables with a minimum term of ten years. To facilitate implementation of the legislation, staff held a workshop in which the IOUs agreed to revise existing standard offer contracts to comply with the requirements of the new legislation. On December 27, 2005, the Commission approved the revised tariffs, and also ordered that an additional workshop be held to determine whether rulemaking or other proceedings to implement the provisions of 366.91, F.S. should be pursued. Following the March 6, 2006 workshop, the Commission initiated a rulemaking proceeding. The Commission adopted, in December 2006, Rules 25-17.200-.310, Florida Administrative Code (F.A.C.), which set forth the requirements for IOUs with regard to contracts for the purchase of renewable energy from non-utility renewable generators. These rules provide: (1) contracts for the purchase of renewable capacity and energy must be continuously offered; (2) a separate standardized contract is required for each avoidable generating technology type in a utility's Ten-Year Site Plan; (3) renewable generators have the option to select a contract term from ten years up to the life of the avoided unit; (4) renewable generators may select a pricing option in which a portion of the energy payment is fixed; and (5) renewable generators or the IOU may reopen the contract if significant new environmental regulations are enacted, such as carbon legislation.

In 2006, the Legislature enacted an omnibus energy bill (SB 888). Section 366.92, F.S., expressed the Legislature's intent 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, lessen Florida's dependence on natural gas and fuel oil, minimize the volatility of fuel costs, encourage investment in the state, improve environmental conditions, and minimize the costs of electricity for customers. The legislation also gave the Commission authority to adopt appropriate goals for increasing the use of existing, expanded and new Florida renewable energy resources.

In response, the Commission began a broad initiative to further explore the opportunities for development of renewable energy in Florida. In January 2007, the Commission held a workshop to explore how to further encourage the development of renewable energy. At that workshop, parties discussed renewable resources available in Florida, and mechanisms to help develop these resources. At the January 2007 workshop, the parties discussed how an RPS can be used to further encourage renewable energy development. The mechanisms also discussed included net metering and expedited interconnection of customer-owned renewable generation. These discussions ultimately led to a rulemaking proceeding in which the Commission adopted amendments to Rule 25-6.065, F.A.C. This rule requires the IOUs to expedite the interconnection of customer-owned renewable generation, and allows customers to retain additional value of excess generation through net metering.

In July 2007, the Commission held a workshop to gather information on the design of an RPS for Florida. Over 30 speakers participated from the renewable industry, electric utilities and state and federal governmental entities. Based on the discussions from the July workshop,

Commission staff conducted follow-up technical workshops in August, September and December 2007, to explore a number of specific elements of an RPS in more depth, including the establishment of goals, applicability, eligible resources, compliance, verification and tracking mechanisms, mechanisms to encourage specific resources, and RPS activities in other states. At these workshops, comments were received from a wide range of stakeholders.¹

House Bill 7135 - Amendments to Section 366.92, F.S.

House Bill 7135 (HB 7135), Chapter 2008-227, Laws of Florida, enacted by the 2008 Florida Legislature, is a comprehensive state energy bill. HB 7135, in part, requires the Commission to adopt RPS rule and submit to the Legislature by February 1, 2009 for ratification. As part of the rule development process, the Commission is to evaluate the current and forecasted installed capacity in kilowatts through 2020, and current and forecasted levelized cost in cents per kilowatt-hour through 2020, for each renewable energy resource. The Commission staff has been collecting data on the number, type and output of existing renewable generators to establish a baseline for determining growth in renewable generation as part of the exploration of the RPS. Recently, the Commission, in cooperation with the Governor's Energy Office and the Lawrence Berkeley National Laboratory, has engaged Navigant Consulting, Inc. to perform an assessment of renewable energy resources that are currently operating in Florida and could potentially be developed in Florida through the year 2020. Funding for this study will be provided through a grant from the U.S. Department of Energy. The renewables assessment to be completed in December 2008 will provide a source of information and data to verify the final percentages and timing of the renewable portfolio standards.

In addition to establishing the RPS percentages and timing, Section 366.92, F.S., requires that the Commission's RPS rule include the following:

- Methods of managing the cost of compliance with the RPS, whether through direct supply or procurement of renewable power or through the purchase of renewable energy credits (RECs). The Commission is authorized to provide for annual cost recovery of compliance with the RPS and adjustments to a utility's return on equity to incentivize renewable energy;
- Appropriate compliance measures and conditions under which non-compliance can be excused when the supply of renewable energy is not adequate or the cost of securing renewable energy is cost prohibitive;
- Appropriate period of time for which RECs may be used for purposes of compliance with the RPS;
- Monitoring procedures for compliance with and enforcement of the RPS;

¹ Attendees included representatives of: (1) the Governor's office, (2) federal, state, and county government agencies, (3) the solar, biomass, waste-to-energy, waste heat, ocean energy, landfill gas, and cogeneration industries, (4) energy efficiency measure providers, (5) investor-owned, municipal, and cooperative electric utilities, (6) customers including large industrial customers, and (7) Florida-specific and national environmental organizations.

- A means of ensuring that energy credited toward compliance with the RPS may not be used for any other purpose;
- Procedures to track and account for RECs, including ownership derived from customer-owned renewable energy facilities as a result of an action by a customer of an electric power supplier independent of a program sponsored by the supplier; and
- Provisions for the repeal or amendment of the rule in the event new federal law supplants or conflicts with the rule.

The Commission may give added weight to energy provided by wind and solar photovoltaic over other forms of renewable energy in developing its RPS rule.

The statute also requires annual reporting to the Commission by each electric IOU of its compliance with the RPS in the previous year and how it plans to comply in the upcoming year. The municipal electric utilities and rural electric cooperatives are also required to develop standards for the promotion, encouragement, and expansion of the use of renewable energy resources and energy conservation and efficiency and to file an annual report with the Commission.

Commission RPS Rulemaking Process

Subsequent to the 2008 legislative session, the Commission held a workshop on July 11, 2008, to provide a forum to discuss issues relevant to the development and implementation of an RPS for Florida that is consistent with the provisions of Section 366.92, F.S. At that workshop, the Commission heard from 16 speakers from renewable energy providers, the electric utilities, and other interested parties. Post-Workshop Comments were filed by 14 stakeholders. On August 20 and 26, 2008, Commission staff held workshops to discuss staff's strawman draft RPS rules. The topics in the strawman draft included: Rule 25-17.400 – Renewable Portfolio Standard design; Rule 25-17.410 – Renewable Energy Credit Market; and Rule 25-17.420 – Reporting requirements for municipal electric and rural electric cooperatives. Written Post-Workshop Comments were received from 29 parties.² A discussion of the comments is contained in the body of the staff recommendation along with the discussion of the relevant section of the draft rules.

² The parties filing Post-Workshop Comments include: Florida Power & Light Company; Progress Energy Florida; Gulf Power Company; Tampa Electric Company; Florida Electric Cooperative Association; Florida Municipal Electric Association; Office of Public Counsel; Charles H. Bronson, Commissioner, Florida Department of Agriculture and Consumer Services; Sarasota County; The Greater Sarasota Chamber of Commerce; Florida Industrial Power Users Group; Florida Renewable Energy Producers Association; Florida Crystals; Sunshine State Solar Power; Mark Alexander; Environmental Defense Fund; Florida Alliance for Renewable Energy; Clean Energy Group; Waste Energy Solutions; APX, Inc.; COB Creations, LLC; Florida Pulp and Paper Association; Florida Solar Coalition; Wheelabrator Technologies, Inc.; Florida Industrial Cogeneration Association; City of Tampa and Solid Waste Authority of Palm Beach County; PCS Phosphate – White Springs; Sterling Planet; Covanta Energy Group, Inc.; and Southern Alliance for Clean Energy.

Docket No. 080503-EI

Date: October 2, 2008

The Commission has jurisdiction pursuant to Sections 350.127(2), 366.05(1), 366.02(2), 366.04(2)(f) and (5), 366.041, 366.05(1), 366.81, 366.82(1) and (2), 366.91(2), and 366.92, F.S.

Executive Summary

Staff is proposing three draft rules to implement the provisions of Section 366.92, F.S. Rule 25-17.400, F.A.C., Renewable Portfolio Standards, would establish uniform mandatory standards for the IOUs, and a procedure to review and, if appropriate, modify the RPS at least every five years. Rule 25-17.410, F.A.C., Florida Renewable Energy Credit Market, would require the establishment of a renewable energy credit (REC) trading market to facilitate compliance with the RPS. Finally, Rule 25-17.420, F.A.C., Municipal Electric Utility and Rural Electric Cooperative Renewable Energy Reporting, would establish reporting requirements for the municipal and cooperative electric utilities.

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

Renewable Portfolio Standards Proceeding - The rule establishes that the Commission would hold a proceeding at least once every five years to review and, if appropriate, modify the renewable portfolio standards. 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.

Initially, the rule establishes the following percentages of the prior year's retail sales for each IOU to be provided by Florida renewable energy resources:

1. By January 1, 2017: 5 percent;
2. By January 1, 2025: 10 percent;
3. By January 1, 2033: 15 percent; and
4. By January 1, 2041: 20 percent.

These percentages are based on an estimate of currently available renewable energy resources, which is approximately 3.61 percent, and their potential expansion to 2017 with a doubling of the percentage standards every eight years. These preliminary standards should be contingent on the analysis of the technical and economic potential for Florida renewable energy resources currently being undertaken by Navigant Consulting, Inc. The Governor's Energy Office and staff are working cooperatively with Navigant which is under contract with the Lawrence Berkeley National Laboratory through a grant from the U.S. Department of Energy. Navigant is to conduct a renewable assessment to analyze the technical and economic potential for renewable energy technologies currently available in Florida and that could be developed through the year 2020. The results of this assessment are expected to be completed in December 2008, prior to the culmination of the rulemaking process and will be available to verify the reasonableness of the initial RPS standards and timing.

Encouragement of Wind and Solar – Section 366.92(3)(b)3, F.S., states that the Commission'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. Accordingly, the rule would require that at a minimum 25 percent of the RPS be provided from wind and solar resources. In addition, 75 percent of revenues available for renewable energy credits would be dedicated to solar and wind resources.

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

Implementation Plans – Each IOU would be required to submit to the Commission within 180 days of the effective date of the rule, its plan for meeting or exceeding the RPS.

Compliance – The rule would require renewable energy credits (RECs) to be the sole means by which to comply with the RPS. This makes implementation and accounting easier than accounting for a mix of energy and RECs. Section 366.92(2), F.S., defines a REC as a product representing the renewable attribute of renewable energy produced in Florida and is equivalent to one megawatt-hour (MWh) of electricity. IOUs may either purchase RECs from Florida renewable energy resources owned by third parties, or use RECs certified from Florida renewable resources owned by the IOU. Staff believes there will be increased efficiency in tracking compliance if only RECs are used, rather than a combination of energy and RECs.

Rewards/Penalties – Staff believes that IOUs will be incented to construct renewables in two ways: (1) self-build renewable projects would add to rate base on which the IOU would have the opportunity to earn a return; and (2) the costs for these facilities would be recovered through a newly created dedicated cost recovery clause, the Renewable Energy Cost Recovery clause (RECR). The return on equity for self-build renewables would be determined by the Commission in the RECR proceeding in which the Commission would take into consideration relevant risk and rewards. The rule also provides conditions under which an IOU may be excused for non-compliance as required by the statute. These conditions include insufficient supply of Florida renewable energy resources or prohibitive cost. If an IOU is not excused from compliance, the rule provides that an IOU which fails to meet the RPS shall be subject to a penalty up to 50 basis points of the IOU's approved rate of return on equity. The penalty would be assessed as a reduction in the amount of recoverable costs in the RECR clause, as discussed below.

Cost Caps - The rule also recognizes the Legislature's intent to minimize the cost of power supply to consumers by establishing cost caps that would limit the total cost of compliance to a total of two percent of each IOU's total annual revenue from retail sales of electricity. To further encourage solar and wind resources, the costs of complying with the RPS are allocated with 1.50 percent going to wind and solar, and 0.50 percent going to all other Florida renewable energy resources.

Renewable Request for Proposals – Each IOU would be required to biennially issue a request for proposals (RFP) for Florida renewable energy resources and factor the results of renewables purchased in the IOU's Ten-Year Site Plan. Thus the need for new power plants would be reduced by: (1) conservation; and (2) cost-effective renewable purchases. This will provide an organized, predictable process to encourage renewable developers to participate in the Florida market. The biennial RFP would be in addition to the opportunity for individual negotiations between renewable developers and the utilities, as well as the renewable energy contracts required by Rule 25-17.200-.310, F.A.C.

Cost Recovery – The rule provides for cost recovery of reasonable and prudent costs associated with the purchase of RECs, including administrative costs, and costs associated with IOU-owned renewable facilities. The RECR clause would be created to allow for Commission review and approval of reasonable and prudent costs associated with RECs, IOU-owned renewable facilities, and capacity and energy purchased through tariffs or contracts with Florida renewable energy resources. The Commission would also establish the appropriate return on equity associated with IOU-owned Florida renewable energy resources.

Reporting Requirements – Each IOU would be required to provide an annual report to the Commission by April 1 as part of its Ten-Year Site Plan. The specific data to be provided by each IOU in these reports will facilitate the Commission’s evaluation of utility efforts and costs associated with the RPS, and efforts to track the development of renewable energy in Florida.

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

Establishment of a REC Market – The REC market allows for the certification and accounting of RECs that may be used by the IOUs to meet the requirements of the RPS. The rule directs the IOUs to establish a REC market and select an independent third party REC market administrator, subject to Commission approval. The REC market will allow the IOUs to generate their own, buy, sell, and trade the RECs needed to comply with the RPS, and allow for owners of Florida renewable energy resources to benefit from the sale of RECs. The rule would require the establishment of a group to act as technical advisors to the REC market administrator in the areas of governance and market rules. The IOUs, municipal electric utilities, rural electric cooperatives, and Florida renewable energy resource providers are to make up the advisory group. As part of the IOUs’ request for Commission approval of the REC market structure and governance, provisions shall be made to facilitate both short-term purchases of RECs, and long-term bilateral contracts for RECs between IOUs and Florida renewable energy providers.

Full Transparency – The rule provides for full oversight of the REC market by the Commission in several ways: (1) the REC market administrator must be approved by the Commission; (2) the rule requires Commission approval of all of the practices and procedures of the REC market; and (3) all records of the REC market must be fully transparent and open to the Commission for inspection and audit. While not specifically identified in the draft rule, complaints are subject to Commission resolution pursuant to Rule 25-22.032, F.A.C., Customer Complaints, or Rule 25-22.036, F.A.C., Initiation of Formal Proceedings.

Eligible Facilities – Renewable facilities that are eligible to produce RECs must be certified by the REC market administrator. The rule lists eligible facilities, which include (1) all utility-owned Florida renewable energy resources, (2) non-utility owned renewables for which the capacity or energy is under contract to a utility or pursuant to an approved tariff, (3) non-utility owned renewables greater than two megawatts, that offset all or part of the customer’s electrical needs, and (4) customer-owned renewables, two megawatts or less, that have not received an incentive from an IOU pursuant to a Commission-approved energy efficiency program.

Treatment of RECs – The rule would require that the REC is retained by the owner of the eligible Florida renewable energy resource, unless sold or transferred. The rule also would

ensure, pursuant to statute, that RECs credited toward RPS compliance are not credited toward any other purpose. To prevent double counting, the rule requires that RECs produced by Florida renewable energy resources used to comply with Florida's RPS or any other state's RPS must be retired and not used for compliance with another state or regional RPS.

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

Reporting Requirements – The municipal and cooperative electric utilities would be required to report annually to the Commission the efforts to develop standards for the promotion, encouragement, and expansion of the use of renewable energy resources, and energy conservation and efficiency measures as required by Section 366.92(5), F.S. Also, these utilities are required to submit additional data to facilitate the Commission's efforts to track the development of renewable energy in Florida.

Discussion of Issues

Issue 1: Should the Commission propose the adoption of Rule 25-17.400, F.A.C., entitled "Florida Renewable Portfolio Standard"?

Recommendation: Yes, the Commission should propose the adoption of the rule as set forth in Attachment A. Rule 25-17.400, F.A.C., establishes an RPS for Florida's investor-owned utilities that offers a balanced approach to encouraging the development of renewable resources in Florida, while providing sufficient ratepayer safeguards. The rule establishes reasonable initial standards that increase over time to 20 percent of each IOU's retail sales. The rule contains two primary components to protect ratepayers from high rate impacts: (1) a procedure for the Commission to review at least every five years and modify the standards, if appropriate, and (2) a cost cap based on two percent of each IOU's annual revenues from retail electric sales. The rule is consistent with the requirements of Section 366.92, F.S. (Harlow, Futrell, Miller)

Staff Analysis:

Overview of Draft Rule 25-17.400, F.A.C.

The draft rule establishes initial uniform numerical renewable portfolio standards for each Florida investor-owned utility, and includes a procedure for the Commission to review and update these standards, as necessary, not less than every five years. The rule implements an RPS with standards that ramp up over time and are based on a percentage of each utility's previous year's sales. The draft rule contains a broad range of eligible renewables, as defined by Section 366.92(2), F.S., and includes electrical, mechanical, and thermal processes. The draft rule gives added weight to solar and wind technologies through a 25 percent carve out, coupled with a 75 percent share of the two percent cost cap.

IOUs are required to submit implementation plans within 180 days of the effective date of the rule. This information must be updated in annual reports to be filed concurrently with each IOU's Ten-Year Site Plans. Compliance with the RPS is accomplished by each IOU through producing or purchasing sufficient renewable energy credits (RECs) to meet each year's RPS. Only in-state renewable facilities are eligible to create RECs that may be used for compliance by the IOUs. As provided for by Section 366.92(3)(b)2, F.S., the rule establishes the reasons under which a utility that makes a good faith effort to comply may be excused, including: (1) a lack of sufficient supply of RECs and (2) prohibitive compliance costs greater than two percent of an IOU's annual retail revenues. The rule incents IOUs to construct renewables by allowing full cost recovery including an appropriate return on equity. The draft rule also provides for penalties of up to 50 basis points if a utility fails to meet the RPS standard and is not excused from compliance.

The draft rule requires each IOU seeking to construct a renewable facility to select the option most likely to result in the least cost for ratepayers, and requires utilities to conduct a biennial request for renewable proposals. The draft rule establishes a new cost recovery clause and proceedings for IOUs to recover reasonable and prudent costs associated with self-build facilities, RECs, the Florida Renewable Energy Credit Market, and renewable purchased power.

The rate of return on equity for self-build renewable facilities will be determined by the Commission in the annual cost recovery proceeding. The Commission may also consider whether to include incentives for meeting or exceeding the RPS standard.

Discussion of Draft Rule Provisions and Comments by Interested Persons

The major provisions of the draft rule and related Post-Workshop Comments are discussed in detail below.

Section (1) Application and Scope (Attachment A, page 56, lines 2 through 9) – Section (1) of staff's draft Rule 25-17.400, F.A.C., delineates the purpose of the Florida Renewable Portfolio Standard rule, which is to establish a procedure for the Commission to review and, if appropriate, update the RPS standards at least every five years. Pursuant to Section 366.92, F.S., the purposes of the standards are those specified by statute and include promoting the development of renewable energy, protecting the viability of existing renewable facilities, increasing fuel diversity, reducing dependence on fossil fuels, minimizing volatility of fuel costs, encouraging investment in Florida, improving the environment, and minimizing costs to consumers.

Post-Workshop Comments

In Post-Workshop Comments, several stakeholders recommend that the Application and Scope section should be clarified to state that the RPS should be uniform for each IOU. [See Post-Workshop Comments by Florida Crystals, Wheelabrator, Covanta, the Southern Alliance for Clean Energy (SACE), and Florida Power and Light Company (FPL).] Staff has proposed that the initial RPS standards be uniform. Each IOU is required to meet the same minimum percentage standard for each year. The Commission should have the flexibility, however, in subsequent review proceedings, to determine whether going forward, the RPS standards should continue to be uniform to reflect the unique circumstances of each IOU.

The Florida Industrial Cogeneration Association (FICA) states that the Application and Scope section should state that the standards are mandatory. Staff agrees subject to the provisions discussed below on excusal from compliance.

The Florida Industrial Power Users Group (FIPUG) recommends that Section (1) should state that the standards are minimum requirements for each IOU. Staff agrees that the standards required by Section (3) are minimum standards, as reflected in Subsection (3)(a), which states "Each investor-owned electric utility shall meet or exceed the following renewable portfolio standards..." The addition of penalties to the rule also reflects that these are not only minimum, but mandatory standards, unless the Commission excuses performance for an IOU within a compliance period. Therefore, staff believes the draft rule clearly reflects that these are minimum standards and that no revision to Section (1) is necessary.

FPL states that the intent language of Section (1) should place primary focus on the promotion of clean energy and the reduction of greenhouse gases. Staff disagrees as the statutory intent is much broader and includes fuel diversity, economic development, and environmental improvements. FPL's definition of clean energy includes nuclear power, as well

as generation and transmission efficiency improvements. As discussed further below, resources eligible for compliance in the RPS are limited to renewables and do not include nuclear generation, generation efficiencies, or demand-side management programs. Staff has conformed the definition of eligible resources with the direction provided by the Legislature. Further, staff does not believe it is necessary to add language stating that an additional purpose of the RPS is the reduction of greenhouse gases. This goal is already reflected in the language, “improve environmental conditions,” taken from the statute.

COB Creations, LLC, (COB) suggests language to reflect that the Commission “shall establish an RPS rule that is equitable to ratepayers, utilities and renewable energy resources....” Staff addressed this suggestion by making revisions to Section (3) that clearly state that the Commission sets the standards, rather than the utilities. COB also states that language should be added to Section (1) to reflect that costs of the RPS should be minimized for all classes of ratepayers. Staff does not believe it is necessary to make COB’s suggested change because equitable treatment of all rate classes will be addressed in the cost recovery proceedings contained in Section (7) and by normal Commission ratemaking policy.

Staff’s strawman draft rule contained two additional subsections under Application and Scope. These subsections described the proceedings for the Commission to review and, if appropriate, modify the standards at least every five years. The language also stated that a proceeding would be held to review the standards upon petition by a substantially affected person or utility. Staff revised these subsections to address the Post-Workshop Comments and moved the revised language to Section (3), because the language relates to the process of reviewing the initial renewable portfolio standards. Staff received numerous comments regarding these provisions of the strawman draft rule, which will be addressed in the discussion of Section (3).

Section (2) Definitions (Attachment A, page 56, line 10, through page 58, line 3) – Section (2) defines certain terms used in draft Rules 25-17.400, 25-17.410, and 25-17.420, F.A.C. The following is a discussion of several of those definitions, upon which there was disagreement among the workshop participants.

Eligible Renewables – Florida Renewable Energy Resources

Staff adopted the language for the definitions of the terms, “Florida renewable energy resources,” “renewable energy,” and “biomass,” directly from the statutes. These concepts are used in the draft rule in defining the resources eligible for compliance with the RPS. Section 366.92(2)(a), F.S., defines “Florida renewable energy resources” as renewable energy, as defined in Section 377.803, F.S., that is produced in Florida. Section 377.803, F.S., refers to electrical, mechanical, or thermal energy produced from a broad range of renewable fuels, including hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power. Staff used the term Florida renewable energy resources throughout the rule to indicate those resources that are eligible for compliance with the RPS.

Staff believes it is appropriate to use the term Florida renewable energy resources to define eligible resources, rather than the term renewable energy, as defined by Section 366.92(2)(c), F.S., for several reasons. First, the Legislature clearly indicated in the term Florida renewable energy resources that all renewable facilities eligible to meet the standards must be located within Florida. Staff believes it is appropriate that resources are located in Florida in order to provide ratepayers with the greatest potential benefits of renewables, including enhanced fuel diversity, economic development and environmental benefits. Second, the term renewable energy, as defined in the statute, does not include thermal and mechanical technologies. Staff believes that the inclusion of thermal and mechanical technologies, along with electrical technologies, will increase the potential for the development of a wider variety of renewable projects in the state. Staff believes that a broad definition of both the eligible technologies and fuel sources will increase competition among renewable providers, and therefore reduce costs for ratepayers.

Post-Workshop Comments

The Florida Municipal Electric Association supports the use of the term and definition of Florida renewable energy resources because they agree that solar thermal should be eligible for RPS compliance. Both Sarasota County and the Sarasota Chamber of Commerce agree with the importance of including solar thermal systems among the eligible resources for the rule, and stress that the inclusion of solar thermal systems will be critical in helping the community achieve its solar thermal goals. Sterling Planet, Inc. also recommends retaining solar thermal technologies for compliance.

Gulf Power Company (Gulf) recommends deleting the use of the term Florida renewable energy resources in order to eliminate eligibility of thermal resources. Gulf states that the term Florida renewable energy resources is orphaned in the statute because the term is not used in the body of the statute. Gulf believes that both mechanical and thermal resources are best handled under the conservation goal requirements of the Florida Energy Efficiency and Conservation Act (FEECA). Tampa Electric Company (TECO) recommends that behind-the-meter solar thermal (solar water heaters) should not be included in the RPS, but rather should be counted as an energy efficiency measure under conservation goals. As discussed above, staff believes that the inclusion of thermal technologies is appropriate because it conforms with the intent of Section 366.92, F.S., when it is read in its entirety, and will potentially reduce costs for ratepayers. As discussed further in Issue 2, staff has addressed the potential for overlap of solar thermal water heaters used in compliance with the FEECA goals and the RPS standards in draft Rule 25-17.410, F.A.C.

FPL adds the term "Florida clean energy resources," which is defined by FPL as new nuclear facilities (post 2006), including uprates of existing nuclear units, energy efficiency measures, fossil units with full/partial carbon capture and sequestration and grid improvements implemented post 2006. FPL also adds the term "energy efficiency measures," which includes measures or programs that increase the efficiency of energy consumption or production or increase energy conservation. This term includes power plant efficiency improvements and grid efficiency improvements in addition to traditional customer conservation programs. Staff disagrees with FPL because they are not included in the statutory definition of Florida renewable

energy resources or renewable energy. While staff agrees with FPL that the inclusion of these resources could potentially reduce costs for ratepayers and improve environmental conditions; these are only two of the goals set forth in the legislative intent of Section 366.92, F.S. The legislative intent also lists promoting of the development of renewable energy and protecting the economic viability of existing renewable energy facilities. It is clear from the definitions contained in Section 366.92, F.S., that the Legislature intended for only renewable resources to be eligible for compliance with the Commission's RPS rule. The Florida Renewable Energy Producers Association (FREPA) agrees that the inclusion of nuclear energy is outside the Commission's legislative authority under Section 366.92, F.S.

The Florida Municipal Electric Association believes that the definition of biomass should be clarified to include "yard waste." Progress Energy, Florida (PEF) suggests that "dedicated energy crops" should be added to the definition of biomass. COB Creations, Inc., states that "agricultural, horticultural, or industrial BTU convertible waste streams" should be added. Staff believes no change should be made to the definition for biomass in the draft rule. The definition was taken directly from the statute and it is clear that the resources mentioned above qualify as biomass.

TECO recommends deleting the text of all definitions contained in the draft rule that are taken directly from the statutes and instead, citing the statute. Staff believes that for clarity and ease of use, it is appropriate to include the text of the definitions in the rule.

Class I and Class II Renewables

Section 366.92(3)(b)3, F.S., states that the Commission's rule "may provide added weight to energy provided by wind and solar photovoltaic over other forms of renewable energy...." The draft rule defines two classes of renewables, Class I and Class II, to facilitate the special treatment of wind and solar resources in Subsection (3)(b). The draft rule defines Class I as Florida renewable energy resources derived from wind or solar energy systems, while Class II contains all other eligible renewable resources. Staff notes that Class I includes both solar photovoltaic and solar thermal resources. Staff believes that the inclusion of thermal technologies for added weight is appropriate because it conforms with the intent of Section 366.92, F.S., when it is read in its entirety and it will potentially reduce costs for ratepayers. Solar thermal systems can range from customer-owned solar water heaters to large scale projects such as FPL's recently proposed 75 MW solar thermal project. The capital costs of solar thermal systems are often lower than current solar photovoltaic costs. Staff believes that in addition to wind resources, it is appropriate to provide added weight to both solar photovoltaic and solar thermal resources. Including solar thermal systems will provide consumers and renewable producers with additional flexibility to build solar facilities, and will potentially reduce the cost of the carve out for Class I resources contained in Subsection (3)(b). The weighting given to Class I solar and wind resources is discussed in Subsection (3)(b) of the draft rule.

Post-Workshop Comments

The Florida Alliance for Renewable Energy (FARE) recommends that if special treatment is given to specific resources, such as the carve out for Class I in the draft rule, the

Commission should consider limiting these resources to smaller commercial systems and excluding utility scale projects. Staff disagrees that Class I resources should be limited in capacity size. The Legislature did not specify in Section 366.92(3)(b)3, F.S., that the Commission should limit any added weight to wind and solar projects based on the size or ownership of each project. Further, limiting the capacity of eligible Class I projects would reduce the potential for economies of scale and lead to increased ratepayer costs associated with the draft rule's carve out for these resources, as contained in Subsection (3)(b).

Waste Energy Solutions recommends that anaerobic digestion should qualify for Class I to receive added weight under the RPS. Staff disagrees. The Legislature limited the resources that should be considered for extra weight to wind and solar in Section 366.92(3)(b)3, F.S.

Several comments suggest that Class I or II resources should be based on the specific characteristics of renewable technologies. For example, COB Creations, LLC, states that Class I should also include low emission resources that do not require an air permit within Florida. In addition, Sunshine State Solar Power suggests that Class II should be further segregated by characteristics of renewables so that preference could be shown based on the characteristics of particular Class II technologies. Sunshine State Solar Power suggests categories within Class II resources based on each project's (1) emissions, (2) technological status (developmental versus mature), and (3) project vintage. Staff disagrees that the rule should consider these additional characteristics of various Class I and Class II renewable technologies. The statute did not provide express authority for the Commission to provide preference for resources other than wind and solar. In addition, ranking Class II resources based on the characteristics suggested by Sunshine State Solar Power would result in a complex and potentially subjective process of selecting eligible projects. Staff believes it will reduce costs for ratepayers if utilities have the flexibility to produce or purchase RECs from the least cost Class II renewable projects.

The strawman draft rule used the term "emitters" in describing Class II resources. Florida Crystals does not agree with the use of this term. Staff agrees with Florida Crystals that some Class II resources produce low or zero greenhouse gas emissions, and did not include the term in the definition of Class II resources in the draft rule.

FPL suggests that the definitions for Class I and Class II resources be deleted because the company recommends that no special treatment should be afforded to solar, wind, or any other specified resources. As discussed further below (see discussion of Section 3), staff believes it is appropriate for the rule to provide added weight to wind and solar resources, as provided for in Section 366.92, F.S. Therefore, the definitions for Class I and Class II resources should be retained to facilitate the carve out contained in Subsection (3)(b) of the draft rule.

Renewable Energy Credits and Renewable Portfolio Standard

The definitions for both renewable energy credit and renewable portfolio standard were taken directly from Section 366.92(2)(d), F.S. As discussed further below, RECs are used as the sole method of compliance in the draft RPS rule.

Post-Workshop Comments

FPL recommends expanding the definition of RECs to include certified renewable attributes from United States' renewable facilities. FPL also suggests text stating that a REC is valid for five years after the month and year of generation. Staff disagrees with FPL's revisions of the definition of RECs contained in the draft rule. The definition for RECs is taken directly from Section 366.92, F.S., which excludes compliance with RECs from renewable facilities outside of Florida. Staff addressed the life of a REC in Section (7) of draft Rule 25-17.410, F.A.C., which is addressed in Issue 2.

Solar Definitions

Staff included definitions of several terms regarding solar energy and thermal systems in the draft rule. These terms are used in the draft rule to facilitate the use of solar photovoltaic and solar thermal systems toward the carve out required by Subsection (3)(b). The definition of the term equivalent solar thermal energy is used in Rule 25-17.410, F.A.C., in the discussion of the creation of RECs from solar thermal systems, which do not create, but rather avoid, the use of electricity.

Post-Workshop Comments

Gulf and TECO suggest that the definitions for all terms regarding solar energy and thermal systems should be deleted. As discussed above, Gulf believes that solar thermal resources should not be eligible for compliance with an RPS, but should be addressed in the FEECA goal setting proceeding. Staff disagrees and believes these definitions should be retained in the rule. The inclusion of low cost thermal technologies for compliance in the RPS will increase the potential for the development of a wider variety of renewable projects in the state, and potentially reduce costs for ratepayers.

Section (3) Renewable Portfolio Standard (Attachment A, page 58, lines 4 through 23) – This section addresses the mandatory minimum renewable portfolio standards to be met by the IOUs.

Standards and Schedule

Section 366.92, F.S., requires the Commission to adopt rules to establish a renewable portfolio standard. This section further defines the renewable portfolio standard as the minimum percentage of total annual retail electricity sales by an IOU to consumers in Florida that shall be supplied by renewable energy produced in Florida. Also, the statute requires the Commission, in developing the rule, to evaluate the current and projected availability and costs of renewable energy through 2020.

The following table provides staff's recommended initial standards in comparison to the standards included in the strawman draft rule:

Year	RPS Draft Rule	RPS Strawman Draft
2010		2.0 %
2017	5.0%	3.75 %
2025	10.0%	6.0 %
2033	15.0%	
2041	20.0%	
2050		20.0%

The standards are based on an estimate of currently available renewable energy resources, which is approximately 3.6 percent. This estimate was determined through staff's data gathering efforts with stakeholders which includes existing renewable resources and self-service generation. At the beginning of the rulemaking process, the best information available to staff was that renewables in the state made up approximately two percent of annual electricity sales. This stresses the importance of the work of Navigant to establish data to verify staff's proposed percentages which are at this point arbitrary at best.

Staff increased its recommended standards compared to the strawman draft rule based on the data provided by the parties. However, these preliminary standards should be contingent on Navigant's analysis of the technical and economic potential for Florida renewable energy resources currently available and that could be developed through the year 2020. The results of this assessment are expected to be completed prior to the culmination of the rulemaking process and the Commission should hold judgment on the standards until the results are available. The target years 2017 and 2025 reflect the timeline established in Executive Order Number 07-127 for greenhouse gas emission reduction goals.

As noted below, many parties advocate higher percentages as a means of encouraging further renewable energy development in the state. Staff agrees that the standards should be set to encourage additional renewable development, yet must be reasonable and obtainable taking into consideration the Legislature's intent to minimize the cost of electricity for consumers.

The following table provides the relative energy that would be represented by the initial standards:

Year	Projected Retail Sales (GWH)	Recommended RPS %	Renewable Energy (GWH)
2017	234,295	5.0%	11,715
2025	294,500	10.0%	29,450
2033	370,177	15.0%	55,526
2041	465,299	20.0%	93,060

In absolute terms and as shown in the table above, supplying 5 percent of 2017's expected retail electric sales with renewable energy will nearly double the state's current

production of renewable energy from 6,339 gigawatt-hours (GWH) in 2007, to 11,715 GWH in 2017. Increasing the standards as staff recommends would result in approximately doubling the amount of renewable energy every eight years.

The draft rule would make 2017 the first year the IOUs are required to meet a standard. Staff is not recommending 2010 for an initial standard due to uncertainty as to when the rule will be effective, and when the Renewable Energy Credit Market will be operational. As discussed further in the recommendation, the rule contemplates a process for the Commission to approve an administrator, and the structure and governance of the Renewable Energy Credit Market. Following this process, there would be additional time needed for the market to become operational. Also, because staff is recommending penalties for non-compliance, a near-term standard when there is uncertainty associated with the establishment of the market and compliance mechanisms may not be appropriate.

Staff's strawman draft rule also included a provision requiring a proceeding for the Commission to establish standards for each utility for the years not listed in the strawman draft rule. Based on the discussion at the workshops and Post-Workshop Comments, staff instead proposes that all utilities be subject to the standards listed in the draft rule. This will remove an administrative burden on the Commission, the IOUs, and stakeholders to hold a proceeding to set interim annual standards. It will also reduce uncertainty in the renewable energy market as to the standards the IOUs are required to meet.

Post-Workshop Comments

Attachment B is a compilation of the parties' recommended RPS percentages. Many of the renewable energy advocates state in their comments that the standards and timing in staff's strawman draft were insufficient. The draft rule is an attempt to balance the interest to promote renewables with reasonably achievable standards, while being mindful of the cost implications to ratepayers.

In the comments filed by the parties, Commissioner of Agriculture Charles Bronson expresses concerns that if the state is to achieve a meaningful RPS, the percentages and implementation schedule in the strawman draft rule are unacceptable. Sarasota County and the Sarasota Chamber of Commerce recommend a standard of 20 percent by 2020. Sarasota County cites an analysis by the Florida Solar Energy Center that this standard is achievable and economical. The Sarasota Chamber of Commerce recommends that the standard of 20 percent of generation by 2020 be composed of non-petroleum, non-natural gas resources.

The Clean Energy Group states that the targets in the strawman draft would have been the least stringent of the 26 states with RPS policies and notes that many states have recently raised RPS targets. They state that a recent study by the Lawrence Berkeley National Laboratory shows that the expected bounds of likely rate impacts from state RPS laws are modest. The Southern Alliance for Clean Energy states the standards in the strawman draft rule were weak and likely would not incent the meaningful type of renewable investment and economic development supported by the intent of the Legislature. It recommends the Commission move forward with aggressive mandatory goals based on data currently available. However, they

failed to mention that renewables, particularly hydroelectric resources, are more abundantly available in other states.

The Florida Renewable Energy Producers Association states that the strawman draft rule schedule postpones meaningful increase in development of renewables until 2025. Florida Crystals supports higher standards as listed in Attachment B, and states that the standards in staff's strawman draft were timid at best and do not meet the Governor's requirements or the Legislative intent of HB 7135. It also recommends uniform standards for each utility.

Sunshine State Solar Power advocates that the RPS needs aggressive targets to encourage development of renewables and reduce greenhouse gases as quickly as possible. The Environmental Defense Fund supports Governor Crist's statements that the Commission should adopt a 20 percent RPS by 2020. Also, it believes a ramped-up schedule of investment in renewable energy is the best way to progress to this goal. The Florida Solar Coalition supports a 20 percent RPS by 2020, and a starting point of January 1, 2010, set at the current level of renewable energy in the state.

Wheelabrator and Covanta state that the Legislature was clear that the viability of existing resources should be protected. Therefore, the starting point of the RPS should equal the percent of statewide existing resources. The Florida Industrial Cogeneration Association (FICA) states that it is the responsibility of the Commission under the statute, to propose and adopt by rule the RPS, not the utilities. It would increase the initial standard to reflect what is thought to be currently in existence in Florida. FICA also suggests an automatic adjustment to increase renewable requirements as electricity prices increase because renewables present a natural hedge and means of reducing such price increases over the long-term. COB Creations believes renewables should be given priority over other electric generation resources.

In response to the above comments, staff would note that the Legislature, in Section 366.92, F.S., does not give the Commission direction on the timing and magnitude of the RPS. Also, the Governor, in Executive Order No. 07-127 requests the Commission initiate rulemaking to establish a 20 percent RPS, but does not provide a timeframe for the standard. The Legislature does appear to give preference to the establishment of reasonably achievable standards by requiring the Commission to consider the cost and availability of existing and new renewable resources. As stated above, the renewables assessment to be performed by Navigant will provide the Commission with the best available data to make an informed decision on the magnitude and timing of the standards.

FPL supports the inclusion of resources such as nuclear energy, energy efficiency measures, fossil units with full or partial carbon capture and sequestration, grid improvements, and out-of-state RECs that result in higher standards. It states the proposed targets and long-term standards are not aggressive enough to promote sufficient amounts of new generation to meet the goals of reducing emissions, increasing energy security, and reducing price volatility. As discussed above, the definition of Florida renewable energy resources in Section 366.92, F.S., does not include the resources and efficiency improvements contemplated by FPL. According to staff's calculation, if FPL included only Florida renewable energy resources, as defined in

Section 366.92, F.S., the maximum standard each utility would be required to achieve through these in-state renewable resources would be 6.67 percent by 2030.³

PEF and Gulf support the standards in staff's strawman draft rule. TECO does not support including percentages or dates at this point in the drafting process until the renewables study has been completed and goals can be properly established. As discussed above, staff believes that the magnitude and timing of the standards in the draft rule should be considered tentative pending the results of the renewables assessment.

The recommended standards must balance the Legislature's intent to encourage renewable energy and minimize the cost of power supply to consumers. The standards established by the Commission should be based on the best available data on existing renewable energy resources in the state, and the potential for expansion of renewable resources. Also, the standards should be reasonably achievable since, as described further, the draft rule would make the IOUs subject to a penalty in the event of non-compliance.

Added Weight for Wind and Solar Resources

Staff believes it is appropriate to provide added weight to wind and solar resources, as provided for in Section 366.92(3)(b)3, F.S. As noted above, the draft rule defines two classes of renewables, Class I and Class II, to facilitate the special treatment of wind and solar resources in Subsection (3)(b). The draft rule defines Class I as Florida renewable energy resources derived from wind or solar energy systems, while Class II contains all other eligible renewable resources. As discussed above, staff believes that the inclusion of thermal technologies for added weight is appropriate because it conforms with the intent of Section 366.92, F.S., when it is read in its entirety and it will potentially reduce costs for ratepayers. As discussed further below, Section (5) of the draft rule, requires the two percent cost cap of complying with the RPS is to be allocated 1.50 percent to wind and solar, and 0.50 percent to all other Florida renewable energy resources.

Staff's strawman draft rule contained three policy options for providing added weight to wind and solar resources, two carve out options and one multiplier option.⁴ After reviewing the Post-Workshop Comments, staff included Option I in the draft rule, which provides for a carve out of a minimum of 25 percent of the RPS for wind and solar resources (Class I). The majority of the Post-Workshop Comments that were in favor of added weight for solar and wind support a carve out, rather than a multiplier approach. The carve out approach also appears to be easier to administer over time than a multiplier approach, which must be continuously monitored and changed to reflect current market costs. In addition, a 2007 study by Lawrence Berkeley

³ FPL's highest proposed standard is 20 percent in 2020; however, under FPL's proposal, compliance with up to 50 percent of this standard may be achieved through out-of-state RECs. Compliance with up to one-third of the remaining half of the standard may be achieved through non-renewable resources, such as nuclear generation and generation efficiency improvements.

⁴ The three options in the strawman rule were: (1) a 25 percent carve out for Class I resources by January 1, 2017; (2) a carve out of 20 percent of the RPS provided by solar photovoltaic or solar thermal systems and 5 percent by wind by January 1, 2017; and, (3) a multiplier of 5 applied to all RECs produced from Class I renewable energy resources until the first year in which they represent 25 percent of the annual RPS.

National Laboratory (LBNL), which reviewed the status of current state RPS programs, found that carve out policies had been more effective in encouraging solar than multipliers.⁵

Post-Workshop Comments

Clean Energy Group (CEG) recommends set asides for solar and distributed generation resources, including solar photovoltaic systems, solar thermal electric, solar heating and cooling, and non-photovoltaic distributed generation. CEG states that there may also be a need for a set aside for higher-cost wind projects, such as offshore wind. CEG recommends 25 percent of the RPS goal be met with these resources, and within this 25 percent, half must come from on-site solar systems located in residential applications. Staff believes that additional requirements within a carve out, such as the suggested carve out for residential solar systems, can increase the cost of implementing a carve out for solar and wind and make the RPS overly complicated. This may be a refinement to be considered at a later date as the renewable energy market in Florida evolves. Staff believes that in order to reduce ratepayer costs, it is more beneficial to allow competition between all solar and wind applications within the carve out requirement. In addition, CEG believes that significant, long-term solar financial incentives should be offered to customers through a system benefit charge or tariff. Staff does not believe the Commission has the authority under Section 366.92, F.S., to establish a system benefit charge and apply these funds toward customer incentives.

Sunshine State Solar Power (SSSP) supports carve outs or set asides for wind and solar. SSSP recommends a two tier structure, with further differentiation of Class II to consider such categories as (1) emission level, (2) technological status (development status), and (3) vintage. SSSP supports the strawman draft Option II set aside for solar and wind; however, SSSP believes a set aside would not be effective given the proposed cost cap and REC price cap in the strawman draft rule. If these limiting provisions of the strawman draft rule were not removed, SSSP supports Option III, the multiplier approach. As stated above, staff disagrees that the rule should consider these additional characteristics of various Class II renewable technologies. The statute did not provide express authority for the Commission to include preference for resources other than wind and solar. In addition, ranking Class II resources based on the characteristics suggested by Sunshine State Solar Power would result in a complex and potentially subjective process of selecting eligible projects.

The Florida Solar Coalition (FSC) supports the Option II set aside approach in the strawman draft rule. FSC modifies this set aside approach to give greater incentives for the development of solar photovoltaic systems due to the higher capital cost of these systems. FSC also reduces the time period for the Option II set aside requirement to begin on January 1, 2013, rather than January 1, 2017. FSC adds language which results in a set aside within a set aside, with 10 percent of the set aside reserved for solar photovoltaic systems, 10 percent from solar thermal resources, and an additional 5 percent for wind. If the wind requirement is not fulfilled, FSC recommends that the utility's obligation with respect to wind can be met with solar. The Southern Alliance for Clean Energy supports the same version of a set aside, with the exception

⁵ Wisser, Ryan and Barbose, Galen, Lawrence Berkeley National Laboratory, *Renewables Portfolio Standards in the United States: A Status Report with Data through 2007*, April 2008.

of a start date of January 1, 2016. After considering the Post-Workshop Comments, staff does not support such a “set aside within a set aside” approach. Staff believes it will reduce costs for ratepayers if utilities have the flexibility to meet the obligations of the set aside by producing or purchasing RECs from the least cost Class I renewable resources.

Florida Crystals also does not agree with the special treatment of certain renewables, and believes this may result in another barrier to renewable development. However, if the Commission includes special treatment for solar and wind in the rule, Florida Crystals prefers the set aside contained in Option I, with the date pushed out to January 1, 2020. If a set aside is used, Florida Crystals recommends the funds from the rule’s cost cap should be allocated according to the set aside. For example, if a 25 percent set aside is included for solar and wind, these resources should be restricted to 25 percent of the funds from the cost cap. Wheelabrator and Covanta state that the rule should provide separate and distinct requirements for solar and wind, in whatever amount is appropriate, so there is no competition between other resources and solar and wind. Wheelabrator and Covanta also recommend that if the Commission implements a set aside, the percentage of the funds from any cost cap allocated to Class I resources should be tied to the set aside percentage. Staff notes that Subsection (3)(b) of the draft rule includes a carve out of a minimum of 25 percent of the RPS is to be provided by Class I renewable resources. Also, as discussed in Subsection (5) on compliance of the draft rule, the costs of complying with the RPS are to be allocated 1.50 percent to wind and solar, and 0.50 percent to all other Florida renewable energy resources.

Gulf, PEF, and TECO support versions of the strawman draft rule Option III multiplier approach to encourage solar and wind. Gulf states that if multipliers have been ineffective in other states, it may be because the multipliers were set too low. The Florida Renewable Energy Producers Association (FREPA) states that it has never supported tiers with different treatment for specified renewable resources. If the Commission chooses to provide additional support for solar and wind; however, FREPA supports Option III in the strawman draft rule, which provides for a multiplier approach, rather than set asides. FREPA believes that multipliers give utilities and producers more flexibility to respond to market forces. FREPA also states that the 25 percent set aside proposed in the strawman draft Options I and II is arbitrary. Upon a thorough review of the comments and RPS policies in other states, staff does not support a multiplier approach. According to the LBNL report, the multiplier approach has not been as effective in other states as a carve out in encouraging solar development. Further, a multiplier approach actually reduces each utility’s obligations under an RPS because the utility would receive a multiplied amount of credit for each solar or wind REC. Given the comments from solar representatives in the Commission’s RPS workshops, staff concludes it is reasonable to believe that the 25 percent carve out in the draft rule can be achieved over time. If information to the contrary is brought to light as the RPS progresses, the Commission may hold a proceeding to review the RPS and carve out requirements under Subsection (3)(c) of the draft rule.

Several interested parties do not believe the rule should contain special treatment for specified resources, such as solar and wind. The Office of Public Counsel (OPC) does not support carve outs or set asides, and believes that the market should determine the renewable resources that should be in each utility’s portfolio based on relative economics. OPC states that in an environment of rapid technological changes, the rule should not favor one technology over

another. The Florida Industrial Cogeneration Association (FICA) and PCS Phosphate – White Springs Agricultural Chemicals, Inc., also do not agree with special consideration for solar and wind, and state that all options for preference for these “high cost” renewables should be deleted from the rule. FPL also deleted the portions of the strawman draft rule that relate to providing a set aside or multiplier for solar and wind. Staff disagrees that there should not be added weight for solar and wind resources. The rule provides sufficient ratepayer protections through a two percent cost cap and future Commission proceedings to modify the RPS if conditions warrant.

Proceeding to Modify the RPS

Staff believes that in order to fully balance the interests of encouraging renewables while protecting ratepayers, the final RPS rule must contain a process for the Commission to review the RPS and utility implementation plans on a regularly scheduled basis and as conditions warrant. The draft rule provides such a process for the Commission to review and modify, if appropriate, the RPS at least every five years. This is similar to the Commission’s conservation goals proceedings. This process for review will also allow the Commission to repeal or amend the rule in the event that new provisions of federal law supplant or conflict with the rule. Pursuant to Section 120.54(7), F.S.,⁶ an IOU or other substantially interested person may petition the Commission to initiate a proceeding to modify the rule. Any modification to the RPS and the IOUs’ implementation plans will not affect existing contracts and commitments. The draft rule also requires each IOU to provide an analysis of the technical and economic potential for renewables in Florida to the Commission in each review proceeding.

Post-Workshop Comments

The Post-Workshop Comments focused on two areas (1) the frequency of the regularly scheduled reviews and (2) the parties that are eligible to petition the Commission to initiate a review. Sunshine State Solar Power agrees that the RPS rules and procedures should be subject to ongoing review by the Commission, but recommends that the timeline should be reduced to every three years, rather than every five years. The Florida Solar Coalition (FSC) suggests that the Commission should review and set the RPS for each IOU at least once every two years for the first eight years of the standard. FSC believes that a shorter time period is needed, especially in the first years of the RPS, for the Commission to respond more rapidly to the developing market for renewable resources. Southern Alliance for Clean Energy suggests that reviews should be held every three years for the first two proceedings and approximately concurrent with the conservation goals proceedings thereafter. FPL states that review proceedings should be held every three years. Staff believes a five year regularly scheduled review proceeding, coupled with the opportunity for utilities or substantially interested persons to petition the Commission to initiate a review at any time is sufficient for the Commission to monitor the RPS. IOUs will also be required to provide reports to the Commission on an annual basis. This will provide the Commission with the information necessary to determine whether to initiate a proceeding.

⁶ Section 120.54(7)(a), F.S., states that any person regulated by an agency or having substantial interests in any rule may petition an agency to adopt, amend, or repeal a rule. The petition shall specify the proposed rule and action requested.

Florida Crystals suggests the addition of “power producer” to the list of entities in the strawman draft rule that can trigger a proceeding for review if a “reasonable showing” is made. Staff believes it is evident in the draft rule that a substantially interested power producer may petition the Commission to initiate a review of the RPS and therefore no change is needed to the existing language.

Section (4) Implementation Plans (Attachment A, page 59, lines 1 through 14) - The draft rule requires each IOU to provide an implementation plan for meeting or exceeding the RPS within 180 days of the effective date of the rule. Each IOU must also provide data as a part of the annual reports required by Section (8) and discussed in more detail below. Section (4) of the draft rule also delineates the information which must be provided in each IOU’s implementation plan. Staff believes that the implementation plan and annual reports will provide valuable information needed by the Commission to closely monitor the IOUs’ actions regarding renewables, as well as the status of the RPS. This information can be used by the Commission in evaluating each IOU’s performance, and in determining if a review proceeding is warranted.

Post-Workshop Comments

The Florida Industrial Cogeneration Association (FICA) suggests that IOUs should be required to add an evaluation of the long-term rate benefits of renewables for each class of customers in the IOUs’ compliance plans and reports. FICA believes these rate benefits should be deducted from the cost limitation under the cost cap. Subsections (4)(c) and (4)(d) of the draft rule require the IOUs to evaluate the effects of a utility’s implementation plan on greenhouse gas reduction and economic development. Staff disagrees with FICA that the IOUs should be required to evaluate additional long-term rate benefits of renewables. FICA has not defined these benefits or how they are to be evaluated.

TECO recommends that Subsection (4)(d), which requires each IOU to provide an analysis of the economic development effects of an IOU’s compliance plan, should be deleted. TECO believes that utilities do not have expertise in performing economic development studies. Staff believes this information is essential for the Commission to evaluate the results of the RPS over time.

In the Commission’s August 20 and 26, 2008 workshop, the IOUs commented that the 90 day timeline in staff’s strawman draft rule for the initial utility filing is too short to provide a thorough filing. Staff agrees and increased the filing time for the IOUs’ implementation plans to 180 days after the effective date of the rule.

Section (5) Compliance (Attachment A, page 59, line 15, through page 60, line 21) -

REC Compliance

Section 366.92(3)(b)1, F.S., requires the Commission to include in the RPS rule methods of managing the cost of compliance with the RPS. The Commission is given compliance

options, whether through direct supply or procurement of renewable power or through the purchase of renewable energy credits. Based on staff's investigation into RPS structures, and the comments of the stakeholders, the draft rule requires RECs to be the sole means by which to comply with the RPS. Staff believes that requiring compliance through RECs will: (1) facilitate the ease of tracking compliance; (2) reduce the potential for double counting; (3) facilitate the inclusion of eligible customer-owned generation, including small systems, because RECs can be issued to account for the energy produced by these facilities; and (4) position the state for integration into any future federal or regional RPS.

Subsection 366.92(2)(d), F.S., defines a renewable energy credit as a product that represents the unbundled, separable, renewable attribute of renewable energy produced in Florida and is equivalent to one megawatt-hour of electricity generated by a source of renewable energy located in Florida. A REC is a financial instrument that may be bought and sold in organized state and regional markets, or it can be negotiated directly between parties as part of bilateral contracts. To a renewable energy provider, a REC represents an additional revenue source above and beyond what is paid by the utility for the renewable capacity and energy. For an IOU, RECs provide flexibility in meeting RPS standards.

RECs can be generated by utility-owned renewable generation resources and may be used by the utility to meet its RPS requirements, or may be sold. Non-utility renewable resource owners may sell the RECs to the utility to which it sells capacity and energy pursuant to a contract. Because the REC is separable from energy, the non-utility provider may sell the REC to another utility. Also, customer-owned renewable generation, such as solar thermal systems, may sell the RECs associated with the equivalent solar energy and gain an additional revenue source to offset the up-front cost of the system.

The requirements for a Florida REC market, including the Florida renewable facilities eligible to create RECs are contained in draft Rule 25-17.410, F.A.C., and are discussed in Issue 2.

Post-Workshop Comments

Gulf, PEF, and TECO support the use of in-state RECs for compliance; while FPL believes that the only REC market that makes environmental, economic, and public policy sense, is a national REC market. Subsection 366.92(2)(d), F.S., requires RECs used for compliance with the Florida RPS to be from Florida renewable energy resources.

The Florida Alliance for Renewable Energy (FARE) states that HB 7135 requires the Commission to consider both RECs and energy procurement for compliance with the RPS, and that REC compliance will add cost to the RPS. FARE also comments that REC compliance is not an equitable way to encourage the development of renewable projects because it will benefit a few large out-of-state companies at the expense of small solar developers already operating in Florida. In the alternative, FARE advocates the use of feed-in tariffs as a more effective means of supporting renewables. Feed-in tariffs provide a long-term fixed payment by the utility for renewable energy. It is clear to staff that Section 366.92, F.S., provides the Commission the flexibility to use a REC-only mechanism for compliance with the RPS. Also, the Legislature

does not give the Commission authority to implement a feed-in tariff as opposed to a REC market. Finally, the Legislature has appropriated funds for the Solar Energy Rebate program administered by the Florida Energy and Climate Commission to provide a payment to offset the up-front cost of solar equipment.

Sunshine State Solar Power (SSSP) states that REC-only compliance implies that feed-in tariffs are “off the table.” SSSP recommends the inclusion of feed-in tariffs in the rule for compliance. Feed-in tariffs provide a long-term fixed payment for renewable energy. SSSP believes that certainty is critical in attracting capital investment for renewables and feed-in tariffs create a more certain revenue stream than the sale of RECs. SSSP recommends that if a REC-only compliance mechanism is used, the REC value must be set at a proper risk-adjusted level to ensure appropriate rates of return to all investors. SSSP did not provide a method to set the risk-adjusted level for RECs. The Environmental Defense Fund (EDF) expresses concern that the emphasis on RECs in the draft rule is designed for only one or two large companies to actively participate. EDF also supports the use of feed-in tariffs and believes these policies result in reduced costs and less development time. EDF states that renewable energy payment policies are a “vital tool to help renewable energy producers, both large and small, contribute toward meeting an RPS goal.” Staff disagrees that the rule should contain feed-in tariffs as a compliance mechanism. Ryan Wisner of the Lawrence Berkeley National Laboratory stated that feed-in tariffs are typically used instead of an RPS, rather than combined with an RPS. HB 7135 clearly requires the Commission to develop a rule for an RPS. The Commission has existing policy on the pricing of renewable energy. Potential changes to the Commission’s existing pricing policies for renewable energy are more appropriately addressed in other proceedings.

PCS Phosphate and White Springs Agricultural Chemicals, Inc. also state that HB 7135 provides for compliance through either energy or RECs and believe the rule should reflect this. PCS Phosphate and White Springs Agricultural Chemicals, Inc. recommends that a provision should be added that authorizes and encourages contractual flexibility (including contract length, billing methodology, and applicable performance criteria) between utilities and renewables to promote renewable energy peak production. Staff believes that Section 366.92, F.S., provides the Commission the flexibility to use a REC-only mechanism for compliance with the RPS. In Rules 25-17.200-.310, F.A.C., the Commission has implemented the policies of the Legislature in Section 366.91, F.S., with regard to the contractual provisions for the purchase of renewable energy and capacity. These rules specify the minimum contract length, availability of the contract, and basis for payments to renewable generators.

The Clean Energy Group (CEG) maintains that in states where short-term trade in RECs is predominant over long-term contracting, RPS policies appear to be more costly and unstable. As a safeguard, CEG recommends that the rule include a provision that establishes express long-term contracting standards for the utilities, with sufficient regulatory oversight to ensure prudent compliance. CEG also suggests that competitive bidding for RECs and/or energy should be required, and IOUs should be required to offer REC contracts with a minimum term of 20 years. CEG argues that the rule does not need to require IOUs to accept any bids, but must develop a report detailing which bids were selected and rejected, and why. In draft Rule 25-17.410, F.A.C., staff contemplates that REC market participants would have the flexibility to enter into both short-term and long-term agreements. The specific governance provisions of the REC

market will be reviewed and approved by the Commission, as discussed in Issue 2. Staff agrees with CEG that the rule should include a requirement for the IOUs to issue a request for proposals as an added protection that least cost renewable resources are built or purchased. Staff addressed CEG's comments by adding the requirement in Subsection (6)(b) for the IOUs to issue a request for proposals for Florida renewable energy resources within 180 days of the effective date of the rule and biennially thereafter.

Florida Crystals states that the separation of RECs from energy has the "clear intent to apply the avoided cost mechanism to the power sales component of the transaction" and that applying the avoided cost standard is contrary to the legislative intent of HB 7135. Florida Crystals recommends striking the tie to avoided cost and replacing this with a more "reasonable pricing mechanism" for renewable contracts that accounts for the full value of renewables (including fuel diversity, economic development and greenhouse gas reduction benefits). Florida Crystals also recommends allowing compliance from the production or purchase of RECs, or production or purchase of renewable energy. As stated above, staff believes it is more appropriate to allow compliance solely from RECs due to the ease of tracking compliance and the reduced potential for double counting. Staff also notes that the Commission has existing policies for the pricing of renewable purchased power including renewable standard offer contracts, as well as negotiated contracts with IOUs for the purchase of capacity and energy based on what the utility would otherwise have paid. It is important to note that the Commission's current pricing policies adopted pursuant to statute recognize that ratepayers should only pay for the benefits received. For example, capacity payments reflect the contribution to reducing peak demand, while energy payments reflect the contribution to reducing fuel cost. Capacity and energy payments for renewable resources will not reflect benefits associated with greenhouse gas emission reductions, economic development, and fuel diversity absent legislation addressing such benefits. The REC compliance mechanism will provide an additional revenue stream above current payments for capacity and energy for renewable producers.

Enforcement Mechanisms - Penalties and/or Alternative Compliance Payments

During the August 20 and 26, 2008 workshop, there was substantial discussion about the need to make the RPS mandatory and to include enforcement provisions in the rule. Several renewable representatives commented that such enforcement mechanisms are necessary to provide certainty for renewable producers. In the Post-Workshop Comments, several interested parties advocated the use of penalties and/or alternative compliance payments to enforce the RPS.

In response to the comments, staff added a penalty provision to Subsection (5)(b) of the draft rule. This section puts utilities on notice that the Commission may assess a penalty of up to 50 basis points if an IOU fails to meet or exceed its standards and has not received excusal based on the conditions specified in Subsection (5)(c). The table below displays the revenues representing 50 basis points for each IOU.

	50 Basis Points
FPL	\$54,649,664
FPUC	\$115,320
Gulf	\$5,538,382
PEF	\$20,927,660
TECO	\$9,965,900

Source: Utility surveillance reports, December 2007.

Section (7) of the draft rule requires that penalty funds shall be refunded to the ratepayers through a credit to the draft rule's new Renewable Energy Cost Recovery clause (RECR). Staff believes that a penalty will not be effective unless it is paid for by the utility's stockholders. Further, it is appropriate to return these funds to the ratepayers because if a utility fails to comply, ratepayers will not receive all of the benefits associated with development of a renewable market in Florida.

As discussed below, Alternative Compliance Payments (ACPs) were advocated by several parties in the Post-Workshop Comments. Staff's review of other states' RPS policies revealed that over half the states with existing RPS policies provide for compliance through ACPs if sufficient renewables are not available or are cost prohibitive. It is important to note that ACP policies, in addition to RPS policies, vary among the states. The revenues from ACPs are typically used to support renewable projects or rebate programs. In developing the draft rule, staff followed the directive of the Legislature in HB 7135. Section 366.92, F.S., does not provide the Commission the express authority to establish ACPs to fund the development of additional renewables in the RPS rule, because the statute does not provide for the use of any such funds by the Commission, other state agency, or third party to support renewable programs. Therefore, staff believes that any enforcement mechanism incorporated into the rule must be based on conventional regulatory practice as supported by the Commission's general ratemaking authority.

Post-Workshop Comments

The Florida Alliance for Renewable Energy supports both penalties and ACPs if the RPS structure remains similar to the strawman draft rule. Sunshine State Solar Power also supports both ACPs and penalties. The Clean Energy Group (CEG) also advocates that the rule should provide for an automatic non-compliance penalty or ACP to ensure a strong RPS program. CEG notes that states without such enforcement mechanisms have had much less success in developing a market for renewables. CEG recommends that an IOU may comply with the RPS through an ACP, and that the Florida Energy and Climate Commission should oversee the use of the resulting funds to support the development of new renewable projects in Florida. CEP advocates an initial ACP of \$50 per MWh, with a yearly adjustment based on the consumer price index. CEG suggests that the Florida Energy and Climate Commission should be required to provide an annual report to the Commission on the use of the ACP funds. CEP believes an IOU should be allowed to recover the ACP if the payment is the least-cost measure to comply and if

there are insufficient eligible renewable resources. CEP states that Section 366.92(3)(b)2, F.S.,⁷ provides the Commission with the authority to establish ACPs.

The Florida Renewable Energy Producers Association (FREPA) comments that the RPS rule should contain meaningful penalties for non-compliance. FREPA recommends penalties of the maximum allowed by Section 350.127, F.S., of \$5,000 per day per REC needed to fully comply until a utility demonstrates it is in compliance. FREPA advocates that IOUs should not be allowed recovery for penalties and that funds should be used to support development of renewables in Florida. In addition, reductions in the utility's return on equity may be necessary based on the extent of a utility's non-compliance. FREPA recommends a 25 to 100 basis points reduction in the utility's return on equity based on non-compliance level.

The Environmental Defense Fund (EDF) supports an automatic penalty and believes that renewable producers will not begin to construct the needed facilities without meaningful penalties. EDF recommends that the failure by an IOU to enter into REC contracts should not qualify the IOU for an excusal. Therefore, to meet the goal, IOUs must begin contracting with renewables as soon as practicable. EDF advocates penalties that are of sufficient size to deter non-compliance; for example, 200 percent of the REC price.

Florida Crystals states that any ACP included in the rule should be based on the full value of renewables to meet the legislative intent, including greenhouse gas reduction, economic development, and fuel diversity. Florida Crystals recommends that utilities that fail to comply and are not fully excused issue a refund to ratepayers through the fuel clause of \$80 (adjusted for inflation) per each MWh that was not excused. In addition, utilities should not be provided with cost recovery from the ratepayers for payments for non-compliance. These funds should be refunded to ratepayers or used toward a public benefits fund to support and promote Florida renewable resources.

Wheelabrator and Covanta state that an enforcement mechanism is needed in the RPS rule and that including an ACP would eliminate the need for a cost cap. An ACP program sets the "price ceiling" for RECs. Wheelabrator and Covanta advocate an ACP set sufficiently high such that it provides sufficient incentives for the development of renewable energy and the procurement of RECs by IOUs prior to reliance on the ACP for compliance. Both believe an ACP is within the Commission's statutory authority and that the rule presented to the Legislature should include a specific proposal for the use of these funds for legislative review.

Gulf does not believe that the rule must expressly provide for penalties in the event of non-compliance, noting that Section 366.92, F.S., is silent with regard to penalties and how funds derived from such penalties would be used. Gulf maintains that the Commission already possesses authority to enforce its rules and to penalize or reward utilities accordingly. PEF agrees, adding that that it would be improper and unnecessary to provide separate penalty provisions in an RPS rule.

⁷ Section 366.92(3)(b)2, F.S., states that the Commission rule "shall provide for appropriate compliance measures and conditions...."

FPL states that, if the Commission feels the need to embrace the concept of penalties and awards, the rule should include both penalties for non-compliance and rewards for compliance. Penalties could include an ACP mechanism and the rewards could include an adder to the utility's return on equity. FPL proposes the imposition of an ACP only if the IOU has not spent up to its expenditure cap. To eliminate the need to designate a state agency to receive the ACP payment, FPL suggests that the IOUs would designate and administer an ACP account, which would be subject to the Commission's oversight. The IOUs would ensure that the funds would be used solely for the development of renewables in Florida.

Conditions for Excusal – Supply of RECs and Prohibitive Costs

Section 366.92(3)(b)2, F.S., requires the RPS rule to provide conditions under which utilities may be excused for non-compliance, including insufficient supply of Florida renewable energy resources or prohibitive cost. The draft rule addresses these two conditions for excusal. First, the supply of renewable energy resources will be initially addressed by a Navigant study on the technical and economic potential of Florida renewable energy resources, including a forecast to 2020. At least every five years, as part of the Commission's review, the IOUs will provide updated information on the supply of renewable resources.

Second, the draft rule addresses the definition of prohibitive cost. In the strawman draft staff proposed a cost cap to address the potential prohibitive cost of renewables and second to provide the Commission flexibility to protect consumers from excessive rate increases. Since the cost of certain renewables is likely to be higher than conventional technologies, particularly in the early years of development, staff proposed a cost cap in the strawman draft rule such that utilities may be excused for non-compliance if their cost for renewables, in aggregate, exceeds one percent of annual retail revenues. As addressed further below, this cost cap was increased to two percent of annual retail revenues in the draft rule.

Post-Workshop Comments intertwine the conditions for excusal with the appropriateness and level of the cost cap. Therefore, staff has addressed the Post-Workshop Comments in a combined section below.

Cost Cap

Since the cost of certain renewables is likely to be higher than conventional technologies, particularly in the early years of development, staff proposed a cost cap in the strawman draft rule. The cost cap limits ratepayer exposure to excessive cost of compliance with the RPS, and provides an excusal for the IOU in the event the cost of RECs is excessive and prevents the IOU from meeting the RPS.

In the strawman draft, staff proposed a cost cap of one percent of annual retail revenues. A one percent cost 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. As discussed below, staff received numerous comments that staff's proposed one percent cost cap is too restrictive to fully encourage the development of renewables in Florida. These comments ranged from increasing the cost cap from one percent up to as high as five percent, to

removing the cost cap altogether. As an example of the various cost caps suggested by the parties, the table below displays one to five percent of each IOU's annual 2007 revenues.

	1% Retail Sales (Strawman)	2% Retail Sales (Draft Rule)	3% Retail Sales	4% Retail Sales	5% Retail Sales
FPL	\$112,648,020	\$225,296,040	\$337,944,060	\$450,592,080	\$563,240,100
FPUC	\$564,089	\$1,128,178	\$1,692,267	\$2,256,356	\$2,820,445
Gulf	\$10,282,092	\$20,564,184	\$30,846,276	\$41,128,368	\$51,410,460
PEF	\$41,383,779	\$82,767,558	\$124,151,337	\$165,535,116	\$206,918,895
TECO	\$20,410,858	\$40,821,716	\$61,232,574	\$81,643,432	\$102,054,290
Total:	\$185,288,838	\$370,577,676	\$555,866,514	\$741,155,352	\$926,444,190

Staff continues to believe that a cost cap is necessary to protect ratepayers from undue rate increases associated with the RPS, particularly in the early years as the market for renewables develops in the state. Staff believes it is appropriate to increase the cost cap from the one percent proposed in the strawman draft rule to two percent for two reasons. First, the numerical standards have been increased in the draft rule. It will require higher expenditures by the IOUs to reach these higher standards. The cap must be set high enough for the RPS goals to be achieved, particularly in the initial years of the RPS, prior to the Commission's first review proceeding. If the Commission determines over time that the two percent cap is too low for the IOUs to meet their goals, the Commission may increase the cap in a review proceeding. Second, the one percent cap appeared low relative to the cost caps in other in other state RPS policies.

Post-Workshop Comments

The Post-Workshop Comments focus on (1) the rate impact of an RPS, (2) the appropriate definition of prohibitive cost, and (3) the need for utilities to prove they have made a good faith effort to comply prior to receiving excusal. Several comments also recommend the inclusion of an alternative compliance payment in the RPS rule.

Several comments stressed the need for ratepayer protection from increased costs associated with an RPS, for example, through the use of a cost cap. The Sarasota Chamber of Commerce states that the Commission should be mindful of the potentially damaging effects of large, rapid, or unpredictable rate increases on businesses, and believes such rate increases could have detrimental effects on Florida's economy and employment base. The Office of Public Counsel (OPC) recommends that the rule should continue to place limits on the costs of an RPS that ratepayers will have to bear. OPC stresses that it is important to control the extent to which the rule would depart from the "norm" of the cost of conventional generation resources, and agrees with the strawman draft rule cap of one percent of revenues.

While Gulf, PEF and TECO support a one percent cap, many comments state that the one percent cap is too restrictive and is low compared to other state RPS policies. The Clean Energy Group (CEG) notes that other states have used a variety of approaches to limit ratepayer cost exposure, including revenue or rate caps. CEG states that the cost cap of one percent in the draft

rule is the lowest of all existing state RPS policies. CEG recommends deleting the cost cap and using an alternative compliance payment to limit ratepayer cost exposure while ensuring the development of new renewable projects through the use of these funds.

The Environmental Defense Fund states that a one percent cap is unreasonable as a measure for non-compliance and provides a disincentive for investment in renewable projects and technology development. EDF notes that many states have higher caps, and believes that the best way to protect ratepayers is to “embrace economies of scale, encourage broad participation in renewable energy markets, provide long-term contracts and avoid undue market manipulation through price caps.”

Secretary of Agriculture Charles Bronson expresses concerns that the strawman draft rule cap is arbitrarily set at one percent, and will fail to allow for significant investment in renewable projects. The Florida Renewable Energy Producers Association also states that the one percent cost cap in the strawman draft rule is arbitrary and believes it is not based on any objective empirical evidence or sound public policy. Florida Crystals also states that a one percent cost cap is too restrictive. Wheelabrator and Covanta agree that a one percent cap is too restrictive and believe the cap should be eliminated. Wheelabrator and Covanta believe that including an alternative compliance payment would eliminate the need for a cost cap.

The Southern Alliance for Clean Energy (SACE) states that the strawman draft rule is overly weighted toward cost containment. SACE believes that the Commission does not have explicit legislative authority in HB 7135 to develop more than one type of standard addressing cost containment, such as the cost cap and REC price cap contained in the strawman draft rule. Staff notes that the cap on REC prices has been removed from the draft rule, as discussed in Issue 2. SACE also states that the one percent cost cap is very restrictive and does not have adequate support in statute or precedent.

The Florida Solar Coalition (FSC) expresses concern that there is no language in the strawman draft rule that ensures utilities are making a good faith effort to secure sufficient renewable resources. Staff agrees, and has added language to Subsection (5)(a) requiring a good faith effort by IOUs prior to receiving excusal. FSC also states that the legislative concept of “prohibitive cost,” which has been defined as one percent of retail revenues in the strawman draft rule is too low. FSC notes that of the 26 states with an RPS policy, 19 have cost caps; and of these only 3 have caps lower than one percent. FSC states that the average cap is just over four percent of revenues. Based on the national average, FSC recommends that a cap of four percent is more likely to sustain the creation of a renewable market. FSC believes the use of a four percent cost cap along with frequent review of RPS goals should provide adequate ratepayer protection.

FPL recommends a cap of three to five percent of annual revenues. However, this is based on a plan which includes nuclear generation, customer energy efficiency programs, and generation and grid efficiency improvements. The Florida Industrial Cogeneration Association increases the cost cap to five percent and suggests that the expected benefits of renewables should be deducted from the cost cap calculation.

FIPUG defines cost prohibitive by adding a definition of avoided cost for solar projects of \$310 per megawatt-hour (MWh) and \$116 per MWh for all other renewable sources. FIPUG provided no support for the suggested dollars per MWh values for avoided cost. Staff does not believe it is appropriate to include specific dollar values for avoided cost in the rule, as avoided costs change significantly over time. FIPUG also adds an excusal condition that utilities must show that no viable avoided cost or other qualifying renewable energy alternative has been rejected prior to receiving excusal. Staff has addressed FIPUG's comment by adding language which requires utilities to show that a good faith effort was made to produce or purchase sufficient RECs prior to receiving excusal from compliance.

Cost of Compliance

At the staff's August 20 and 26, 2008 RPS workshop, several parties expressed concern that the strawman rule did not define the types of costs to which the cost cap would apply. The types of costs to implement an RPS may include: (1) costs to obtain RECs; (2) administrative costs associated with the REC market; (3) purchased power costs; and, (4) utility self-build project costs. Staff agrees that the rule must fully define the types of costs which may be counted toward the cost cap. Therefore, staff added Subsection (5)(d) to the draft rule, which defines the cost of compliance. Staff believes it is appropriate to count those costs for producing or procuring RECs which exceed a utility's cost for generating or purchasing traditional resources.

Allocation of Compliance Costs to Class I and Class II Resources

Subsection (5)(e) of the draft rule addresses how the cost of compliance (two percent of retail revenues) should be allocated to Class I and Class II resources. The draft rule states that compliance costs for Class I resources are considered prohibitive if they exceed 1.5 percent of retail revenues; while costs for Class II resources are considered cost prohibitive if they exceed 0.5 percent. Staff added the compliance cost allocation methodology to the draft rule primarily in response to the comments of the solar industry at the Commission's workshops. Staff agrees that additional support through dedicated funds for solar and wind resources is needed to encourage the development of these resources in Florida. Section 366.92(3)(b)3, F.S., allows for the rule to provide added weight to these beneficial resources. Because the rule includes a carve out for solar and wind resources, staff also believes that dedicated funds are needed to encourage the development of non-Class I resources. If a proportion of the compliance costs is not dedicated to non-solar resources, utilities may spend the entire allowed two percent cost cap in an effort to meet the solar and wind carve out requirement.

Post-Workshop Comments

In its Post-Workshop Comments, Florida Crystals expresses concern that high-cost solar and wind resources will use up the RPS compliance funds if a set aside policy is included in the rule. Florida Crystals recommends that utilities be excused from full compliance upon a showing that the compliance costs for Class I resources exceeds two percent of annual revenue and allocates an additional three percent for Class II resources. To address these concerns, staff added the language requiring the allocation of costs between Class I and Class II resources. The

language staff used is similar to the language suggested by Florida Crystals, with a cost cap of two percent rather than five percent of revenues, and a higher allocation of the costs to Class I resources to provide added weight to these resources.

(6) Utility Self-Build Option (Attachment A, page 60, line 22, through page 61, line 5) -

At the conclusion of the August 20 and 26, 2008 workshop, the staff asked the workshop attendees to address the issue of how to ensure that the least cost projects were built as a result of the RPS rule. Several renewable representatives also expressed concern that utilities would self-build projects to the detriment of other renewable producers. Staff has reviewed the Post-Workshop Comments and in response, has added Section (6) to the draft rule regarding utility self-build renewable projects. The new Subsection (6)(a) requires each IOU that seeks to build a Florida renewable project to select the resource that is most likely to result in the least cost option for ratepayers. In addition, Section (6)(b) requires each IOU to issue a request for proposals (RFP) for renewable projects within 180 days of the effective date of the rule. Each IOU is also required to issue an RFP on a biennial basis following the initial RFP. IOUs must report the results of these solicitations in their Ten-Year Site Plans.

Staff believes that requiring a regularly offered RFP will have several benefits as the market for renewables develops in Florida. First, if a utility chooses to self-build, the results of the RFP will supply added information for the Commission, and assurance to ratepayers, that the project is the least cost option available. Second, the RFPs will provide non-utility renewable generators with an additional entry point into Florida's developing market. Finally, the results of the RFPs reported in the IOUs' Ten-Year Site Plans will provide the Commission with additional information to track the success of the RPS rule and determine whether a proceeding to review the rule is necessary.

Post-Workshop Comments

In its Post-Workshop Comments, The Clean Energy Group (CEG) adds a new section to the strawman draft rule to address resource acquisition that is similar to Subsection (6)(b) of the draft rule. CEG also requires competitive bidding; however, CEG expands the requirement to the purchase of renewable energy and/or RECs, and requires REC contracts used to meet RPS obligations to have a minimum offered term of 20 years. In addition, CEG recommends that an independent auditor should be used to evaluate any RFPs that include offers from utility affiliates. A utility issuing an RFP is not required to accept any bids, but must develop a report detailing which bids were selected and rejected, and why. The Environmental Defense Fund (EDF) also recommends that the rule should provide for an open, transparent solicitation process that begins as soon as the RPS is ratified. Staff agrees with CEG and EDF that an RFP requirement should be included in the rule, but does not agree that the RFP requirement should be expanded to include REC purchases. The Florida REC market will facilitate REC trading and provide sufficient information to the Commission to determine if each IOU is purchasing the least cost RECs available.

Gulf recommends the use of an RFP process as a means for the Commission to evaluate the cost-effectiveness of proposed utility projects. However, Gulf only applies the RFP requirement to relatively large scale projects that are already subject to an RFP requirement under existing Commission rules. Gulf suggests that an RFP should only be required for projects falling within the scope of Rule 25-22.082, F.A.C., the "bid rule." Gulf recommends that the cost-effectiveness of a project outside the scope of the bid rule should be evaluated based on avoided cost plus the average price of RECs produced and sold in Florida within the most recent 12 month period (limited by any REC price cap). FPL recommends an exemption from the bid rule for utility self-build projects.

Staff disagrees with FPL that utility self-build renewable projects should automatically be exempt from the bid rule. Staff also disagrees with Gulf that an RFP should be limited to those projects currently subject to the bid rule. A regularly scheduled RFP process open to projects of all capacities is needed to provide an additional entry point for a wider variety of renewable projects. The bid rule only applies to those projects greater than 75 MW that require a need determination under Section 366.419, F.S. Renewable projects are often smaller in scale than 75 MW. An RFP process for all renewable projects, regardless of capacity, will also supply the Commission with the information needed to ensure that utilities select the projects or purchased power agreements that are in the best interests of their ratepayers.

The Florida Industrial Cogeneration Association (FICA) also recommends that each utility should be required to use an RFP bidding process before proceeding with self-build projects regardless of the technology. FICA provides language, which is similar to that contained in Subsection (6)(a) of the draft rule, that requires each IOU to select the most cost-effective option for meeting its RPS obligations. FICA also recommends an alternative avoided cost calculation for renewable energy resources based on utility nuclear unit costs. Staff notes that the Commission has existing policy on the pricing of renewable capacity and/or energy. Potential changes to the Commission's existing pricing policies for purchased power agreements for renewable resources are more appropriately addressed in other current proceedings relating to renewable tariffs.

Section (7) Cost Recovery (Attachment A, page 61, line 6, through page 63, line 14) -

Renewable Energy Cost Recovery Clause and Proceedings

Section 366.92(3)(b)1, F.S., provides the Commission with rulemaking authority for annual recovery of costs associated with the RPS. However, the statute does not identify the ratemaking mechanism for recovery of costs associated with the RPS.

Staff has made significant changes to the cost recovery language in the draft rule as compared to the strawman draft rule. The strawman draft rule provided for cost recovery of reasonable and prudent costs associated with the purchase of RECs, including administrative costs, through the Environmental Cost Recovery clause (ECRC). The strawman draft did not directly address cost recovery for utility-owned renewable facilities and power purchase agreements; rather, the Commission's existing rules and procedures would be controlling.

The cost recovery section in the draft rule establishes a new cost recovery clause, entitled the "Renewable Energy Cost Recovery clause" (RECR). All reasonable and prudent costs for complying with the RPS will be recovered through this clause including (1) the costs of construction, operation, and maintenance of Florida renewable energy resources by the utility; (2) the purchase of RECs, including administrative costs associated with the Florida REC market; and (3) costs associated with the purchase of capacity and energy from renewable facilities. Section (7)(a)1 of the draft rule provides for the Commission to determine a separate return on equity for utility self-build renewable projects. Subsections (7)(c) through (7)(e) establish the procedures for annual RECR proceedings, true-up filings, and projection filings, and for the establishment of RECR billing factors. Staff based the language for the RECR proceeding and filing process on the Commission's existing cost recovery clause rules.

Staff believes there are three primary benefits to establishing the RECR clause and providing annual cost recovery for all costs associated with the RPS. First, by placing all costs associated with renewables in a dedicated cost recovery clause, the Commission and the IOUs' ratepayers will know the total costs for each IOU to comply with the RPS. The dedicated clause will facilitate the Commission's ability to track the compliance costs for the RPS, which will provide full transparency regarding ratepayer costs associated with renewables. Second, allowing recovery for self-build projects through the clause will remove any disincentive the IOUs have to develop renewable projects in between rate cases. The rule provides for the Commission to determine the appropriate return on equity for utility self-build projects. As a part of this determination, the Commission will consider the IOU's risk associated with each project. Finally, the RECR proceedings will be a dedicated forum for the Commission, IOUs, and other interested parties to raise issues regarding cost recovery for renewables. For example, staff believes the RECR proceedings are the appropriate venue in which the Commission should determine whether to consider rewards for exceeding the RPS, or to assess penalties if an IOU fails to comply with its obligations under the RPS and has not received excusal from the Commission.

Post-Workshop Comments

Gulf supports broadening the cost recovery language in the strawman draft rule to allow reasonable recovery of costs associated with utility renewable projects or conversion of existing utility facilities. Gulf states that the strawman draft rule does not provide for timely recovery of costs associated with building small generating projects; for example, projects with a capacity of three megawatts (MW) and above. According to Gulf, this is a significant disincentive for utilities to further develop renewables in Florida. Gulf believes the Commission has the authority to allow recovery of self-built projects. Gulf notes that the Commission could impose appropriate limitations on cost recovery for self-built projects, including size limitations and measures to ensure projects are cost-effective. Gulf suggests a maximum size limitation for cost recovery of 100 MW in the rule. Gulf proposes that a new clause dedicated to recovery of renewable costs should be established in the rule, which provides for the recovery of costs associated with (1) RECs, (2) administering the REC market, (3) renewable fuel, and (4) capital costs for self-built renewable projects. Staff agrees with Gulf that this separate recovery clause for costs associated with renewables would centralize and simplify tracking, recording and reporting costs of the RPS.

TECO also supports broadening the types of costs recovered through a clause to include recovery of investments in eligible renewable projects built by utilities. TECO recommends that compliance costs associated with the RPS, including costs for self-build projects, should be recovered through the ECRC. TECO also stresses the importance of timely recovery of costs with regulatory finality in order to ensure the “ultimate success of meeting Florida’s RPS as soon as reasonably possible.” As discussed above, staff agrees with the recovery of self-build costs through a clause dedicated to renewable resources, rather than the existing ECRC.

FPL also recommends that costs associated with self-build projects should be eligible for annual recovery through the ECRC. FPL states, however, that the normal standard for review for cost recovery is not workable for new technologies and will “impose incremental risk on the providers of renewable resources.” FPL bases its standard for recovery on the cost recovery language for the 110 MW of zero greenhouse gas emission Florida renewable projects contained in Section 366.92(4), F.S. The statute provides for recovery for the 110 MW projects through a clause upon a showing that the “provider has used reasonable and customary industry practices in the design, procurement, and development of the project in a cost-effective manner appropriate to the location of the facility.” Staff disagrees with FPL that the recovery of costs associated with renewable self-build projects should be based on the standard in Section 366.92(4), F.S. The Legislature clearly intended for Section 366.92(4), F.S., to apply solely to the recovery of costs for the 110 MW of zero greenhouse emission projects referred to within the statute.

Florida Crystals also recommends recovery of costs through the ECRC. Florida Crystals limits cost recovery through the clause to those costs associated with purchasing renewable energy, and excludes recovery of administrative costs through the clause. Florida Crystals does not advocate the recovery of costs for self-build projects through a clause.

The Florida Solar Coalition (FSC) states that RECs from non-utility facilities should be recovered through a separate cost recovery clause so expenditures are transparent to ratepayers. FSC also advocates that costs associated with producing RECs from utility-owned facilities should be rate based in order to provide incentives for the IOUs to exhaust the marketplace before building facilities themselves. FSC also recommends that revenues from RECs sold by utilities from utility-owned facilities should be returned to the ratepayers. Staff agrees with FSC that revenues from the sale of RECs from self-build projects should be returned to the ratepayers. These revenues should be credited to the RECR clause. Ratepayers should receive the benefit of any revenues resulting from projects for which an IOU has recovered costs through ratepayer bills. This will also prevent utility gaming by selling RECs from self-build projects to each other or through affiliate transactions.

The Office of Public Counsel (OPC) states that regulated utilities do not need additional incentives to self-build renewable projects. OPC believes that traditional regulation provides the utility with sufficient incentives to develop a renewable resource. OPC states that if the utility does not require all of the RECs from self-built resources, the utility could sell the credits in the market. No other incentives are needed. Staff believes that recovery through a newly established clause is needed for the reasons stated above. Staff recommends that any revenues from the sale of RECs from self-build projects should be credited to the RECR clause.

COB Creations disagrees with allowing recovery from the ratepayers for costs associated with the RPS. COB states that there are alternatives to encouraging renewables without recovery from the ratepayers. For example, utilities should be required to select resources based first on the emission level of those resources. Mark Alexander agrees with this approach. The RPS rulemaking proceeding is not the venue to address to the resource selection criteria of the IOUs.

Section (8) Reporting Requirements – (Attachment A, page 63, line 15, through page 64, line 17)

Pursuant to Section 366.92(3)(c), F.S., each IOU is required to provide an annual report to the Commission by April 1. Section (8) of the draft rule requires that this report be filed in conjunction with the filing of the utility's Ten-Year Site Plan. The information required by this section of the rule includes an update of the data that each IOU will be filing in its implementation plan, which is contained in Section (4) of the draft rule. These data consist of a ten-year forecast of the installed capacity and energy for each renewable energy resource, the effects of the utility's plan on the reduction of greenhouse gas emissions and economic development in Florida, and the estimated impact of the plan on rates to its customers. In addition, each utility will be filing certain information regarding its activities during the previous calendar year with regard to the purchase and generation of renewable energy.

With the information contained in these reports, the Commission will be able to closely monitor each IOU's performance regarding the promotion of the development of renewable energy. These data will aid in evaluating a utility's request to be excused from compliance with the RPS pursuant to Subsection (5)(c) of the draft rule, and whether a penalty pursuant to Subsection (5)(b) is appropriate if a utility fails to meet the RPS goal. These data will also assist the Commission in evaluating the overall effectiveness of the RPS program in achieving the goals of increased renewable generation, reduction in greenhouse gas emissions, fuel diversity, economic development, and minimizing the volatility of fuel costs. This evaluation will help determine whether a review proceeding is warranted sooner than the next scheduled five year review.

Staff changed this rule from the strawman draft rule that was presented at the last workshop in that staff added the requirement to file an update of the data that will be filed by each IOU in its implementation plan. As discussed above, staff believes this information will be valuable in evaluating each IOU's specific performance as well as the overall effectiveness of the RPS program.

Post-Workshop Comments

Staff notes that in its Post-Workshop Comments, Southern Alliance for Clean Energy (SACE) also recommends expanding the scope of the annual report to include an update of the information from the utility's RPS implementation plan. SACE asserts that such information will allow the Commission to provide an annual summary of the full range of impacts of interest to the Governor and Legislature.

In its Post-Workshop Comments, Sunshine State Solar Power states that the reporting requirements need to be broadened so that the Commission receives full disclosure of the costs associated with each self-build, renewable energy and REC purchase activity. It asserts that these details will provide the information necessary to track compliance and to understand the full costs of the RPS and will be helpful in determining whether the RPS is working as intended. Staff does not believe this change is needed since the Commission will receive cost information through the cost-recovery mechanism discussed in Section (7) of the draft rule.

FPL made minor editorial changes to the annual filing report requirements to reflect its proposed adoption of the Clean Energy Portfolio Standard (CEPS) model rather than an in-state REC-only model. Staff did not use FPL's edits to the filing requirements since staff is not recommending the use of the CEPS model, as discussed in Section (2) of the rule.

In its changes to this section of the draft rule, PEF removes the requirements to report the quantity of self-generated and purchased renewable energy in MWh, and the fuel type and ownership of the Florida renewable energy resource associated with each REC. However, PEF retains the requirements to report the RECs purchased and self-generated. Staff believes the data on the MWh of renewable energy purchased and self-generated and the fuel type and ownership of the resource associated with each REC are important in order to adequately evaluate each IOU's specific performance as well as the overall effectiveness of the RPS program. Therefore, staff did not make the changes recommended by PEF.

TECO comments that the reporting requirements in the draft rule should be amended to clarify that each utility only needs to file data associated with the footprint of that utility. Staff does not believe this is unclear in the rule and, therefore, staff did not add any additional language to the draft rule.

Statement of Economic Regulatory Costs

Pursuant to Section 120.541, F.S., a Statement of Estimated Regulatory Costs (SERC) is encouraged on proposed rules. Attachment C is the SERC prepared on the strawman draft RPS rules. The SERC states that there would be an impact from the increased electric bills which will impact ratepayers, including small businesses, cities and counties, from the adoption of the rules if they are customers of the investor-owned utilities. If the costs are spread evenly over all customer bills, the approximate increase would be \$2 per 1,000 kWh consumed. The IOUs' customers will face higher electric bills when the RPS costs of almost \$204 million per year are passed through a Renewable Energy Cost Recovery clause. Also, the utilities estimate that the costs to compile the data for the annual reports could be substantial. The utilities' estimates are included in the SERC.

The SERC also notes that there would be benefits from attaining the statutory goals, where possible, of promoting the development of renewable energy; protecting the economic viability of Florida's existing renewable energy facilities; diversifying the types of fuel used to generate electricity in Florida; lessening Florida's dependence on natural gas and fuel oil for the production of electricity; minimizing the volatility of fuel costs; encouraging investment within the state; improving environmental conditions; and minimizing the costs of power supply to

electric utilities and their customers. The estimated dollar values of these benefits, however, is difficult to measure.

Conclusion

Staff recommends that the Commission should propose the adoption of Rule 25-17.400, F.A.C. The rule is consistent with the requirements of Section 366.92, F.S, and offers a balanced approach to encouraging the development of renewable resources in Florida, while providing sufficient ratepayer safeguards. The rule establishes reasonable initial uniform numerical renewable portfolio standards for each Florida investor-owned utility, and includes a procedure for the Commission to review and update these standards, as necessary, not less than every five years. The Commission will have the opportunity to revise these standards based on the technical study of the potential for renewable development in Florida prior to approving a final rule. Further, the rule contains two primary components to protect ratepayers from high rate impacts: (1) the procedure for the Commission to review and modify the standards, if appropriate, and (2) a cost cap based on two percent of each IOU's retail electric sales.

Issue 2: Should the Commission propose the adoption of Rule 25-17.410, F.A.C., entitled "Florida Renewable Energy Credit Market"?

Recommendation: Yes, the Commission should propose the adoption of the rule as set forth in Attachment A. The rule contains appropriate procedures for the establishment and administration of a Florida REC market consistent with Section 366.92(3)(b)7, F.S. (Chase, Futrell, Miller)

Staff Analysis:

Overview of Draft Rule 25-17.410, F.A.C.

Section 366.92(3)(b)7, F.S., requires the Commission to include, in its RPS rule, procedures to track and account for RECs. Rule 25-17.410, F.A.C., addresses this requirement by setting forth the procedure for the establishment and administration of a Florida REC market. The rule directs the IOUs to establish a REC market and select an independent third party market administrator, subject to Commission approval. The REC market will allow the IOUs to generate their own, buy, sell, and trade the RECs needed to comply with the RPS, and allow for owners of Florida renewable energy resources to benefit from the sale of RECs. In addition, the rule requires the establishment of a group of stakeholders to act as technical advisors to the REC market administrator in the areas of governance and market rules.

Pursuant to the draft rule, within 180 days of the selection of the market administrator, the IOUs are required to file with the Commission for approval of the rules and procedures for the establishment and ongoing administration of the market, including certification of the RECs, the subsequent buying, selling trading and retirement of RECs, and recovery of the administrative costs of the market. The draft rule sets forth minimum provisions that must be contained in the filing for Commission approval of the REC market structure and administration.

Sections (1), (2), and (3) – (Attachment A, page 65, line 2, through page 66, line 11)

Establishment of the REC market

Section (1) of the draft rule provides for the creation of a transparent REC market and requires that all records of the market be available to the Commission for audit purposes. In order to ensure the creation of a market that is administered in a fair and open manner for all participants, Section (2) of the draft rule requires the IOUs to issue an RFP for a third party administrator to establish and operate the REC market. The choice of the administrator is subject to Commission approval. Section (3) of the draft rule addresses the process for developing and seeking Commission approval of the structure, governance and operational procedures of the REC market. Pursuant to this section of the rule, within 180 days of the selection of the market administrator, the IOUs are required to file with the Commission for approval of the rules and procedures for the establishment and ongoing administration of the market. Subsection (3)(a) requires the establishment of a group to act as technical advisors to the REC market administrator in the areas of governance and market rules. The IOUs, municipal electric utilities, rural electric cooperatives, and Florida renewable energy resource providers are to make up the

advisory group. Thus, it is the intent of the draft rule that there will be input from all stakeholders in the design and operation of the REC market in order to ensure that no one group of stakeholders dictates the terms for entry or rules of the market.

Post-Workshop Comments

In its Post-Workshop Comments on the strawman draft rule, the Florida Renewable Energy Producers Association (FREPA) argues that the Commission cannot delegate to the IOUs the legislative mandate to establish a REC market. It asserts that allowing the primary market actors to establish the REC market will allow the IOUs to capture the market and continue to avoid meaningful development of renewable energy in Florida. FREPA suggests that the Commission should establish a REC market that can operate without direct capture and coercion by IOUs. A number of other parties, including Sunshine State Solar Power, LLC, Florida Solar Coalition, Wheelabrator Technologies, Inc., Covanta Energy, Clean Energy Group, Florida Crystals and FIPUG also suggest that the Commission retain direct responsibility for creating and maintaining the REC market. In its Post-Workshop Comments, Florida Crystals provides rule language that would require the Commission, in consultation with the Governor's Action Team on Energy and Climate Change, to name an independent corporation for the development, administration and maintenance of a Florida REC market. FIPUG suggests the establishment of a department within the Commission to administer the REC market. Both FIPUG and Clean Energy Group provide rule language that would give all stakeholders 90 days to file recommendations with the Commission on the structure and governance of the REC market. In its Post-Workshop Comments, FPL maintains that a structure in which an IOU must participate in the very market it establishes to meet its RPS obligation would breed distrust from other entities and become a lightning rod for allegations of self-dealing, anti-trust, and collusion.

Staff's strawman draft rule discussed at the workshop held on August 20 and 26 required the IOUs to establish and maintain the REC market. Given that the IOUs are the only participants in the REC market that are directly subject to Commission jurisdiction, staff believes that the best way to establish the market is to require that it be done by the IOUs with appropriate Commission oversight. Staff recognizes that a number of parties believe that the Commission should establish and maintain the REC market in order to ensure transparency and fairness to all stakeholders. To address this concern, staff has revised the draft rule to require, rather than encourage, that the IOUs contract, through an RFP process, with a third party to administer the market. The selection of the market administrator as well as the market's practices and procedures will be subject to Commission approval. In addition, the draft rule requires that all transactions and records of the REC market be open for Commission inspection and audit. Staff believes these requirements in the draft rule provide reasonable Commission oversight into the development and administration of the REC market. Further, market participants will be able to file a complaint for Commission resolution, if needed, pursuant to Rule 25-22.032, F.A.C., Customer Complaints, or Rule 25-22.036, F.A.C., Initiation of Formal Proceedings.

The Florida Industrial Cogeneration Association (FICA) provides rule language that would require the IOUs to organize the Florida REC market but require consensus by all stakeholders on all aspects of the development, administration and maintenance of the REC market. FICA also suggests that the market be governed by a Florida REC Market Board of

Directors, consisting of a balanced representation from all stakeholders with an option for Commission input. COB Creations, LLC (COB) suggests rule language providing that the REC market be developed, administered and maintained by an independent not-for-profit corporation which would be governed by a board with representation consisting of: 55 percent renewable energy resource providers, “activists” and technologists; 20 percent renewable energy financiers, brokers, traders and market analysts; and 25 percent utilities and Commission representatives. Southern Alliance for Clean Energy (SACE) suggests that the Commission’s direction to the IOUs should clearly require a third party administrator to establish and oversee the Florida REC market. SACE suggests that either the Commission or the IOUs should issue an RFP to select an administrator.

Staff believes the revised draft rule addresses the concerns raised by the parties above regarding control of the REC market. As noted previously, the current draft requires, rather than encourages, that the IOUs use an RFP process to select a third party market administrator. In addition, the draft rule requires that a committee made up of representatives of stakeholders be established to act as technical advisors to the administrator in the areas of governance, market rules and administration in order to ensure that concerns of all stakeholders are considered. With these changes, staff believes the current draft rule contains sufficient safeguards to ensure that the market will be transparent, impartial and fair to all market participants.

The Florida Electric Cooperative Association (FECA) and the Florida Municipal Electric Association, Inc. (FMEA) assert that the section in the strawman draft rule that “encourages” municipal electric utilities and rural electric cooperatives to participate in the Florida REC market is ambiguous. They both suggest clarification that the IOUs must allow participation by the municipal and rural electric cooperative utilities in the development and administration of the REC market on a fair and equitable basis. The current draft rule addresses this concern by requiring the establishment of a group of stakeholders to act as technical advisors to the REC market administrator in the areas of governance and market rules. Municipal and rural electric cooperative utilities are to be represented in this advisory group, along with IOUs and Florida renewable energy resource providers.

APX Inc. (APX) suggests that the requirement in the strawman draft that encourages the IOUs to contract with an independent not-for-profit corporation to develop and administer the market may be too rigid. It suggests allowing maximum flexibility in the design of the market and the selection of an administrator. Accordingly, APX suggests that for-profit firms should be considered in the selection of an administrator. TECO also recommends that for-profit firms be considered in the selection of an administrator. Staff agrees with the idea of maintaining flexibility for the stakeholders to determine the optimal structure of the market. For this reason, the draft rule does not require that the market administrator be a not-for-profit corporation, but only that it be an independent third-party administrator.

Market Structure, Governance and Administration

Section (3) of the draft rule requires that within 180 days of approval of the administrator, the IOUs must file for Commission approval of the structure, governance and procedures for

administering the REC market. Subsections (3)(b) through (3)(f) set forth the minimum provisions that must be contained in the filing for Commission approval, including:

- the buying, selling and trading of RECs using an electronic platform for the execution of short-term transactions and long-term contracts;
- the aggregation of RECs for customer-owned resources 2 megawatts or less that have not received incentives from a demand-side conservation program pursuant to the Florida Energy and Efficiency Conservation Act (FEECA);
- the certification and verification of RECs, including those resulting from equivalent solar thermal energy;
- an accounting system to verify compliance with the RPS; and
- a method to record each transaction and to indicate whether the REC is associated with a Class I or Class II renewable energy source.

Post-Workshop Comments

In Post-Workshop Comments, PEF and Gulf suggest that the time period to file for Commission approval of the structure, governance and procedures of the REC market be increased from 90 days from the effective date of this rule contained in the strawman draft to 180 days. TECO suggests this time period should be extended to one year from the rule's effective date. At the workshop, there was discussion that 90 days would not be sufficient time to develop the market, especially since, under the strawman draft rule, the IOUs would also have only 90 days to prepare and file their plans to implement the RPS. Staff agrees with this concern. As noted in the discussion of Rule 25-17.400, F.A.C., (the RPS rule), under the current draft rule, the IOUs would have 180 days to submit their implementation plans for meeting or exceeding the RPS. Likewise, staff is recommending that the IOUs be given 180 days from the approval of the market administrator to file the proposed market structure, governance and procedures for Commission approval. Staff believes this is particularly important now that the rule requires the establishment of a stakeholders committee to provide advice to the administrator on the workings of the market. Staff believes the rule should provide sufficient time to first establish the stakeholders committee and then to conduct meetings and negotiations to develop the market rules.

The Florida Solar Coalition suggests adding a requirement for a REC standard offer contract to the provisions that must be included in the REC market design. It maintains that the standard offer contract should be at least 10 years in duration at a set kWh price for renewable energy with Class I renewable energy resources given preference for those contracts. The Solar Coalition argues that a standard offer contract is needed in order to stimulate the development of capital intensive solar photovoltaic systems. Staff does not believe this requirement is necessary as a minimum requirement for the market design. The solar industry already has been given a preference over many renewable technologies in the RPS rule by requiring the IOUs to maintain a minimum of 25 percent of the RPS provided from Class I renewable energy sources. Further, staff notes that the rule specifies only the minimum provisions for market design. The topic of a REC standard offer contract can be explored by the administrator and stakeholders committee during the development of the market rules and administration. If the concept is incorporated

into the REC market design, the Commission will then have the benefit of all stakeholder input during the market design approval process.

TECO and Gulf recommend adding a provision to the rule to require that each REC producer bear the cost of metering and verification. TECO argues that the REC producer should not be subsidized by ratepayers for the cost of equipment needed to measure the RECs produced. Staff does not believe this provision is needed in the rule. One of the requirements that must be contained in the filing for approval of the market design and function is a procedure for the verification of RECs (Subsection (3)(d) of this rule). This filing should address how the costs associated with that verification process should be recovered. Likewise, the recovery of metering costs should also be addressed in the filing for approval of market design and procedures.

In its Post-Workshop Comments, FPL expresses its belief that an in-state only REC market is not workable, will be costly and administratively burdensome, and will not best promote the development of renewable assets and the provision of renewable energy in Florida. Staff notes that Section 366.92(2)(e), F.S., defines "RPS" as "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.*" (emphasis added) Thus, the Legislature clearly indicated in HB 7135 that renewable facilities must be located within Florida in order to be eligible for the Florida RPS.

Section (4) – (Attachment A, page 66, lines 12 through 14)

Fees

Section (4) of the draft rule provides that the administrative costs associated with the REC market shall be collected through fees assessed to a REC, and that such fees shall be fair, equitable and cost-based.

Post-Workshop Comments

Florida Crystals Corporation, Sunshine State Solar Power, and FIPUG assert that the administrative costs associated with the market should be paid through the Commission's regulatory trust fund. Staff does not believe the Commission has the specific statutory authority to use the regulatory trust fund to pay the administrative costs associated with the REC market. Further, staff believes it is more appropriate to fund the market through fees collected from the market participants, which directly benefit from the REC market activities.

COB proposes that the administrative costs be collected from fees or dues assessed to the IOUs until such time as the 20 percent RPS goal is met in Florida. Following the achievement of that goal, COB asserts the costs should be recovered through an automatic one percent assessment of each REC transaction. The Florida Industrial Cogeneration Association (FICA) recommends rule language that would limit the amount of administrative costs that can be recovered through the REC payment. In this regard, FICA recommends that fees be collected

through membership dues based on the amount of RECs bought or sold by any member, or administrative fees assessed to a REC provided that such fees may not exceed three percent of the credit. Staff does not believe it is necessary or advisable for the Commission to dictate a specific fee structure in the rule. First of all, not all market participants addressed the issue of fee structure, so the Commission does not have the benefit of all stakeholders' recommendations. Further, the draft rule requires that fees be established that are fair, equitable and cost-based. The rule contemplates that the specific fee structure be established by the market administrator after consultation with the stakeholders' committee. No fees would be implemented without prior Commission approval as part of the filing of the administration and guidelines of the REC market.

Section (5) – (Attachment A, page 66, line 15, through page 67, line 7)

Eligible Facilities

Under the draft rule, renewable facilities that are eligible to produce RECs must be certified by the REC market administrator. Section (5) of the draft rule lists eligible facilities, which include:

- all utility-owned Florida renewable energy resources;
- non-utility owned resources providing as-available energy pursuant to a tariff, or net capacity and energy under a purchased power agreement with a Florida electric utility;
- customer-owned facilities greater than 2 megawatts that provide on-site generation or equivalent solar thermal energy to offset all or a part of the customer's electrical needs; and
- customer-owned resources, 2 megawatts or less, that have not received incentives from a Commission-approved demand-side conservation program pursuant to FEECA.⁸

Post-Workshop Comments

The strawman draft rule limited non-utility facilities eligible to produce RECs to only those facilities that sold energy and capacity pursuant to a purchase power agreement with a utility. FREPA comments that this provision is anti-competitive and undermines the RPS by prohibiting the renewable energy producer from taking advantage of the spot energy market and effectively requiring it to sell power under the IOUs' standard offer contracts. This same concern was raised by Florida Crystals Corporation, Florida Industrial Cogeneration Association (FICA), Wheelabrator Technologies, Inc., and Covanta Energy Group. Florida Crystals added that requiring a power purchase agreement for capacity and energy is an unfair barrier to entry to the market. FICA provides rule language that adds facilities selling energy only to the list of

⁸ Staff notes that the revisions to FEECA in HB 7135 include counting utility-supported customer-owned renewable facilities less than 2 megawatts toward conservation goals. Therefore, facilities that have received incentives from a FEECA program have been excluded from the RPS.

eligible facilities. Wheelabrator maintains that the only required qualification for entitlement to sell a REC should be that the facility generates renewable energy.

It was not staff's intent that this rule prohibit a renewable energy producer from selling power however it chooses – short-term or long-term. Thus, staff clarified in Subsection (3)(b) of the current draft rule that the market procedures must allow for the execution of hourly and other short-term transaction and long-term bilateral contracts. Further, staff has clarified in Subsections (5)(c) and (5)(d) of the rule that non-utility renewable energy resources are eligible to participate in the market by either providing net capacity and energy under a purchase power agreement or by providing as-available energy pursuant to a tariff.

FICA provides rule language prohibiting the production of RECs from utility-owned facilities that receive accelerated cost recovery, exceed avoided cost as specified in the utility's most current standard offer contract, or have received any other Commission-approved incentives. While FICA does not elaborate on its rationale for this proposal, staff does not believe that it is appropriate. Under traditional ratemaking philosophy and procedures, the cost of utility-owned facilities built to provide electricity to its customers are recovered through approved rates and charges to its customers, whether the facilities are powered by renewable energy or more traditional sources, such as oil, gas, coal or nuclear. To not allow utilities to produce RECs from their renewable facilities simply because they received some sort of accelerated cost recovery or other incentive would serve to deter utilities from building renewable facilities, which is contrary to the intent and purpose of HB 7135. Further, eliminating one major source of renewable energy resources would hinder the ability of the IOUs to meet the RPS established in draft Rule 25-17.400, F.A.C.

SACE comments that the reference in the rule which allows "investor-owned" renewable energy resources to qualify for a REC is contrary to HB 7135 in that it is not clear that the renewable energy source must be located in Florida. According to SACE, under this rule, an IOU could go outside the state and utilize power generated in other states to satisfy the Florida RPS. The Florida Solar Coalition expressed a similar concern and suggests language that clarifies the facility must be located in Florida. Staff does not share this concern. First, the language in Subsection (5)(a) specifically references investor-owned electric utilities and Florida owned renewable energy resources. Staff does not believe that description would allow the IOUs to input renewable energy from other states. Further, the definitions for "Renewable Energy Credit" and "Renewable Portfolio Standard" contained in draft Rule 25-17.400(2)(f) and (2)(g), F.A.C., clearly require that the renewable energy must be generated by a resource located in Florida. Therefore, staff does not believe a change to the rule in this regard is warranted.

FIPUG asserts that an IOU should be limited in how much of its own renewable generation can count toward the RPS. FIPUG suggests this limitation should be 25 percent of the minimum RPS. Staff sees no reason to place such a limit on an IOU's renewable generation. The RPS established in draft Rule 25-17.400, F.A.C., is only a minimum and does not limit how many RECs can be purchased or generated by IOUs. Thus, if sufficient RECs are available, there is nothing in the draft rule that would prohibit an IOU from purchasing more than the amount needed to meet the RPS, as long as the cost is not prohibitive, as described in draft Rule 25-17.400, F.A.C. In addition, FIPUG suggests rule language that adds certified energy

efficiency programs for renewable energy resources greater than 2 megawatts that offset all or a part of the customer's electrical needs. FIPUG argues that a customer's zero fuel cost cogeneration can displace utility electrical production and should be eligible for RECs. Staff does not believe this change should be incorporated into the rule because energy efficiency and conservation programs are more appropriately a part of FEECA.

TECO comments that behind-the-meter solar thermal should not be included as a renewable technology since it does not provide electricity to the grid. TECO suggests that this type of technology should be included as an appropriate technology for energy efficiency. Gulf similarly asserts that thermal energy should not qualify for the production of RECs and is best handled under FEECA. Gulf questions how thermal energy can be measured accurately and consistently to maintain financial integrity in the REC trading market.

Staff does not agree with TECO and Gulf on this issue. In developing the draft rule, staff used the term "Florida renewable energy resources" to define resources eligible to generate RECs. The term "Florida renewable energy resources" is defined in the draft Rule 25-17.400(2), F.A.C., and includes "thermal energy." This definition was taken from HB 7135, which defined "Florida renewable energy resources" by referring to an existing definition in Section 377.803, F.S., which includes "thermal energy." Further, staff believes that the inclusion of thermal technologies will increase the potential for the development of a wider variety of renewable projects in the state. Staff believes that a broad definition of the eligible technologies will increase competition among renewable providers, and is consistent with the intent of HB 7135. With regard to the measurement of thermal energy for purposes of generating RECs, the draft rule contemplates that a procedure would be worked out by the market administrator in consultation with the stakeholders committee. Subsection (3)(d) of this draft rule requires that the filing made by the IOUs of the procedures for administering the market include the certification and verification of RECs, including those resulting from equivalent solar thermal energy.

Florida Pulp and Paper Association (FPPA) filed comments directed toward ensuring a balance between encouraging greater utilization of renewable energy, specifically woody biomass materials, while recognizing the physical limits of the current harvest areas in Florida to produce additional woody biomass for electric generation. FPPA notes that HB 7135 directed the Department of Agriculture and Consumer Services (DACS) and the Department of Environmental Protection (DEP) to conduct an economic study on the effects of granting financial incentives to energy producers who use woody biomass as a fuel, including an analysis of the effects on wood supply and prices and impact on current markets and forest sustainability. The study is scheduled to be filed with the Speaker of the House, President of the Senate and the Governor by March 1, 2010. FPPA acknowledges that issues to be addressed in the study are not within the regulatory domain of the Commission, but adds that it believes HB 7135 provides considerable discretion in how the Commission goes about setting RPS standards. FPPA recommends that the rule provide a specific cap as to the amount of new electric production from woody biomass that could be eligible to sell RECs. The cap could increase as planted acreage increases. FPPA notes that its recommended rule language does not restrict the development of dedicated biomass crops, the use of waste biomass or agricultural by-products. The specific rule language recommended by FPPA is:

For the first five years after adoption of this rule, the number of renewable energy credits that can be sold from all renewable generators that commence construction of new facilities after July 1, 2009 and whose total fuel input for the facility use exceeds 50 percent woody biomass from trees, limbs, and branches shall be limited to a cumulative of 1,170,000 megawatt-hours per year for the first five years. This restriction does not apply to any repowering or upgrades of existing biomass generators.

Staff does not believe it would be appropriate to include language in the rule that limits the amount of RECs that can be sold from renewable generators using woody biomass materials. First of all, as recognized by FPPA, the appropriate amount of renewable energy from woody biomass is outside the purview of the Commission's regulatory domain. The Commission does not have the expertise to know if the limitation suggested by FPPA in the above recommended language is reasonable or necessary. Staff believes the Legislature clearly recognized this when it directed the DACS and the DEP to conduct a study to determine the effects of using woody biomass as a renewable fuel. This study will be completed by March 1, 2010. If that study concludes that a limitation on renewable energy from woody biomass is warranted, an amendment to this rule can be explored at that time.

Sections (6) through (10) – (Attachment A, page 67, lines 8 through 20)

Ownership, Life and Applicability of a REC

Sections (6) through (10) provide specific criteria on the ownership, life and applicability of a REC created in the Florida market. Section (6) clarifies that a REC is retained by the owner of the eligible Florida renewable energy resource unless specifically sold or transferred. No party to this rulemaking argues against this provision.

Section (7) establishes that the REC is valid for two years after the date the associated energy is certified by the market administrator. Sections (8) and (9) prohibit double counting of RECs by clarifying that a REC must be retired after it is used to comply with the Florida or any other state or regional RPS, and that it cannot be counted toward compliance in Florida if it has already been used to comply with any other state or regional RPS. Section (10) clarifies that RECs cannot be used for compliance with the Florida RPS if it results from a Commission-approved demand-side conservation program pursuant to FEECA.

Post-Workshop Comments

The strawman draft rule provided for a two year life for each REC from the date the energy is generated, or, in the case of a customer-owned renewable system, less than two megawatts, from the date the REC is certified. Certain parties to this rulemaking suggested changes to the life of a REC ranging from 15 months to no expiration at all. Sunshine State Solar Power suggests a life span of no more than 15 to 18 months, stating that two years is longer than most current REC programs. Florida Crystals recommends rule language that specifies that the REC is valid for two "calendar" years. Gulf suggests that a REC should be valid for three

years, and FPL and TECO believe a REC should have a life of 5 years. TECO asserts that two years is too short a period given the intermittent nature of some REC production and the development risk of some renewable projects. TECO further suggests that this issue be ultimately determined when the REC market administration and organization is developed. FIPUG recommends that there be no end date to the life of a REC and it be bankable, presumably to be sold or transferred at any time after it is certified.

In this draft rule, staff retains a two year life for each REC. Staff modified the strawman draft rule to make the beginning point of the REC life uniform for all renewable energy resources, and not differentiate for customer-owned systems less than 2 megawatts. Based on the information garnered in the 2007 RPS workshops, staff believes the two year REC life is reasonable and consistent with most RPS programs in other states.

Florida Crystals adds a requirement that RECs cannot have been used toward compliance with a cap and trade program. TECO suggests that utilities may need to comply with a federal mandate in addition to a state mandate and that any Florida and federal RPS should overlap. Staff's only change from the strawman draft rule is to delete the requirement that a REC cannot be used for compliance with the Florida RPS if it has been used to comply with a federal RPS. Staff agrees with TECO that a utility may need to comply with both should a federal mandate be established. Further, pursuant to Section 366.92(3)(b)8, F.S., the rule may be repealed or amended in the event new provisions of federal law supplant or conflict with this rule. Therefore, the impact on the use of RECs from a federal RPS can be addressed at the time a federal law is enacted.

REC Price Cap

Staff's strawman draft rule capped the price of RECs at \$16 per ton of greenhouse gas emissions (GHG) avoided by renewable resources relative to utility emissions. The price was to be reevaluated or phased out after adoption of a state or federal cap and trade system. A number of parties suggest that the REC price cap should not be included in the rule. The Clean Energy Group suggests that the price cap should be deleted because it is unnecessary, difficult for investors to calculate and understand, and is so low that utilities are likely to pay the price cap rather than purchase RECs. FREPA asserts that the REC price cap is arbitrary and not based on any objective empirical evidence or sound public policy. FREPA maintains that, by limiting the REC price, the rule is severely limiting a renewable producer's revenues above avoided cost. Florida Crystals states that the REC cap, which is based solely on an estimate of avoided GHG emissions, fails to take into account that renewable generation also provides benefits related to fuel diversity and economic development. Southern Alliance for Clean Energy argues that the Commission does not have explicit legislative authority in HB 7135 to develop more than one type of standard addressing cost containment, such as the cost cap contained in draft Rule 25-17.400, F.A.C., and the REC price cap. Sunshine State Solar Power and the Florida Solar Coalition suggest that the REC price cap be eliminated and the cost cap be used as a limiting factor. Staff agrees that the REC price cap does not capture the benefits related to fuel diversity and economic development, and has not included it in the draft rule.

Statement of Estimated Regulatory Costs

The SERC, Attachment C, is based on the strawman draft RPS rules and states that the cost for establishing a REC market and running it is unknown. However, there will likely be over a million dollars in start-up costs and in recurring costs.

Conclusion

In conclusion, staff recommends that the Commission propose the adoption of the rule as set forth in Attachment A, which contains appropriate procedures for the establishment and administration of a Florida REC market. The REC market will allow the IOUs to generate their own, buy, sell and trade the RECs needed to comply with the RPS and allow for owners of Florida renewable energy resources to benefit from the sale of RECs. The draft rule requires that the IOUs use an RFP process to select a third party market administrator. The selection of the market administrator and the governance and structure of the market will be subject to Commission approval. The draft rule sets forth minimum provisions that must be contained in the REC market filing, identifies eligible facilities, addresses the ownership and life of a REC, and clarifies the prohibition of double counting of a REC created in the Florida market. Further, the rule requires the establishment of a group of stakeholders to act as technical advisors to the REC market administrator in the areas of governance and market rules. The IOUs, municipal electric utilities, rural electric cooperatives, and Florida renewable energy resource providers are to make up the advisory group. Staff believes the draft rule provides for reasonable oversight by the Commission, and will ensure a REC market that is transparent, impartial and fair to all market participants.

Issue 3: Should the Commission propose the adoption of Rule 25-17.420, F.A.C., entitled “Municipal Electric Utility and Rural Electric Cooperative Renewable Energy Reporting”?

Recommendation: Yes, the Commission should propose the adoption of the rule as set forth in Attachment A. The rule sets forth the appropriate annual reporting requirements for each municipal and cooperative electric utility as required by Section 366.92(5), F.S. The information contained in this annual report will facilitate the Commission’s efforts to track municipal and cooperative policies regarding renewable energy and energy efficiency, as well as any resulting increase in statewide renewable resources in Florida. (Chase, Futrell, Miller)

Staff Analysis:

Overview of Draft Rule 25-17.420, F.A.C. (Attachment A, page 68, lines 1 through 16)

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 annual reports to the Commission identifying these standards by April 1 of each year. The draft rule specifies the annual reporting requirements for municipals and cooperatives. The information in these reports will facilitate the Commission’s efforts to track municipal and cooperative policies regarding renewable energy and energy efficiency, as well as any resulting increase in statewide renewable resources in Florida.

Staff’s draft rule differs only slightly from staff’s strawman draft. Staff has reordered the filing requirements such that the first item listed in the rule is a detailed description of the standard adopted to promote, encourage and expand the use of renewable energy resources and energy conservation and efficiency measures. This language tracks Section 366.92(5), F.S. Staff has also added one requirement, which is that the utility provide its plan to meet the standards it has adopted. The remaining data requirements include: (1) retail MWh sales in the prior year; (2) quantity of self-generated renewable energy in MWh separated by fuel type; (3) quantity of renewable energy purchased in MWh separated by type of ownership and fuel type; (4) quantity and vintage of self-generated RECs; (5) quantity and vintage of purchased RECs; and (6) the fuel type and ownership of the Florida renewable energy resource associated with each REC.

Post-Workshop Comments

The Florida Electric Cooperative Association (FECA) filed Post-Workshop Comments to the staff’s strawman draft questioning the Commission’s jurisdiction to adopt any reporting requirements outside of those enumerated in HB 7135. Staff notes that the Commission has authority under Section 366.04(2)(f), F.S., to prescribe and require the filing of periodic reports and other data as may be reasonably available and as necessary to exercise its jurisdiction. The data required in the draft reporting rule should be readily available to the municipal and cooperative utilities, and will be useful to staff in our efforts to evaluate and report on the statewide effectiveness of RPS programs in encouraging the development of renewable generation in Florida. Staff notes that all of the reporting requirements contained in this rule are also required to be filed by the investor-owned utilities in draft Rule 25-17.400(8), F.A.C.

FECA further comments that, with the adoption of this rule, its members would be required to file three separate reports on renewables with the Commission.⁹ FECA recommends the following rule language if the Commission finds that a reporting rule for municipals and cooperatives is necessary:

Each municipal electric utility and rural electric cooperative shall submit to the Commission an annual report no later than April 1 of each year for the previous calendar year. Each utility's report shall include a renewable energy standard which promotes, encourages, and expands the use of renewable energy resources.

The two existing rules that require municipal and rural electric cooperative utilities to file reports related to renewable generation are Rules 25-17.300 and 25-6.065, F.A.C.

Rule 25-17.300, F.A.C., was adopted in 2007 as part of a rule package that created a new Part IV of Chapter 25-17 titled "Obligations with Regard to Renewable Generating Facilities". The purpose of this part of Chapter 25-17 is to implement 2006 legislative changes to Sections 366.92, F. S., regarding the promotion of renewable energy in Florida. This rule requires that certain information be filed by all utilities, including IOUs, municipals, and cooperatives as part of a utility's Ten-Year Site Plan. The information required in this rule includes: (1) the total MW and percentage of each utility's total capacity comprised of renewable generation; (2) the total MWh and percentage of each utility's net energy for load and fuel mix of energy purchased from renewable generation; and (3) the total MW and MWh of self-service generation by renewable generation. FECA suggests that, at a minimum, Rule 25-17.300, F.A.C., should be deleted prior to the adoption of the draft rule in order to simplify and consolidate reporting requirements. Staff agrees with FECA that this information may no longer be needed if the draft rule is adopted. Staff plans to review the matter after the RPS rules are adopted and will initiate a proceeding at that time to recommend revision or deletion of Rule 25-17.300, F.A.C., if appropriate.

Rule 25-6.065, F.A.C., relating to interconnection and net metering of customer-owned renewable generation, was adopted in 2008. The purpose of the rule is to promote the development of customer-owned renewable generation up to 2 megawatts in size, by expediting the interconnection of such generation and by minimizing costs incurred by the customers. Only Section (10) of the rule is applicable to municipal and cooperative electric utilities. This section contains annual reporting requirements which will allow the Commission to monitor the development of customer-owned renewable generation. The reporting requirements are specific to customer-owned facilities which are two Megawatts or less and include: (1) information about the customer-owned generation, including the technology, power rating, location and date of interconnection; (2) the total number of customer-owned renewable generation interconnected in the previous year; (2) the total kW capacity associated with the new interconnections; (3) the total kWh received by interconnected customers from the electric utility; (4) the total kWh of customer-owned generation delivered to the electric utility; and (5) the total energy payments made to interconnected customers of customer-owned renewable generation. Staff believes this

⁹ FECA asserts that Commission Rules 25-17.300 and 25-6.065, F.A.C., include similar reporting requirements for renewable generation.

information is not duplicative of the data required by the draft rule, and is necessary in order to accurately monitor the development of customer-owned renewable generation in the State. Staff notes that FECA did not recommend deleting this rule in its Post-Workshop Comments.

Southern Alliance for Clean Energy (SACE) also comments on this rule, stating that the reporting requirements of the municipal and cooperative electric utilities should be closely aligned with those of the IOUs. Sunshine State Solar Power argues that such reporting will provide a clearer picture of the costs related to renewable energy throughout Florida, and would allow the public to compare the performance of all utilities on a consistent basis. Staff believes that the draft rule requires consistent reporting of all utilities, where practical. However, as discussed in Issue 1 in the staff analysis of Section (8) of the RPS rule, a number of the filing requirements for the IOUs relate to an update of data IOUs must file with the Commission when they initially implement the RPS and again at the time the RPS is reviewed (at least every five years). It is not appropriate to request this information from the municipal and cooperative electric utilities since they are not subject to the RPS established in Rule 25-17.400, F.A.C.

Statement of Estimated Regulatory Costs

According to the SERC, Attachment C, which is based on the strawman draft RPS rules, the Florida Electric Cooperatives Association stated that the additional costs to provide the required information are unknown at this time. However, a significant number of man-hours would be required because the information is not readily available and would have to be compiled and calculated manually.

Conclusion

Staff recommends that the Commission propose the adoption of the rule as set forth in Attachment A. The rule contains the appropriate annual reporting requirements for each municipal and cooperative electric utility as required by Section 366.92(5), F.S. In addition, staff notes that the Commission has authority under Section 366.04(2)(f), F.S., to prescribe and require the filing of periodic reports and other data by electric utilities as may be reasonably available and as necessary to exercise its jurisdiction. The data required in the draft rule should be readily available to the municipal and cooperative electric utilities. The collection of these data will facilitate the Commission's efforts to track municipal and cooperative policies regarding renewable energy, as well as any resulting increase in statewide renewable resources in Florida. Further, upon adoption of the draft rule, staff will review the need for the report currently required by Rule 25-17.300, F.A.C., and will initiate a proceeding to recommend revision or deletion of the rule, if appropriate.

Docket No. 080503-EI

Date: October 2, 2008

Issue 4: Should this docket be closed?

Recommendation: No. This docket should remain open to proceed to the rule hearing, scheduled for December 3, 2008. (Miller)

Staff Analysis: Pursuant to Section 120.54(3)(c), F.S., an agency has the option to either: (1) schedule a public hearing on the proposed rule, or (2) hold a hearing on the proposed rule only if requested. Section 366.92, F.S., requires the Commission to submit a draft RPS rule by February 1, 2009, to the Legislature for consideration and ratification. Because of the time constraints involved and the important policy implications of this rulemaking, a public hearing on the proposed rule has been scheduled for December 3, 2008. Thus, this docket should remain open to proceed to the rule hearing scheduled for December 3, 2008.

1 17.400 Florida Renewable Portfolio Standard

2 (1) Application and Scope.

3 The purpose of this rule is to establish and update at least every five years numerical renewable
4 portfolio standards for investor-owned electric utilities that will promote the development of
5 renewable energy, protect the economic viability of existing renewable energy facilities,
6 diversify the types of fuel used to generate electricity in Florida, lessen Florida's dependence on
7 fossil fuels for the production of electricity, minimize the volatility of fuel costs, encourage
8 investment in the state, improve environmental conditions, and minimize the costs of power
9 supply to electric utilities and their customers.

10 (2) Definitions.

11 (a) "Florida renewable energy resources," means electrical, mechanical, or thermal energy
12 produced from a method that uses one or more of the following fuels or energy sources:
13 hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or
14 hydroelectric power that is produced in Florida.

15 (b) "Renewable energy," means electrical energy produced from a method that uses one or more
16 of the following fuels or energy sources: hydrogen produced from sources other than fossil fuels,
17 biomass, solar energy, geothermal energy, wind energy, ocean energy, and hydroelectric power.
18 The term includes the alternative energy source, waste heat, from sulfuric acid manufacturing
19 operations.

20 (c) "Biomass," means a power source that is comprised of, but not limited to, combustible
21 residues or gases from forest products manufacturing, waste, or co-products from agricultural
22 and orchard crops, waste or co-products from livestock and poultry operations, waste or

1 byproducts from food processing, urban wood waste, municipal solid waste, municipal liquid
2 waste treatment operations, and landfill gas.

3 (d) "Class I renewable energy source," means Florida renewable energy resources derived from
4 wind or solar energy systems.

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

7 (f) "Renewable Energy Credit," means a financial instrument that represents the unbundled,
8 separable, renewable attribute of renewable energy or equivalent solar thermal energy produced
9 in Florida and is equivalent to one megawatt-hour of electricity generated by a source of
10 renewable energy located in Florida.

11 (g) "Renewable Portfolio Standard," means the minimum percentage of total annual retail
12 electricity sales by an investor-owned electric utility to consumers in Florida that shall be
13 supplied by renewable energy produced in Florida.

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

20 (i) "Solar Photovoltaic System," means a device that converts incident sunlight into electrical
21 current.

22 (j) "Solar thermal system," means a device that traps heat from incident sunlight in order to heat
23 water.

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

4 (3) Renewable Portfolio Standard.

5 (a) Each investor-owned electric utility shall meet or exceed the following renewable portfolio
6 standards through the production or purchase of renewable energy credits pursuant to Rule
7 17.410, F.A.C.:

8 1. by January 1, 2017: 5 percent of the prior year's retail electricity sales;

9 2. by January 1, 2025: 10 percent of the prior year's retail electricity sales;

10 3. by January 1, 2033: 15 percent of the prior year's retail electricity sales; and

11 4. by January 1, 2041: 20 percent of the prior year's retail electricity sales.

12 (b) At a minimum, 25% of the renewable portfolio standards shall be provided from Class I
13 renewable energy sources;

14 (c) The Commission, on its own motion, shall initiate a proceeding at least once every five years
15 to review and, if appropriate, modify the renewable portfolio standards. An investor-owned
16 electric utility or a substantially interested person may petition the Commission, pursuant to
17 Section 120.54(7), F.S., to request the initiation of a proceeding to modify the renewable
18 portfolio standards. All modifications of the approved renewable portfolio standards and the
19 associated implementation plans shall only be on a prospective basis and shall not affect
20 previously approved contracts and commitments.

21 (d) In a proceeding to review the renewable portfolio standards, each investor-owned electric
22 utility shall provide an analysis of the technical and economic potential for Florida renewable
23 energy resources.

1 (4) Implementation Plans.

2 Within 180 days of the effective date of this rule, each investor-owned electric utility shall
3 submit an implementation plan for meeting or exceeding the renewable portfolio standards
4 required by subsections (3)(a) and (3)(b) which shall, at a minimum, contain the following:

5 (a) Current and ten-year forecast of installed capacity in kilowatts and energy production in
6 kilowatt-hours for each Florida renewable energy resource;

7 (b) Levelized life-cycle cost in cents per kilowatt-hour for each existing, planned, and proposed
8 Florida renewable energy resource;

9 (c) Current and ten-year forecast of the effects of the utility's compliance and implementation
10 plan on the reduction of greenhouse gas emissions in Florida;

11 (d) Current and ten-year forecast of the effects of the utility's compliance and implementation
12 plan on economic development in Florida; and

13 (e) Current and ten-year forecast of the estimated retail rate impact for each class of customers of
14 the utility's compliance and implementation plan.

15 (5) Compliance.

16 (a) Each investor-owned electric utility shall comply with the renewable portfolio standards
17 approved by the Commission through the production or purchase of renewable energy credits.

18 Each investor-owned electric utility shall make a good faith effort to acquire sufficient renewable
19 energy credits to comply with the renewable portfolio standards.

20 (b) Except as provided by paragraphs (5)(c) and (5)(d), any investor-owned electric utility which
21 fails to meet or exceed its renewable portfolio standards shall be subject to a penalty equal to an
22 amount up to 50 basis points of the utility's approved rate of return on equity assessed by
23 reducing the amount of recoverable costs associated with the production or purchase of

1 renewable energy credits pursuant to subsection (7).

2 (c) The Commission shall excuse an investor-owned electric utility from compliance with any
3 renewable portfolio standards based upon a showing that:

4 1. the supply of renewable energy credits is not adequate to satisfy the renewable
5 portfolio standard; or

6 2. the cost of securing renewable energy credits is prohibitive such that the total costs of
7 compliance with the renewable portfolio standards exceeds the cost caps contained in paragraph
8 (5)(e).

9 (d) The cost of compliance with the renewable portfolio standards shall be defined as the
10 incremental costs associated with the production or purchase of renewable energy credits which
11 exceed the costs to the utility of electric energy or capacity, or both, which but for the production
12 or purchase of renewable energy such utility would generate itself or purchase from another
13 source.

14 (e) The cost of compliance shall be allocated separately for Class I and Class II renewable
15 energy sources and shall be subject to the following cost caps.

16 1. For Class I renewable energy sources, the total cost of compliance shall be deemed
17 prohibitive if such costs exceed 1.50 percent of the investor-owned electric utility's total annual
18 revenue from retail sales of electricity.

19 2. For Class II renewable energy sources, the total cost of compliance shall be deemed
20 prohibitive if such costs exceed 0.50 percent of the investor-owned electric utility's total annual
21 revenue from retail sales of electricity.

22 (6) Utility Self-Build Option.

23 (a) Each investor-owned electric utility seeking to construct a Florida renewable energy resource

1 shall select the resource likely to result in the least cost option for the general body of ratepayers.

2 (b) Within 180 days of the effective date of this rule and biennially thereafter, each investor-
3 owned electric utility shall issue a request for proposals for Florida renewable energy resources
4 and report the results in the investor-owned electric utility's Ten-Year Site Plan, filed pursuant to
5 Rule 25-22.071, F.A.C.

6 (7) Cost Recovery.

7 (a) In order to foster the development of Florida renewable energy resources, the Commission
8 shall allow full cost recovery through a Renewable Energy Cost Recovery (RECR) clause of all
9 reasonable and prudent costs incurred by the investor-owned electric utility for:

10 1. the cost of construction, operation, and maintenance of Florida renewable energy
11 resources by the utility, including a separately determined return on equity on total capital costs.

12 Cost includes, but is not limited to, all capital investments including rate of return, any applicable
13 taxes and all expenses, including operation and maintenance expenses, related to or resulting
14 from the siting, licensing, design, construction, or operation of the Florida renewable energy
15 resource.

16 2. the purchase of renewable energy credits, including administrative costs of the Florida
17 Renewable Energy Credit Market.

18 (b) Notwithstanding Rules 25-17.0825(6), 25-17.0832(8), and 25-17.220, F.A.C., the reasonable
19 and prudent costs associated with the purchase of capacity and energy from existing and new
20 renewable generating facilities shall be recovered through the RECR clause and shall appear as a
21 separate line item on customer's bills.

22 (c) The Commission shall conduct annual RECR clause proceedings during November of each
23 calendar year. Each investor-owned electric utility may seek to recover its costs associated with

1 renewable energy credits, the purchase of capacity and energy from Florida renewable energy
2 resources, the purchase of as-available energy from Florida renewable energy resources, or the
3 construction, operation, and maintenance of Florida renewable energy resources owned by an
4 investor-owned electric utility. Each investor-owned electric utility seeking cost recovery shall
5 file the following at the times directed by the Commission:

6 1. An annual final true-up filing showing the actual costs, renewable energy credit costs,
7 purchased power costs, costs associated with Florida renewable energy resource owned by an
8 investor-owned electric utility, and actual revenues from the sale of renewable energy credits for
9 the most recent 12-month historical period from January 1 through December 31 that ends prior
10 to the annual RECR proceedings. As part of this filing, the utility shall include a summary
11 comparison of the actual total costs and revenues reported to the estimated total costs and
12 revenues previously reported for the same period covered by the filing in subsection 2. The
13 filing shall also include the final over- or under-recovery of total renewable energy costs for the
14 final true-up period.

15 2. An annual estimated/actual true-up filing showing eight months actual and four months
16 projected costs, renewable energy credit costs, purchased power costs, costs associated with
17 Florida renewable energy resource owned by an investor-owned electric utility, and actual
18 revenues from the sale of renewable energy credits collected. Actual costs and revenues should
19 begin January 1 immediately following the period described in subparagraph 1. The filing shall
20 also include the estimated/actual over- or under-recovery of total renewable energy costs for the
21 estimated/actual true-up period.

22 3. An annual projection filing showing 12 months projected costs, renewable energy
23 credit costs, purchased power costs, costs associated with Florida renewable energy resource

1 owned by an investor-owned electric utility, and actual revenues from the sale of renewable
2 energy credits for the period beginning January 1 following the annual hearing.

3 4. An annual petition setting forth proposed renewable energy cost recovery factors to be
4 effective for the 12-month period beginning January 1 following the hearing. Such proposed
5 cost recovery factors shall take into account the data filed pursuant to subparagraphs 1., 2., and 3.

6 5. Within the 90 days that immediately follow the first six months of the reporting period
7 in subsection 1., each utility shall report the actual results for that period to the Director, Division
8 of Economic Regulation, Florida Public Service Commission.

9 (d) Each utility shall establish separate accounts or subaccounts for renewable energy credits,
10 purchased power, Florida renewable energy resource owned by an investor-owned electric utility
11 for purposes of recording the costs incurred. Each utility shall also establish separate
12 subaccounts for any revenues derived from the sale of renewable energy credits.

13 (e) A complete list of all account and subaccount numbers used for renewable energy cost
14 recovery shall accompany each filing in subsection 1.

15 (8) Reporting Requirements. Each investor-owned electric utility shall file with the Commission
16 an annual report for the previous calendar year no later than April 1 in conjunction with the filing
17 of its Ten-Year Site Plan. Each investor-owned electric utility's report shall include the
18 following:

19 (a) Current and ten-year forecast of installed capacity in kilowatts and energy production in
20 kilowatt-hours for each Florida renewable energy resource;

21 (b) Levelized life-cycle cost in cents per kilowatt-hour for each existing, planned, and proposed
22 Florida renewable energy resource;

23 (c) Current and ten-year forecast of the effects of the utility's compliance and implementation

- 1 plan on the reduction of greenhouse gas emissions in Florida;
2 (d) Current and ten-year forecast of the effects of the utility's compliance and implementation
3 plan on economic development in Florida;
4 (e) Current and ten-year forecast of the estimated retail rate impact for each class of customers of
5 the utility's compliance and implementation plan;
6 (f) the retail sales of the prior year in megawatt-hours;
7 (g) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
8 (h) the quantity of renewable energy purchased in megawatt-hours, separated by type of
9 ownership and fuel type;
10 (i) the quantity and vintage of self-generated renewable energy credits;
11 (j) the quantity and vintage of renewable energy credits purchased;
12 (k) the fuel type and ownership of the Florida renewable energy resource associated with each
13 renewable energy credit;
14 (l) a statement as to whether it was, on an actual or projected basis, in compliance with the
15 renewable portfolio standards; and
16 (m) the utility's plan for additional generation or procurement to meet the renewable portfolio
17 standards for the current calendar year and the following two years.
18 Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(c), (5), 366.041, 366.05(1),
19 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History--New XX-XX-09.

1 17.410 Florida Renewable Energy Credit Market.

2 (1) The renewable energy credit market shall allow for the transparent certification, buying,
3 selling, trading, and retiring of renewable energy credits used to comply with the renewable
4 portfolio standards of Rule 25-17.400, F.A.C. All records, including those associated with the
5 certification of and the buying, selling, trading, or retiring of renewable energy credits shall be
6 available to the Commission for audit purposes.

7 (2) Within 30 days of the effective date of this rule, the investor-owned electric utilities shall
8 issue a request for proposals for an independent third party administrator to establish and
9 administer a Florida Renewable Energy Credit Market. Within 90 days of the effective date of
10 this rule, the investor-owned electric utilities shall select and submit for Commission approval a
11 Florida Renewable Energy Credit Market administrator.

12 (3) Within 180 days of Commission approval of the Florida Renewable Energy Credit Market
13 administrator, the investor-owned electric utilities shall file for Commission approval the
14 structure, governance, and procedures for administering the renewable energy credit market.

15 The filing shall, at a minimum, provide for the following:

16 (a) a committee made up of representatives from the investor-owned electric utilities, the
17 municipal electric utilities, the rural electric cooperative utilities, and Florida renewable energy
18 resource providers, which will act as technical advisors to the administrator in the areas of
19 governance, market rules and guidelines.

20 (b) the buying, selling, and trading of renewable energy credits which shall be accomplished
21 through the use of an electronic platform for the execution of:

22 1. hourly and other short-term transactions; and

23 2. long-term bilateral contracts.

1 (c) the aggregation of renewable energy credits for customer-owned Florida renewable energy
2 resources 2 megawatts or less that have not received incentives from a Commission-approved
3 demand-side conservation program pursuant to the Florida Energy and Efficiency Conservation
4 Act, Sections 366.80-.85 and 403.519, F.S.

5 (d) the certification and verification of renewable energy credits as defined in Rule 25-
6 17.400(2)(f), F.A.C., including renewable energy credits resulting from Equivalent Solar
7 Thermal Energy as defined in Rule 25-17.400(2)(k), F.A.C.;

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

9 (f) a method to record each transaction, and to indicate whether the renewable energy credit is
10 associated with a Class I or Class II renewable energy source as defined in Rule 25-17.400(2)(d)
11 and (e), F.A.C.

12 (4) The administrative costs associated with the Florida Renewable Energy Credit Market shall
13 be collected through fees assessed to a renewable energy credit. Fees shall be fair, equitable, and
14 cost-based.

15 (5) The following entities are eligible to produce renewable energy credits that may be counted
16 toward the renewable portfolio standards:

17 (a) Florida renewable energy resources owned by an investor-owned electric utility;

18 (b) Florida renewable energy resources owned by a municipal electric utility or a rural electric
19 cooperative utility;

20 (c) Non-utility Florida renewable energy resources providing as-available energy to a Florida
21 electric utility pursuant to a tariff;

22 (d) Non-utility Florida renewable energy resources providing net capacity and energy under a
23 purchase power agreement with a Florida electric utility;

1 (e) Non-utility Florida renewable energy resources greater than 2 megawatts providing on site
2 generation to offset all or a part of the customer's electrical needs;

3 (f) Non-utility Florida renewable energy resources greater than 2 megawatts providing
4 equivalent solar thermal energy to offset all or a part of the customer's electrical needs; and

5 (g) Customer-owned Florida renewable energy resources, 2 megawatts or less, that have not
6 received incentives from a Commission-approved demand-side conservation program pursuant
7 to the Florida Energy and Efficiency Conservation Act, Sections 366.80-.85 and 403.519, F.S.

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

10 (7) A renewable energy credit shall be valid for two years after the date the corresponding
11 megawatt-hour or equivalent solar thermal energy is certified.

12 (8) A renewable energy credit shall be retired after it is used to comply with the Florida or any
13 other state, or regional renewable portfolio standard.

14 (9) Renewable energy credits shall not be used for compliance with the Florida renewable
15 portfolio standards if the renewable energy credit or its associated energy has already been
16 counted toward compliance with any other state or regional renewable portfolio standard.

17 (10) Renewable energy credits shall not be used for compliance with the Florida renewable
18 portfolio standards if the renewable energy credit results from a Commission-approved demand-
19 side conservation program pursuant to the Florida Energy Efficiency and Conservation Act,
20 Sections 366.80-.85 and 403.519, F.S.

21 Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(f), (5), 366.041, 366.05(1),
22 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History—New XX-XX-09.

1 25-17.420 Municipal Electric Utility and Rural Electric Cooperative Renewable Energy

2 Reporting

3 Each municipal electric utility and rural electric cooperative utility shall file with the

4 Commission an annual report no later than April 1 of each year for the previous calendar year.

5 Each utility's report shall include the following:

6 (1) a detailed description of the standards adopted to promote, encourage, and expand the use of
7 renewable energy resources and energy conservation and efficiency measures;

8 (2) the utility's plan to meet the standards;

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

10 (4) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;

11 (5) the quantity of renewable energy purchased in megawatt-hours, separated by type of
12 ownership and fuel type;

13 (6) the quantity and vintage of self-generated renewable energy credits;

14 (7) the quantity and vintage of renewable energy credits purchased; and

15 (8) the fuel type and ownership of the Florida renewable energy resource associated with each
16 renewable energy credit;

17 Specific Authority 350.127(2), 366.05(1), FS. Law Implemented 366.02(2), 366.04(2)(f), (5), 366.041, 366.05(1),

18 366.81, 366.82(1),(2), 366.91(2), 366.92 FS. History—New XX-XX-09.

Renewable Portfolio Standards Submitted by Staff and Interested Parties					
	PSC Staff	FICA	FPL	CEG, FIPUG, PCS, and PEF	Wheelabrator and Covanta
Year	%	%	%	%	%
2010		5		2	3
2011					
2012					
2013					
2014					
2015		10			
2016					
2017	5		5	3.75	6
2018					
2019					
2020		20			
2021					
2022					
2023					
2024					
2025	10		10	6	12
...					
2030			20		
...					
2033	15				
...					
2035					20
...					
2041	20				
...					
2050				20	
...					

Renewable Portfolio Standards Submitted by Staff and Interested Parties					
	Sunshine State Solar Power	SACE and Florida Crystals	FREPA	Solar Coalition and EDF	DACS and Sarasota County
Year	%	%	%	%	%
2010	2	4	3	2	
2011				3	
2012				4	
2013	4	8		6	
2014				8	
2015			8	10	
2016	8	12		12	
2017			15	14	
2018				16	
2019	12			18	
2020		20	20	20	20
2021					
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State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: September 23, 2008
TO: Office of General Counsel (Miller)
FROM: Division of Economic Regulation (Hewitt)
RE: Proposed Rules 25-17.400, Florida Renewable Portfolio Standard, F.A.C., 25-17.410, Florida Renewable Energy Credit Market, F.A.C., and 25-17.420, Municipal Electric Utility and Rural Electric Cooperative Renewable Energy Reporting, F.A.C.; Docket No. 080503-EI

DETAILED DESCRIPTION OF THE PROPOSED RULE

1. Why are the rule amendments being proposed?

These rules would implement Chapter Law No. 2008-277, Section 366.92, F. S. which directs the Commission to submit a Renewable Portfolio Standard (RPS) rule to the legislature for ratification by February 1, 2009. Each investor-owned electric utility (IOU) would be required to develop their own RPS met by using either self-generated renewable energy credits (RECs) or purchases of Florida RECs.

2. What do the rules do and how do they accomplish the goal?

Rule 25-17.400, Florida Renewable Portfolio Standard, F.A.C., would give definitions and establish a process for setting the initial RPS for each investor-owned electric utility with subsequent updates not less than every five years. A time schedule would raise the percent of retail sales goals that should be reached using RECs from five percent by 2017 to 20 percent by 2041. A minimum of 25 percent of an RPS would have to be met by wind or solar renewable generation. An IOU would be penalized up to 50 basis points of its rate of return on equity if it fails to meet its RPS goals. However, utilities may be excused for non-compliance by showing that: 1) the supply of RECs is not adequate to satisfy the RPS or 2) the cost of securing RECs is prohibitive such that the total costs of compliance exceeds two percent of annual retail revenues. Full costs for the RPS would be passed on to ratepayers through a Renewable Energy Cost Recovery clause.

Rule 25-17.410, Florida Renewable Energy Credit Market, F.A.C., would give the definitions for RECs associated with renewable energy. The rule would require IOUs to establish a REC market and file within 180 days for Commission approval the structure, governance, and procedures for administering the REC market.

Rule 25-17.420, Municipal Electric Utility and Rural Electric Cooperative Renewable Energy Reporting, F.A.C., would require each municipal and cooperative electric utility to develop their own standards for renewable energy resources and submit an annual report identifying these standards by April 1, beginning in the year after the rule is adopted.

IMPACT ON THE PSC

Incremental costs

There would be incremental costs to the Commission to implement the proposed rules. There would be additional Commissioner and staff time required to work on the initial proceeding to set each IOU's RPS; a proceeding to establish the REC market administration and procedures; Renewable Energy Cost Recovery clause proceedings; and, further proceedings at least every 5 years for review of the goals and possible revisions. Staff would have to review the annual reports and monitor performance of the RPS over the years.

Incremental benefits

There is no direct benefit to the Commission resulting from the implementation of the proposed rule amendments.

WHO BESIDES THE PSC WILL BE AFFECTED BY ADOPTION OF THE PROPOSAL

Utilities

The proposed rules would affect the five investor-owned electric utilities which would be required to have an RPS.

Customers

The five IOUs had approximately 6,915,643 residential, commercial, and industrial customers as of the end of 2007.

Outside business and local governments

There would be a negative impact from the increased electric bills of small businesses, small cities, or small counties resulting from an adoption of the above rules if they are customers of the IOUs.

HOW ARE THE PARTIES ABOVE AFFECTED BY THE ADOPTION OF THE PROPOSAL

Estimated transactional costs to individuals and entities

Utilities

The proposed rule caps for the amount the IOUs would have to spend on renewable resources are 1.5 percent of total revenues for wind and solar and 0.5 percent for all other types.

If the caps are reached, two percent of total revenues (2007) for the five IOUs would be \$372,126,983. As IOUs' revenues grow over the 33 years of the renewables implementation schedule, the total cost cap would be higher. Unless the renewable resources generation is available on demand, such as biomass generation, the renewable resources would have to be in addition to the new future generation because renewables such as wind and solar are not necessarily available during peak demand hours. If the costs are spread evenly over all customer bills, the approximate increase would be \$2 per 1,000 kWh consumed.

In addition, the cost for establishing a REC market and running it is unknown but would likely be over a million dollars in start-up costs and in recurring costs. The Western Renewable Energy Generation Information System is a REC trading system used by several western states. It is reported that California's share of the cost of developing and operating the system ranges between \$1 and \$1.5 million per year for the initial years. The IOUs would have to appoint an independent third party administrator to establish and administer a Florida Renewable Energy Credit Market (RECM). The IOUs would have to file for Commission approval of the structure, governance, and procedures of the RECM. The filing would have to provide for a) a committee made up of stakeholders in renewable energy; b) the buying, selling, and trading of RECs in the hourly, short-term, and long-term bilateral contracts; c) aggregation of RECs for customer-owned renewable energy resources; d) the certification and verification of RECs; e) an accounting system to verify compliance; and f) a method to record each transaction, and whether the REC is a Class I (wind or solar) or Class II (all other types).

Furthermore, the costs to assemble the data for annual reports could be substantial. The annual report would include: a) current and ten-year forecast of installed capacity in kW and kWh for each renewable energy resource; b) levelized life-cycle cost in cents per kWh for each existing, planned, and proposed renewable energy resource; c) current and ten-year forecast of the effects of the utility's compliance and implementation plan on the reduction of greenhouse emissions in Florida; d) current and ten-year forecast of the effects of the utility's compliance and implementation plan on economic development in Florida; e) current and ten-year forecast of the estimated retail rate impact for each class of customers; f) the retail sales of the prior year in MWh; g) the quantity of self-generated renewable energy in MWh by fuel type; h) the quantity of renewable energy purchased in MWh by ownership and fuel type; i) the quantity and vintage of self-generated RECs; j) the quantity and vintage of RECs purchased; k) the fuel type and ownership associated with each REC; l) a statement whether it was in compliance with the RPS; m) the utility's plan for additional generation or procurement to meet the RPS for the current calendar year and the following two years.

Utilities' Responses

Florida Public Utilities (FPU) does not own or operate any generation facilities but has purchased power agreements for its divisions through the year 2017. For FPU to accurately determine its obligations and to provide the legal guidance on developing renewable energy standards would cost approximately \$30,000 to \$50,000 to review contracts and draft any additional agreements necessary. FPU believes that to comply with the proposed rules would impose significant burdens on FPU and would not appear to achieve the overall benefits as may

be the case with generating utilities. Based on FPU 2007 revenues, a 2 percent cap would be \$1,110,417.

Gulf stated that because of the high cost of set-asides for wind and solar renewables, it would reach the cap and that its overall incremental cost (above avoided cost) would be approximately \$10 million a year for a one percent cap. The two percent cap in the proposed rule would cost Gulf \$20,564,184 on 2007 revenues. Gulf also stated that as the time frame for implementation is shortened, the cost for renewables would go up as the developers rushed to get projects online.

Progress Energy Florida (PEF) would spend \$82,767,558 to obtain renewables at the two percent cap of its 2007 revenues. In addition to the capped expenditures on renewables, PEF stated that to reach the renewables percentages until 2050 would cost from \$500,000 per year rising to \$1,100,000 per year for administrative incremental costs; \$300,000 per year rising to \$500,000 per year for infrastructure incremental costs; \$20,000 per year rising to \$60,000 per year for operating incremental costs; and \$100,000 for each year proceeding implementation of a higher percentage level of renewables. Decreasing the time frame for achieving 20 percent renewables would increase these costs, e.g., implementation by 2030 for PEF would raise costs for the out year to \$1,650,000 administrative costs; \$700,000 infrastructure costs; and \$100,000 operating costs.

Tampa Electric Company (TECO) estimated that a 1 percent cap of total annual revenues would cost it about \$22.5 million in 2010. At two percent of retail sales, TECO's cost would be \$42,388,783 based on 2007 revenues.

A two percent expenditure on renewables by Florida Power & Light (FPL) would be \$225,296,041 based on 2007 revenues. FPL estimated that with a one percent expenditure cap, it could add renewable generation costing approximately \$130 million, which could buy approximately 217 MW of solar PV. A two percent cap would allow approximately 434 MW of solar PV using the FPL estimated expenditures at \$260 million. FPL believes that an in-state only REC market is not workable, would be costly and administratively burdensome, and would not best promote the development of renewable assets and the provision of renewable energy in Florida.

The Florida Electric Cooperatives Association stated that the additional costs to its members to collect, analyze, and submit the information required are unknown at this time but would require a significant number of man-hours because the information is not readily available and would have to be compiled and calculated manually.

Customers

Ratepayers of the IOUs would face higher electric bills when the RPS costs of \$204,832,807 per year are passed through a Renewable Energy Cost Recovery clause. Staff estimated that the maximum amount a bill would increase for a two percent of revenues cost cap would be 0.2 cents per kWh or \$2 per 1,000 kWh. The other requirements of the rules would

add a few more cents per bill depending on the costs of developing the REC market and the on going administrative costs.

Outside business including specifically small businesses

Small business would experience the same higher cost of electricity as residential ratepayers.

Local governments

Local governments would experience the same higher cost of electricity as small businesses and residential ratepayers.

ANY OTHER PERTINENT COMMENTS REGARDING THE APPLICATION OF THE PROPOSED RULES

The legislative intent of the statute requiring the proposed rules is 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."

The proposed rules would further some of these goals with attendant benefits to ratepayers. The values of those benefits are indeterminate because they are difficult to measure and have no market price. Some of the goals would not be achieved with the proposed rules.

CH:kb

cc: Mary Andrews Bane
Chuck Hill
Mark Futrell