September 5, 2008

Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: In re: Establishment of Rule on Renewable Portfolio Standard
Comments of Southern Alliance for Clean Energy,
Docket No. 080503-EI

Dear Commissioners:

Enclosed please find the comments of Southern Alliance for Clean Energy regarding proposed Rule 25-17.400, Renewable Portfolio Standard, Rule 25-17.410 Florida Renewable Energy Credit Market and Municipal and Rural Coop Electric Reporting, Rule 25-17.420. We have attached modifications to the proposed rules as an appendix to these comments.

These comments are endorsed by Eric Draper on behalf of Florida Audubon Society.

An RPS provides Florida a unique opportunity to jump-start renewable energy investment and related job creation in the state while insulating consumers from price shocks from new conventional power plant construction and fossil fuel charges. We believe the comments offered above will help the state realize those goals.

Sincerely,

John D. Wilson
Director of Research
Southern Alliance for Clean Energy (SACE) wishes to thank the Florida Public Service Commission for the opportunity to comment on the proposed “draft” renewable portfolio standard (RPS) rule in the above docket. SACE is a non-profit, non-partisan organization that promotes responsible energy choices that solve global warming problems and ensure clean, safe and healthy communities throughout the Southeast.

In HB 7135, the Florida Public Service Commission was directed to establish an RPS that requires each utility to supply a minimum percentage of its total annual retail electricity sales from renewable energy produced in Florida. We offer the following comments to the proposed rule issued on August 13, 2008 and have included our “type and strike” modifications to the proposed rule as an appendix to these comments.

The Legislature intends to achieve numerous goals through the RPS that include¹:

- Promotion of the development of renewable energy;
- Protection of the economic viability of Florida's existing renewable energy facilities;
- Diversification of 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, lastly
- Minimize the costs of power supply to electric utilities and their customers.

The proposed rule recognizes the intent of cost minimization but fails to capture the totality of the legislative intent. The proposed rule doesn’t accurately reflect the intent of either Governor Crist for a 20% goal by 2020² or the majority of the Legislature’s goals as expressed above. The proposed rule will fail to promote vibrant development of renewable energy; fuel diversification; encourage investment within the state; and

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² Executive Order 07-127. While Gov. Crist did not state a deadline for the 20% RPS target in the executive order, he has publicly advocated for a 2020 deadline, see Governor Signs Executive Orders to Reduce Greenhouse Gases, July 13, 2007, at http://www.flgov.com/release/9217
improve environmental conditions.\(^3\) The rule proposes an oppressive and very restrictive 1% cost cap without adequate support in statute or precedent that results in very low targets for renewable energy and a restrictive cap on renewable energy credit (REC) prices. That leads the proposed rule to be overly weighted towards cost containment in a way that will squelch any meaningful investment in renewable technology and clean energy jobs in Florida.

I. **Renewable Portfolio Standard**

**Cost Cap Structure Needs Revision**

The Florida Legislature provided for a single standard to ensuring that the economic impact of the RPS would be taken into consideration. As described in Florida Statute Section 366.92(3)(b)(2), noncompliance with the RPS shall be excused if “…the cost of securing renewable energy or renewable energy credits was cost prohibitive.” This new “cost prohibitive” test provides the Commission with the authority to meet the need to develop renewable energy without offering utilities a “blank check” to build such facilities at any price.

We believe that the proposed RPS cost provisions are flawed in two respects. First, it creates two standards where the statute calls for only one. Second, the proposed interpretation of “cost prohibitive” fails to recognize prior utility precedent.

There is no explicit legislative authority in HB 7135 for the Commission to develop more than one type of standard addressing cost. Moreover, there is no statutory authority to support a REC price cap on the basis of dollars per ton of greenhouse gas (GHG) emissions reduced by Florida renewable energy resources relative to the GHG emission otherwise emitted by the utility. This concept is not presented in Section 42 of the law; neither is any other legislative authority cited. Furthermore, we are unable to locate any precedent for this type of price cap in another state. In addition to the lack of statutory authority, such a price cap would be administratively complicated to administer by requiring purchasers to review the specific GHG reductions associated with individual REC purchases; in addition to the additional tracking and oversight costs, such a price cap would likely raise the cost of third party administration by requiring a tracking system that would be incompatible with those used in other states and potentially at the federal level. The use of a unique “currency” for RECs would be more obscure for participants or investors to understand, which might discourage investment.

Therefore, we advocate letting supply and demand set the REC prices since the backstop may ultimately be provided by any predetermined cost cap or an ACP or penalty acting as a rate cap.

\(^3\) The Commission’s specific responsibilities with respect to the RPS are laid out in §366.92, but it is essential to also recognize that additional intent and state policy are established in §377.601 citing the importance to the state of reducing GHG emissions.
Whatever standard the Commission selects to implement the “cost prohibitive”
limitation, it must consider the total cost of renewable energy in a reasonable manner. As
pointed out by other parties, such as Florida Crystals, the proposed rules structure
payments to third-party generators of renewable energy in two components, power sales
and RECs. Power sales would continue to be priced under the Commission’s avoided cost
mechanism. RECs would be priced in the marketplace.

Under the Commission’s avoided cost mechanism, it is quite possible (even likely) that
the price set for power sales will be below rates. As noted by Florida Crystals, “The vast
majority of the [plant operating] hours, the energy rate paid to the seller [is] the marginal
energy cost of the system.”4 The marginal energy cost of the system is by definition less
than rates (which also recover utility fixed costs). Thus, even when combined with the
price of a REC, the total price paid to the seller could easily be a substantial discount
down retail rates.

It is very difficult to imagine that the Florida Legislature conceived that the Commission
would consider power generated at prices below retail rates to be “cost prohibitive.” Yet
if the price of the REC is such that it results in the utility reaching a cost cap (discussed
below), then this is the absurd result that could follow.

There are some additional problems with the proposed approach. Florida Crystals further
notes that the proposed rules could delay cost recovery until a new rate case is filed,
which would be a disincentive to such power purchase agreements. We also note that the
market price for RECs will be set in a statewide market, while the avoided cost based
price for power purchase agreements varies by utility, creating a price variation across the
state that may be significant.

The Commission has a strong interest in ensuring that the costs passed on to customers
are reasonable and prudent, but it needs to offer more flexibility to those who would use
Florida’s renewable resources and hire Floridians to sell sustainably generated electricity
to the utilities. To achieve this flexibility, the Commission should seriously consider the
Renewable Energy Power Purchase Agreement concept suggested by Florida Crystals.
We urge the Commission to allow for an alternative approach for utilities to obtain
renewable power from third party generators to achieve the goals of the Florida
Legislature.

Cost Cap Level is Restrictive
Regarding the proposed 1% cost cap, the staff’s comment that more than a 1% increase in
rates constitutes an “undue rate increase” would surely set a new standard for utility
regulation in Florida.

4 Cepero, Gus, “Florida Crystals Initial Comments on the August 13, 2008 Draft Rule,” Florida Crystals
Corporation, undated.
• As noted by Florida Crystal, average Florida electricity rates have increased by 25% since 2005.  

• As noted by Florida Crystal, taxes represent nearly 15% of the average retail electricity bill.  

• Utility bills will increase by over 30% next year for Progress Energy customers due early cost recovery for new nuclear power plant construction and recently approved fuel charge increases. Similar rate increases are anticipated for FPL.  

Based on rate increases that have been approved in the past for various reasons, it appears that a rate increase of 1% is far less than what the Commission has historically considered “prohibitive.” It is not possible to refute the staff’s rationale for a 1% rate increase cap because the proposal did not include any precedent as basis, method for deriving the cap, or criteria by which it was selected. Until the Commission addresses this question directly, there is no clear answer, except that it would be a break from past practice to consider medium-term rate impacts of 15-30% to be something that must be prevented in any context.

To restrict rate impacts of renewable generation to 1% while allowing large rate impacts from new costly nuclear generation and fossil fuel charges is fundamentally unfair to renewable energy developers. In contrast to these “conventional” resources that are well associated with rate impacts, Florida renewable energy resources have never caused rate increases. A rate cap would place great uncertainty on the legal authority of utilities to collect reasonable and prudent cost-based rates in order to acquire renewable energy. A cost cap could limit the amount of investment in renewable technologies without protecting customers from rate impacts, since competing “conventional” resources cause rate impacts as well. If the cost cap limits renewable energy capital investment in Florida below a level necessary to realize the standards, the standards will effectively be meaningless. Low cost levels in other states have led to standards that can’t be attained. In Arizona, for example, compliance has been well below 50% since 2003. This low level of compliance is due to low pre-specified spending amounts, combined with a lack of an

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6 Id.  
8 Testimony of Steven R. Simms on Behalf of Florida Power and Light, Docket No. 07-0650-EI (describing non-binding capital cost estimate for Turkey Point Units 6 and 7).  
9 Even a 3-5% initial price cap, as suggested by Florida Power and Light, would appear more restrictive than the statutory standard of “cost prohibitive.”
enforcement mechanism for the RPS, that have restricted the capital investment necessary to meet state RPS targets.\textsuperscript{10}

Furthermore, the proposed cost cap could undermine the proposed preferential treatment for zero emission renewable resources like solar and wind. We support a set aside for solar and wind as a way to recognize the societal benefits of zero emission technologies and as the only way to guarantee that the resources will be utilized in Florida. Indeed, both Governor Crist, through Executive Order 10-127, and the Legislature, in HB 7135 have expressed support for solar and wind technologies.

Unfortunately, a 1% cost cap could make a set aside for solar resources impracticable. Solar resources are currently a higher cost resource;\textsuperscript{11} therefore the utility obligation to meet a solar set aside could result in hitting the 1% cap prior to fulfilling the set aside requirement, thereby disadvantaging other renewable resources in the early years of implementation. The low cost cap undermines the solar and wind preference as a policy tool, thereby establishing an unworkable regulatory program.

Given the expanded latitude of considering cost containment intended by the Legislature under the “cost prohibitive” standard, the Commission should consider not utilizing a cost cap. There are states that have enjoyed 100% compliance to their state RPS without any explicit cost caps. For instance, Wisconsin, Maine, Iowa have no explicit cap in place while Connecticut and Pennsylvania don’t have explicit caps but have financial penalties that might act as a cap – all have achieved 100% compliance to their standards. Several states such as Maryland and New Jersey have cost caps only for solar set-aside programs and are achieving 100% compliance.

Ultimately, if the Commission decides to utilize a cost cap, we recommend a cost cap for Florida that places renewable energy resources on a level playing field with conventional generation. In order to accomplish equal treatment of both resources throughout the state, renewable energy cost caps should be indexed to recent rate impacts from conventional generation. An acceptable baseline might be the rate impacts of the most recent nuclear generation unit(s) approved in a need determination hearing by the Commission. The renewable energy source should be granted a 10% rate impact premium above the largest rate impact of a recently approved major generation unit(s) in recognition of the economic benefit of renewable energy as a hedge against fuel price spikes associated with conventional and nuclear generation.

Under this scenario the rate impacts of renewable energy sources, as defined by Florida Statute Section 366.91(2)(d), should be pegged to the proposed PEF Levy nuclear units.


The table below exhibits how the indexed rate cap would operate for renewable energy sources. The commission would update nuclear rate impacts and the renewable rate cap yearly as more reliable information becomes available.

<table>
<thead>
<tr>
<th>Year</th>
<th>Nuclear Plants</th>
<th>Suggested Renewable Energy Cap</th>
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<td>2009</td>
<td>$ 6.43</td>
<td>$ 7.07</td>
</tr>
<tr>
<td>2010</td>
<td>9.16</td>
<td>10.08</td>
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<td>44.43</td>
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<tr>
<td>2018+</td>
<td>51.92</td>
<td>57.11</td>
</tr>
</tbody>
</table>

Standards Are Weak
The targets proposed in the rule are: 2010: 2% of prior year’s retail sales; 2017: 3.75% of prior year’s retail sales; 2025: 6% of prior year’s retail sales; and 2050: 20% of prior year’s retail sales. We believe that the commission has not captured the full legislative intent of HB 7135 because the RPS targets are timid relative to RPS targets in other states\(^{13}\) and likely won’t incent the meaningful type of renewable investment and economic development supported in the legislative intent of the HB 7135.

The initial target for 2010 is unacceptable because it simply preserves the status quo. Furthermore, even that is questionable because it was unclear at the commission’s staff workshop on August 20, 2008 whether existing renewable resources represent 1.9% of existing electric generation or some smaller or larger percentage of current electricity generation in the state. The Commission as recently as 2003 estimated that the 3% of net electric generation came from renewable resources.\(^{14}\) We would recommend a more ambitious target for 2010.

Since the Commission will not complete its inventory of renewable energy potential for some months, we recommend that the Commission move forward on aggressive mandatory goals based on data currently available. We recommend a starting point of 4% in 2010, which is achievable based on current data, a 12% level by 2016 representing what may be the potential for readily developable renewable resources, and an end point of 20% in 2020 (consistent with Gov. Crist’s Executive Order 07-127). The Commission has granted itself authority to modify the standards in Section (1)(b) and should exercise

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\(^{13}\) See Department of Energy, \textit{Summary of State Renewable Portfolio Standards}, at http://www.eere.energy.gov

the authority that it finds that legitimate good faith efforts based on objective, explicit criteria will fail to meet the targets.

Compliance Measures are Critical
We believe that an effective policy requires and enforcement mechanism is critical to support compliance. Without an enforcement mechanism, the standards are not meaningful. The Legislature also realized the importance of enforcement as a tool to drive compliance by specifically tasking the Commission to develop a rule with a compliance and enforcement mechanisms.  

Clear rules for enforcement in cases of non-compliance provide confidence to renewable energy developers that electricity suppliers will make their required purchases. Explicit implications for noncompliance also will ensure that obligated utilities take the requirement seriously. The rule as proposed has no enforcement mechanism and a vague and low bar for excusing compliance.

Alternative Compliance Payment
States use a variety of enforcement options to ensure that RPS targets are met. The most popular option in states that allow retail competition is an alternative compliance payment (ACP). An ACP is generally recoverable in rates and is a means of complying with an RPS, rather than procuring renewable generation or RECs. Thus, the ACP makes the need for explicit penalties moot. An ACP system has merit because it still allows utilities to report compliance with the RPS rather than to be penalized. The ACP should be set at a level that incents the procurement of renewable energy or RECs. Some states, such as Maryland, Maine, New Hampshire, New Jersey and Rhode Island have payments go to a renewable energy fund. Failure to pay can result in financial penalties.

The ACP also has the effect of acting as a rate cap because compliance can be achieved at a predetermined level. The ACP levels in other states tend to be in 5 cents/kWh range. Therefore, if the ACP level is set higher than a REC, it acts to cap rate impacts. On an average household use of 1,000 kWh per month, the rate impact from a 5 cents/kWh ACP cap would be $5/month. Examples of other state RPS ACP measures includes New Jersey with a 5 cents/kWh; Delaware with an ACP of 2.5 cents/kWh first year, 5 cents/kWh second year, 8 cents/kWh in subsequent years; and Pennsylvania with a 4.5 cents/kWh ACP.

The commission staff has indicated that it does not have the statutory authority to establish a fund to receive ACP payments. We find that this interpretation is incorrect since the Legislature expressly mandated an enforcement provision as part of the rule. It is typical that the Legislature will lay out the components of rule and defer to agency expertise to promulgate a rule designed to effectively carryout the mandate in the legislation. It should be noted that §120.52(15) defines a rule as an “agency statement of general applicability that implements, interprets, or prescribes law ….” The Commission

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16 Id. WISER
17 Union of Concerned Scientists, Renewable Energy Toolkit, at http://go.ucsusa.org/
could choose to interpret the mandate for enforcement to create an ACP. The Commission could create and hold ACP funds as a compliance tool until further direction for the Legislature on how to appropriate the funds.

**Financial Penalties**
If the staff maintains its objection to an ACP fund-type payment, then explicit financial penalties with no automatic cost recovery should be utilized to drive compliance. It is clear that the Legislature explicitly authorized the Commission to administer enforcement. Enforcement without some form of financial ramification can not reasonably be termed “enforcement.” Even the ability to set punitive fines by the Commission appears to be limited to $5,000 per day, which is not a sufficient amount by itself to incent meaningful compliance.

We would use the analogy of having a speed limit with no police officers to enforce, and in the event a speeder was caught violating the limit – there would be no repercussions. States that utilize a penalty includes California, Connecticut, Montana, Pennsylvania, Texas, Washington, and Wisconsin. In these states, the penalty is often explicit with no automatic cost recovery. For instance, in California in June 2003, the PUC set the penalty amount at 5 cents per kWh if a retailer is deficient in renewable generation, with an annual cap of $25 million per utility. In Connecticut the penalty is 5.5 cents per kWh with no automatic cost recovery.

Therefore, we recommend an enforcement provision that allows the utility to file a notice of noncompliance and an implementation plan describing how it will reach its goal in the following year – assuming it has not been excused from compliance. Under this approach, if it fails to meet the implementation plan in the following year, the cost of the shortfall should not be recoverable as a prudent expenditure.

**Excusal Provision Vague**
The provision excusing performance based on inadequate “supply” of renewable energy, or renewable energy credits, is vague and open to interpretation and challenge. We would recommend a provision that grants excusal under more explicit terms related to exhausting all good faith efforts. For instance, the provision should require that the utility has certified that it has pursued all good faith efforts to build renewable energy projects or acquire Florida RECs from a third party under a long term contract and the spot market that are not cost prohibitive.

**Solar and Wind Preference**
SACE supports the preferential treatment for solar and wind resources expressed by Governor Crist and the Florida Legislature. Florida is not alone in recognizing the public value of emission-free resources. Set-asides for solar or distributed generation exist within 12 of the 26 U.S. state RPS programs. Four of these states combine credit multipliers of some form with these set-asides. Credit multipliers have become somewhat less popular in recent years, and only two states – Texas and Washington – now use

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19 See Executive Order 07-127 and in HB 7135 Section 42.
credit multipliers without an accompanying mandatory set-aside. In contrast, the popularity of set-asides for solar or distributed generation, has increased dramatically in recent years. In 2007, new solar or distributed generation set-asides were created in Delaware, Maryland, New Hampshire, New Mexico, and North Carolina, and the previously-established solar set-aside in Colorado was effectively expanded though an increase in that state’s overall RPS target.  

We support Option II as an effective method to incent investment in solar and wind resources, contingent on eliminating or increasing the proposed cost cap so other renewable sources are not disadvantaged by a preference for a perceived limitation on available investment. We offer a modified version of Option II proposing that the 5% set aside for wind fall back to solar if there aren’t enough wind resources to meet the goal.

Option III should be rejected. While a multiplier may provide more flexibility to the utility industry in meeting a set-aside target, it suffers from a major shortcoming if the intent is to drive investment in solar and wind. A multiplier cannot guarantee that a resource will in-fact be utilized to meet a percentage of the stated target. That is why almost all states with preferential treatment for Class I renewable energy sources use an explicit set-aside. Additionally, the statutory definition and proposed rule for a REC may preclude use of multipliers since a REC is defined specifically as “1 megawatt-hour of electricity generated by a source of renewable energy located in Florida.”

A feed-in tariff is another mechanism that can effectively support the development of solar and wind resources in Florida. A feed-in tariff is a policy based on financing long-term investments in renewable energy to generate economies of scale to drive down prices. One of the most successful solar power programs in the world is in Germany, where a feed-in tariff policy was adopted in 2000 (and amended in 2004). The key components of this approach are:

- Priority access to the grid;
- Monetary compensation in the form of a payment per generated kWh; and
- A guaranteed payment over a fixed period of time at a fixed rate.

As a state policy, of course, a feed-in tariff is an alternative to a renewable portfolio standard. However, utilities can establish a feed-in tariff as a means by which the RPS is achieved.

If utilities use a feed-in tariff rate to achieve the RPS, then business and homeowners can install solar panels and sell the electricity they produce back onto the grid, and then buy back the amount that they use from the utility. This is different from net metering in that the utility buys 100% of the power generated, and sells 100% of the power used by the customer. The rate impact of this purchase is handled identically to that of self-generated power, REC purchase, or any other means of compliance. We would encourage Commission staff to explicitly comment on whether the Commission would entertain a

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20 Id. WISER
proposal by a Florida utility to establish a feed-in tariff as a means of compliance with the RPS.  

**Contracting Requirements**
We have reviewed the draft comments of Clean Energy Group and endorse their modification to the proposed rule requiring more stringent contracting requirements in order to incent more renewable energy investment.

**Timetable for Review**
The rule contemplates a five year review period by the Commission. It was stated by Commission staff during the August 20, 2008 workshop that the review period was designed to coincide with the 5-year FEECA DSM goal setting process. We believe that it is important to encourage administrative efficiencies wherever possible. But given that early years of a new RPS regulatory plan may require more adjustments than in later years, we would recommend that there be a more frequent review period for the first ten years. Initially, reviews should occur every three years. After two such reviews, the frequency should be aligned with the 5-year FEECA DSM goal setting process. This represents only one additional review in the first ten years. The impact to administrative efficiency will be minor while the added value of more review in the early years of the program should provide substantial programmatic benefit.

**Application and Scope**
The language refers to renewable portfolio standards (plural) as if to suggest that each individual investor-owned utility shall be subject to different targets. This is not the statutory intent language in HB 7135 as it consistently refers to a single “standard.” To eliminate any confusion, we suggest alternate language, such as substituting the term “standards” for “standard.”

The last sentence in the Application and Scope section (1)(c), states that that each investor owned utility shall provide an analysis of technical and economic potential to provide “reasonably achievable” and “affordable annual KWH savings” in a proceeding to establish or modify standards. This could be interpreted to mean that the investor owned utilities present what it believes to be reasonably “achievable” to the Commission for its consideration. We understand that the Application and Scope section does not determine rights and responsibilities under the rule, but it does set the tone. If the sentence is interpreted in this way, it violates the Legislatures expression to have the Commission as the final arbiter on rate impact as prescribed in Florida Statute Section 366.92(3)(b)(2).

**Reporting**
We recommend expanding the scope of yearly reporting by all utilities to include the cost information now mandated only during an RPS standard filing. Such cost information will allow the Commission to provide an annual summary of the full range of impacts of interest to the Governor and Legislature. More generally, reporting by public utilities

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22 At the utility’s option, we would also energy generated under a feed-in tariff as being eligible to meet an obligation under the demand-side renewable energy goals provision of the FEECA proceeding.
should be closely aligned with the reporting requirements of the investor owned utilities. Such reporting will provide a clearer picture to the Commission and the public of costs related to renewable energy throughout Florida. Complete information would allow the public to compare the performance of all utilities on a consistent basis. Such information should lead to best management practices being adopted by all utilities, both large and small.

II. Florida Renewable Energy Credit Market.

It is unclear in the proposed rule language if the investor utilities would manage the Florida REC market if they don’t heed the Commission’s “encouragement” to seek out a third party administrator. We believe that the Commission’s direction should be clearer in requiring a third-party REC administrator to establish and oversee the Florida REC market. A third-party administrator would maximize transparency and administrative efficiency. The commission or the investor-owned utilities as a group should issue and request for proposals and approve an administrator to oversee the Florida REC market.

We find that references to “investor owned” renewable energy sources qualifying towards a REC is contrary to HB 7135. The language in HB 7135 clearly states that a REC will represent 1 megawatt hour of electricity by a source of renewable energy produced in Florida, not from an investor owned renewable power source.\(^\text{23}\) Under that scenario, a utility could go outside of the state and utilize power generated in other states to satisfy the Florida RPS. The Legislature intends in HB 7135 that renewable energy be generated in Florida and that the state should enjoy the investment and job benefits from such production.

III. Conclusion

The comments above and the attached appendix are focused on strengthening the proposed rule in order to realize compliance and meaningful target attainment. We look forward to continued engagement in the rulemaking process, including the technical and economic potential study by Navigant Consulting, Inc.

\(^{23}\) § 366.92(d), Fla. Stat.
Appendix I: SACE Type and Strike Modifications

I. Renewable Portfolio Standard

17.400 Florida Renewable Portfolio Standard

(1) Application and Scope.

(a) The Commission shall establish a numerical portfolio standard for that applies to each investor-owned electric utility that will promote the development of renewable energy, protect the economic viability of existing renewable energy facilities, diversify the types of fuel used to generate electricity in Florida, lessen Florida’s dependence on fossil fuels for the production of electricity, minimize the volatility of fuel costs, encourage investment in the state, improve environmental conditions, and minimize the costs of power supply to electric utilities and their customers.

(b) After approval of the initial renewable portfolio standards, the Commission shall review and set a renewable portfolio standard for that applies to each investor-owned electric utility at least once every five years. The Commission on its own motion, or upon petition by a substantially affected person or a utility, shall initiate a proceeding to review and, if appropriate, modify the renewable portfolio standards. All modifications of the approved renewable portfolio standards and the associated compliance plans shall only be on a prospective basis.

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

(2) Definitions.

(a) “Florida renewable energy resources,” means electrical, mechanical, or thermal energy

CODING: Words underlined are additions; words in struck-through type are deletions from proposal.
produced from a method that uses one or more of the following fuels or energy sources:
hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat,
or hydroelectric power that is produced in Florida.

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

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

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

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

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

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

CODING: Words underlined are additions; words in struck through type are deletions
from proposal.
Appendix I: SACE Type and Strike Modifications

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

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

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

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

(3) Renewable Portfolio Standard. Within 90 days of the effective date of this rule, and not less than every five three years for the first two proceedings, and approximately concurrent with the scheduling of proceedings under [Rule 25-17.0021, F.A.C.] thereafter, each investor-owned electric utility shall file for approval by the Commission proposed renewable portfolio standards based on an analysis of the technical and economic potential of Florida renewable energy resources for each utility’s service area.

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

1. by January 1, 2010: 4
2. by January 1, 2017: 3.75

CODING: Words underlined are additions; words in struck through type are deletions from proposal.
Appendix I: SACE Type and Strike Modifications

3. by January 1, 2025: 12 percent of the prior year’s retail electricity sales;

4. by January 1, 2050: 20 percent of the prior year’s retail electricity sales.

Options for Wind & Solar Preference:

OPTION I:

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

OPTION II:

(b) By January 1, 2017 and thereafter, a minimum of 20% of the renewable portfolio standard shall be provided from Class I solar photovoltaic or solar thermal systems and 5% of the renewable energy portfolio standard shall be provided by Class I wind energy systems. To the extent Class I wind energy systems are not available, the resources shall be provided by Class I solar photovoltaic or solar thermal systems.

OPTION III:

(b) For purposes of compliance with the renewable portfolio standards, a multiplier of 5 shall be applied to all renewable energy credits produced from Class I renewable energy sources until the first year in which they represent, in aggregate, 25% of the annual Renewable Portfolio Standard.

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

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

2. Levelized life-cycle cost in cents per kilowatt-hour for each Florida renewable

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energy resource;

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

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

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

(4) Compliance.

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

1. the supply of renewable energy or renewable energy credits is not adequate to satisfy the demand for such energy as demonstrated by a written certification that the utility has pursued steps to procure renewable energy credits under long-term and short term contract and that the integration of additional renewable energy technologies will negatively impact the reliability of the transmission system; or

2. the cost of securing renewable energy or renewable energy credits was prohibitive such that the total costs for compliance with the renewable portfolio standard exceeded one percent 110% of the projected rate impact from the most recent nuclear generating facility granted a determination of need by the Commission as reflected in the table below. In a proceeding applying this section, the Commission shall adjust this table to reflect current rate impact information, of the investor-owned electric utility’s total annual retail revenues.

2010: $10.08

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(b) Any utility requesting to be excused from meeting its renewable portfolio standard must submit its request along with the annual report required by Rule 25-17.400(6), F.A.C.

(c) If an investor-owned utility fails to meet the annual renewable energy requirements, and has not been excused from compliance, it is required to include a notice of noncompliance with its annual report required by Rule 25-17.400(6), F.A.C. The noncompliance notice must provide:

1. a computation of the difference between the annual renewable energy credits required and the amount actually obtained;
2. the cost of meeting the shortfall;
3. an implementation plan describing how the investor-owned utility intends to meet the shortfall from the previous calendar year in the current calendar year.

(d) If the Commission finds after affording an affected utility notice and an opportunity to be heard that the investor-owned utility has failed to comply with its approved implementation plan, the Commission shall find that the affected utility cannot recover the costs of meeting the shortfall in rates. The Commission may also may impose penalties pursuant to its regulatory enforcement authority expressed in § 366.095, Fla. Stat.

(5) Cost Recovery. Reasonable and prudent costs associated with the provision or purchase...
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of renewable energy credits to meet the utility’s renewable portfolio standards, including
administrative costs of the Florida Renewable Energy Credit Market, shall be recovered
through the Environmental Cost Recovery clause.

(6) Reporting Requirements. Each investor-owned electric utility shall file with the
Commission an annual report no later than April 1 of each year for the previous calendar year.

Each investor-owned electric utility’s report shall include the following:

(a) the retail sales of the prior year in megawatt-hours;
(b) the quantity of self-generated renewable energy in megawatt-hours separated by fuel type;
(c) the quantity of renewable energy purchased in megawatt-hours, separated by type of
ownership and fuel type;
(d) the quantity and vintage of self-generated renewable energy credits;
(e) the quantity and vintage of renewable energy credits purchased;
(f) the fuel type and ownership of the Florida renewable energy resource associated with each
renewable energy credit;
(g) a statement as to whether it was in compliance with the renewable portfolio standard in the
previous calendar year; and
(h) the utility’s plan for additional generation or procurement of Florida renewable energy
resources or renewable energy credits for the current calendar year and the following two
years;
(i) an estimate of levelized life-cycle cost in cents per kilowatt-hour for each type of Florida
renewable energy resource generated or renewable energy credits purchased;
(j) an estimate of the effects of the impact of renewable energy generation or renewable
energy credit purchases on the reduction of greenhouse gas emissions in Florida;
(k) an estimate of the estimated retail rate impact for each class of customers of the utility’s

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17.410 Florida Renewable Energy Credit Market.

1. Investor-owned electric utilities shall issue a request for proposal for a third party administrator to establish and administer, subject to Commission approval pursuant to subsection (4), an electronic renewable energy credit market. The utilities may invite other parties with relevant expertise to participate in oversight of the third party administrator in an advisory capacity. The renewable energy credit market shall allow for the transparent production, buying, selling, and trading of renewable energy credits used to comply with the renewable portfolio standards of Rule 25-17.400, F.A.C. All records associated with the production of and the buying, selling, or trading of renewable energy credits shall be available to the Commission for audit purposes.

(a) Investor-owned electric utilities are encouraged to collectively establish and contract with an independent not-for-profit corporation for the development, administration, and maintenance of a Florida Renewable Energy Credit Market.

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

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

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

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

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

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

3. Non-utility owned Florida renewable energy resources providing net capacity and energy under a purchase power agreement to a Florida electric utility;

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

5. Non-utility owned Florida renewable energy resources greater than 2 megawatts providing equivalent solar thermal energy to offset all or a part of the customer’s electrical needs;

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

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

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(c) A renewable energy credit shall be valid for two years after the date the corresponding megawatt-hour or equivalent solar thermal energy was generated. A renewable energy credit from a customer-owned renewable system less than 2 megawatts shall be valid for two years after the date the renewable energy credit is certified. However, a renewable energy credit shall be retired after it is used to comply with the Florida or any other state, regional or federal renewable portfolio standard.

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

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

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

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

(a) a mechanism to buy, sell, and trade renewable energy credits generated by utilities and Florida renewable energy resources;

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

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resources;

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

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

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

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

III. Municipal and Rural Electric Coop Reporting

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

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

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

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

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

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

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

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

(g) the utility’s plan for additional generation or procurement of Florida renewable energy resources or renewable energy credits for the current calendar year and the following two years;

(h) an estimate of levelized life-cycle cost in cents per kilowatt-hour for each type of Florida renewable energy resource generated or renewable energy credits purchased;

(i) an estimate of the effects of the impact of renewable energy generation or renewable energy credit purchases on the reduction of greenhouse gas emissions in Florida;

(j) an estimate of the estimated retail rate impact for each class of customers of the utility’s generation or procurement of Florida renewable energy resources or renewable energy credits for the current calendar year and the following two years;

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

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

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