

Ruth Nettles

From: ljacobs50@comcast.net
Sent: Wednesday, September 12, 2007 7:47 PM
To: Filings@psc.state.fl.us
Subject: Comments in Undocketed Renewable Portfolio Standard Proceeding
Attachments: SACE - NRDC Comments on RPS filed.doc

Please find attached the comments of the Southern Alliance for Clean Energy and the Natural Resources Defense Council for filing in the above-referenced matter.

Regards,
E. Leon Jacobs

9/13/2007

DOCUMENT NUMBER-DATE
08294 SEP 13 5
FPSC-COMMISSION CLERK

WILLIAMS & JACOBS

ATTORNEYS AT LAW
1720 S. GADSDEN ST, MS 14
TALLAHASSEE, FL 32301

MOSES WILIAMS, ESQ.

E. LEON JACOBS, JR., ESQ.

September 12, 2007

Ann Cole
Director, Office of the Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd
Tallahassee, Florida 32399-0850

RE: In the Matter of: Renewable Portfolio Standard.

Dear Ms. Cole:

On behalf of the Southern Alliance for Clean Energy, and the Natural Resources Defense Council, I have enclosed for filing comments for consideration by the Florida Public Service Commission in this undocketed matter. I thank you for your attention to this matter.

Sincerely,

/s/ E. Leon Jacobs, Jr.

E. Leon Jacobs, Jr.

Enclosures

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In the matter of)
RENEWABLE PORTFOLIO STANDARD)
_____)

UNDOCKETED

Submitted: September 12, 2007

**COMMENTS AND SUGGESTIONS OF THE
SOUTHERN ALLIANCE FOR CLEAN ENERGY, AND OF
THE NATURAL RESOURCES DEFENSE COUNCIL,,
PERTAINING TO RULEMAKING ON A RENEWABLE PORTFOLIO STANDARD**

The Southern Alliance for Clean Energy, Inc., ("SACE") is a nonprofit, nonpartisan organization that promotes responsible energy choices that in turn provide solutions to global warming problems and ensure clean, safe and healthy communities throughout the Southeast.. The Natural Resources Defense Council ("NRDC") is a nonprofit organization whose purpose is to safeguard the Earth: its people, its plants and animals and the natural systems on which all life depends. NRDC has a total constituency of 1.2 million members and activists, including 63,000 in Florida.

SACE and NRDC thank the Florida Public Service Commission ("Commission") and it's Staff for the opportunity to submit comments regarding the establishment of a renewable portfolio standard in Florida. It is our hope that in making these comments we succeed in communicating to the Commission a common vision for the incredible potential that renewable and clean energy resources have in Florida's energy portfolio.

Overview of Renewable Technology and Renewable Portfolio Standards

The Florida Legislature has defined "renewable energy" as

"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 resource, waste heat, from sulfuric acid manufacturing operations. ...”.¹

As a matter of public policy, the Legislature has determined that renewable energy must be promoted and fostered in Florida in order to diversify our electricity fuel sources and reduce dependency on fossil fuels.² The Commission has endorsed this policy by requiring Florida’s investor-owned utilities to implement a standard offer contract pricing for renewable generators through a Fossil Fuel Unit Type Portfolio approach.³ The Standard Offer Portfolio approach encourages development of renewable energy resources by allowing renewable generators to choose from a menu of contracts based on various generating technologies, with different pricing, timing, and operating characteristics.

A renewable portfolio standard (“RPS”) is a defined policy obligating each retail seller of electricity to include in its resource portfolio (that is, the resources procured by the retail seller to supply its retail load) a certain amount of electricity from renewable energy resources.⁴ The retailer can satisfy this obligation by either: (a) owning a renewable energy facility and producing its own power, or (b) purchasing power from someone else's facility, and thus expand development of renewable resources. RPS statutes or rules can allow retailers to conduct "trade" transactions in order to meet their RPS obligation. Under this trading approach, the retailer, rather than maintaining renewable energy in its own energy portfolio, instead purchases tradable

¹ Section 366.91, Florida Statutes.

² Section 366.91(1).

³ Rule 25-17.0832(4)(a), Florida Administrative Code

⁴ N. Rader, S. Hempling, *The Renewable Portfolio Standard: A Practical Guide*, Report prepared for the National Association for Regulatory Utility Commissioners, February, 2001; at pg. Ch.1-1.

<http://www.naruc.org/goto.cfm?returnto=displayindustrynews.cfm&industrytopicnbr=380&page=www.naruc.affiniscape.com/associations/1773/files/rps.pdf>.

credits that demonstrate that someone else has generated the required amount of renewable energy.

RPS policies use minimum targets for renewable energy to set up retail electricity suppliers as drivers of a competitive market for renewable energy technologies, thereby creating active demand among renewable developers. In this way, an RPS serves to establish a market-driven method for increasing and expanding the availability, and impact of renewable energy resources. This market focus changes the Commission's present approach to renewable energy by establishing a floor for active renewable resources, and promoting principles to deliver these resources at the lowest possible cost.

SACE and NRDC propose that the Commission initiate a clearly defined, strategic plan designed to develop a competitive market in Florida for emerging renewable energy technology. The center piece of this plan should be strategies to require utilities in the state to deliver at least 20 percent of net generation from renewable resources by the year 2020. This plan should commence with the adoption of the rule setting in place a mandatory RPS.

Overriding Principles of Florida's Renewable Portfolio Standard

1. Strong Public Policy Foundation

Governor Charlie Crist has established public policy in Executive Order 07-127 to reduce greenhouse gas emissions in Florida. Executive Order 07-127 specifically promotes renewable energy, and an RPS as strategic elements in reducing greenhouse gases. This policy statement dovetails with the Legislature's strong endorsement of renewable technologies as vital to the future energy policy of the state.

2. Emerging Competitive Renewables Market in Florida

Perhaps the most significant feature of an RPS must be its ability to develop a market for the sale of renewable electricity that will support the financing of new facilities. This presents a particular challenge in Florida given the scarcity of indigenous renewable technologies. SACE and NRDC suggest that the most critical task for the Commission is the completion of a deliberate, strategic analysis of the industries that are viable potential renewable electricity technologies in Florida. This analysis must assess the generic viability of these technologies, a process initiated in 2002 by the Legislature, and undertaken by the Commission. SACE and NRDC suggest that the Commission's 2003 renewables assessment⁵ must be expanded to assess research and development of new renewable technologies versus existing technologies, and the cost profiles of each. In addition, the Commission must be informed as to the projected impact of increased demand on the individual technologies, of the infusion of capital, and of particular cost advantages versus competing fossil fuel generation technologies. As the Commission has indicated, only when it understands these vital parameters, can it impose such a significant obligation as an RPS on utilities. Most importantly, only with this background, can the Commission enunciate clear and concise design and structural elements which facilitate cost-effective, efficient market operations.

The rulemaking process can and should proceed on its present timetable. SACE and NRDC suggest consultation with the New Jersey Board of Public Utilities, and other states where an RPS was adopted prior to, or simultaneous with the completion of a potential study.

3. Economic Integration of Renewable Resources Into Florida's Energy Mix

⁵ Florida Public Service Commission-Florida Department of Environmental Protection, *An Assessment of Renewable Electric Generating Technologies for Florida*, January, 2003.

Energy policy in Florida presents another key factor for development of an RPS. The Commission and the Legislature have each recognized a growing need for fuel diversity in electric generation,⁶ as the state's energy portfolio has become weighted dramatically in favor of natural gas generation. The Commission and its Staff have correctly noted the risk of price volatility borne in this reliance on natural gas, and sought to diversify the generation fuel mix. Renewables represent a vital source of energy, which if designed and administered for maximum dispatch, and joined with a strategy for greater use of energy efficiency, can effectively diversify the risks associated with fossil fuel electricity generation. Thus, one of the key objectives of the Commission's policy must be the identification and nurturing of emerging renewable technologies which feature declining costs, thus making them cost competitive with fossil fuel plant additions.

A study conducted at Resources for the Future (RFF) in 1999 found that although both advocates and more agnostic analysts had expected the costs of renewable-based electricity generation to fall during the 1980s and 1990s, the declines over time, were greater than either group expected—in some cases, markedly so.⁷ With proper design of contracts under an RPS, these technologies, when combined with a portfolio policy for demand side resources, will defer new fossil fuel plant additions, or reduce existing energy needs from fossil fuel plants. This is the logical area for investments or incentive funding to bring along technologies fitting this profile.

⁶ Florida Public Service Commission, *A Review of Florida Electric Utility 2006 Ten-Year Site Plans*, December 2006, *A Review of Florida Electric Utility 2005 Ten-Year Site Plans*, December, 2005.

⁷ J. McVeigh, D. Burtraw, J. Darmstadter, and K. Palmer. 1999. *Winner, Loser or Innocent Victim: Has Renewable Energy Performed as Expected?* Washington, DC: Renewable Energy Project, March, Research Report No. 7.

Renewable resources can look more expensive than other supply-side technologies if the cost comparison does not consider the costs avoided in the hours the renewable resource is likely to run, or if it does not consider the renewable resource's other risk-mitigating benefits such as non-fluctuating fuel costs. Wind and solar energy both tend to be available during peak hours, which are higher-cost hours to serve. An accurate avoided cost for many renewable resources would likely be higher than the average cost for all hours. These methods also need to replace existing methods that unreasonably discount the capacity value of intermittent renewables.⁸

This cost comparison requires a true assessment of the avoided costs of fossil fuel plants, one which accurately allocates the costs associated with carbon regulation, in the case of coal plants, and the price volatility associated with natural gas plants.⁹ There is evidence that the overall operating costs of many renewable energy technologies are declining. An RPS designed to maximize the impact of these declining cost technologies will then maximize the economic efficiencies of the generation mix.

In light of these fundamental facts, SACE and NRDC propose that a market for renewable power has the greatest prospect if there is clear government enforcement of the RPS mandate. Even then, the market price for renewables must be greater than energy costs, terms of purchases should be stable, contracts should extend for as long as economically feasible, transaction costs should be minimized, and fair and reasonable interconnection must be available.

⁸ Regulatory Assistance Project, *Clean Energy Policies for Electric and Gas Utility Regulators*, January, 2005.

⁹ New York State Department of Public Service, New York State Energy Research & Development Authority, *New York Renewable Portfolio Standard Cost Study Report II: Volume A*, February, 2004.

Outline of Key Issues

- Eligibility
- Structure, Size and Application of RPS
- Administration

1. Eligibility

In selecting the eligible renewable technologies, the Commission must clearly enunciate its overall policy objectives, and then match technologies to those objectives. As discussed herein, an RPS for Florida can have at least three policy objectives: (i) energy diversity; (ii) greenhouse gas reduction; and (iii) development of emerging renewable technologies. These objectives can conflict with each other, according to the specific characteristics of eligible resources. In other states, structured tiers are often used in an RPS to accommodate competing public policy objectives, to provide strategic directives among competing technologies, or to direct incentives to emerging technologies.

The Commission may accommodate different objectives by designing the RPS with a “resource tier” which gives direction on RPS support for various renewable resources. This determination conclude that specific resources will not be eligible for the benefits of an RPS. In other cases, the Commission may prefer to adopt a complementary policy measure. SACE and NRDC recommend that the RPS should be structured with resource tiers to address RPS support for existing technologies, for emerging technologies, and for solar and wind. Other tiers should be considered should the Commission deem them necessary to accommodate strategic issues in the state’s energy policy. SACE and NRDC further recommend that the Commission develop a

separate Energy Efficiency Performance Standard (“EEPS), to operate in conjunction with the RPS.

The argument has been made that renewable technologies already thriving in the state, though authorized in statute, should not receive RPS support because they have survived without the RPS. This is not recommended here by SACE and NRDC. However, it is recommended that the Commission undertake an analysis which addresses the fundamental, and most important economic question: without RPS support, will the existing facility continue to operate? Past success, even success built on pre-existing government programs, does not guarantee future viability. Excluding from RPS eligibility the entire group of existing resources is likely to make economic sense if the entire group (or most of it) clearly does not require support to operate profitably over the long term.¹⁰ But if only a subset of existing facilities requires support, a discrete, strategic analysis will need to determine whether the cost of including the entire group of existing facilities -- and raising the RPS percentage requirement to accommodate it -- would outweigh the benefits gained. Costs may outweigh benefits even when the at-risk subset is less costly than the new facilities that would replace them.

The goals proposed herein allow existing renewable technologies to participate with the view that they have been positive contributors, and bring momentum to the development of the market. However, a competitive renewables market in Florida can only grow with the addition

¹⁰ The PUC of Texas conducted such an analysis and concluded that allowing existing resources, predominantly hydropower, to qualify for tradable renewable energy credits was not worth the increase in the cost of the RPS policy. The PUCT estimated that these costs would increase by 300 percent during the program's first compliance period if existing resources were included and the obligation was raised to accommodate them. The record reflects a dispute between parties who contended that hydro resources are at risk, and parties who contended the opposite. As a compromise, and considering the state's RPS legislation that referred to a cumulative renewables capacity target that included existing resources, the PUC decided to allow existing resources to offset the obligation of retailers who own or contract for those resources, while raising the obligation for new resources on all other retailers. The offset is not tradable. (Texas Substantive Rule, 1999)

and expansion of emerging technologies. RPS policies and allocation of resources must reflect this choice.

In assessing technologies, some key issues arise:

- Do existing renewables require support?
- Should projects already receiving benefits from other programs, i.e. PURPA, also receive benefits from an RPS?
- Should generators have to meet location requirements?
- How can policy makers resolve competing policy goals?
- What special issues are associated with specific technologies and fuels?

Most of these can be resolved by adhering to the directive to promote cost-effective resources in a competitive market.

i. SACE and NRDC propose that technologies in biomass and waste heat be included as eligible technologies in Florida's RPS, but on a tier which offers RPS support at existing levels of generation throughout the operation of the RPS.

ii. SACE and NRDC propose that the RPS exclude nuclear energy for any purpose, including generation of hydrogen.

iii. SACE and NRDC propose that the RPS include municipal solid waste as an eligible technology, however RPS support would be offered beginning at a percentage level commensurate with percentage of 2001 MSW generation to 2007 net generation for the state, and decline to one-half of this percentage in 2012.

iv. SACE and NRDC propose that solar, ocean, combined heat and power, and wind energy are eligible and be nurtured as emerging technologies.

2. Structure, Size and Application of RPS

a. Mandatory compliance. The RPS must be mandatory in order to maximize prospects for a viable competitive market for renewables. Costs of compliance represent a major

concern in states with an existing RPS. In order to minimize the potential for high compliance costs, there must be a penalty for noncompliance which equates to 200-300 percent of the market price of renewable energy credits. This compliance policy should operate in tandem with other incentives to spur investment by retail providers in renewable technology development, rather than paying the enforcement penalty.

b. Compliance Schedule. The RPS should adopt the Governor’s 20 percent goal as specified in the public policy statement. The proposal by the Florida Municipal Electric Association for a fixed investment in renewables is not acceptable to SACE or NRDC, most specifically because it flies in the face of the true purpose of an RPS; which is to expand the use of renewables to the greatest extent possible in the competitive market.

SACE recommends that the RPS should adopt a staggered enforcement, as done in many states, beginning with a 4 percent goal and increasing by 1.5 percent each year as follows:

<u>Year</u>	<u>Goal Enforced</u>
2009-2011	4%
2012	5.5%
2013	7%
2014	8.5%
2015	10%
2016	11.5%
2017	13%
2018	17%
2019	19%
2020	20%

The Commission’s 2003 renewable study reported that in 2000, the renewable technologies then specified in statute totaled approximately 3 percent of the state’s net generation. This generation total consisted primarily of municipal solid waste (MSW), biomass materials (primarily agricultural waste and wood residues), waste heat, and a small contingent of hydro-electric

generation. Virtually all of these resources were of 1980 or early 1990s vintage. The study did not project potential generation potential for newer renewable technologies, nor did it address the potential for greater efficiencies in existing technologies, or the potential generation from non-Florida based technologies.

The initial RPS requirement must take effect far enough in the future to allow for market entry of these newer technologies. This ensures competition among all types of eligible renewable resources that are reasonably considered to be in competition with one another, as opposed to the 1980 vintage technologies found in the Commission's report. For this reason, Florida's RPS should commence on January 1, 2009, or later according to the Commission's discretion.

The predictable, initial ramp-up schedule of 1.5% a year provides a steadily growing market for renewable energy which, in turn, promotes industry development, technology advancement, and cost reductions. In addition, a stable rate of increase will prevent "boom and bust" cycles in the renewables industries.¹¹

c. Obligated Retail Providers. The RPS should obligate all providers of retail electric service in the state to meet its goals. This promotes a diverse, active and dispersed competitive renewables market. Retail sellers clearly fall under the state's jurisdiction. In addition, such an approach most appropriately allocates cost responsibility for renewables, and minimizes entry barriers in the competitive market. These add up to substantial enhancement in the economic efficiency of retail customer shopping decisions.

d. Structure and Existing Renewable Technologies. -In Florida, the existing technologies are primarily biomass and municipal solid waste. As stated above, these industries

¹¹ Hempling, Rader, *The Renewables Portfolio Standard: A Practical Guide*, supra, note 4.

bring momentum in establishing a competitive renewables market. However, the RPS must enunciate policy which ties market growth to the expansion of solar, wind, ocean, CHP, distributed generation, and other such emerging technologies.

e. Solar carve-out. Governor Crist has distinguished wind and solar technologies for having strong potential in an RPS. SACE and NRDC endorse this policy choice by the Governor because they both demonstrate the key features needed in a competitive renewables markets; they each are experiencing declining development and operational costs, and expanded market acceptance.

Demand for photovoltaic (“PV”) solar is being driven by policies that reduce the cost of solar systems, increase the revenue for solar operators, and ease solar installation. New Jersey is one state among many now placing extensive focus on solar for this reason. Germany has also used legislation effectively, and now installs over one gigawatt of PV annually. In Florida, it is projected that a 2% solar goal would result in the installation of 4 Gigawatts of solar power by 2020. This capacity would largely come in the form of distributed generation on new and existing building structures, such as rooftops.¹²

Thus, SACE and NRDC endorse the proposal of a 4% carve-out for solar in the RPS, consisting of 2% PV and 2% thermal. The concept of a revenue-based cap on solar expenditures is reasonable, however, this cap should be designed primarily to expand market offerings, and should be accompanied by incentives to expand investment in solar in a way which enhances economic benefits of solar in the renewables market.

f. Energy Efficiency Performance Standard. Energy efficiency resources generally impact the state’s electricity mix by reducing demand for electricity rather than

¹² The Vote Solar Initiative, Putting the Sun in the Sunshine State: Developing a World Class Solar Industry in Florida, August, 2007.

providing additional supply. They are a vital and valuable resource in addressing the state's energy needs. However, it is not anticipated that energy efficiency resources ("EE") would be a part of a competitive market for renewable technologies, which generally are supply options. Though renewable technologies have strong synergies with EE, the differences in their deployment and economic models suggest different mechanisms to promote them in the states energy mix.

SACE and NRDC propose the adoption of an energy efficiency performance standard, alternatively referred to as an energy efficiency portfolio standard ("EEPS"). An EEPS requires electricity service providers to meet a portion of their annual increase in electricity demand through energy efficiency measures. This type of policy treats energy efficiency as an invisible power plant and requires that a set percentage of new electricity come from this source.

The EEPS essentially sets a goal for energy savings and requires that utilities meet that goal. The EEPS is *performance-based*—it sets a goal for energy savings and requires that utilities meet that goal. This characteristic is attractive to lawmakers interested in funding results-oriented energy efficiency efforts. The EEPS can be increased or decreased over time.

It is especially appropriate that an EEPS be considered in conjunction with the enactment of an RPS. Like the RPS, an EEPS will stimulate demand for EE technologies and foster a more active deployment. Also, like an RPS, the technologies delivered to the consuming public will likely bring lower cost energy into the energy mix. As discussed herein, the EEPS will work in conjunction with an RPS to more effectively integrate economic, clean supply resources, and economic clean demand side resources into the state's energy mix, and thus defer deployment of new fossil fuel plant.

In making this proposal, SACE and NRDC acknowledge the existence of a formidable barrier to the viability of an EEPS; namely the Commission's present policy on measuring the cost effectiveness of EE resources. The Rate Impact Test ("RI") is a substantial impediment to the expansion of EE resources in Florida. Florida is the lone state among the those states which actively deploy EE, to still employ the RIM test. SACE and NRDC therefore propose that the Commission undertake a policy review of the RIM and its impact on the EEPS.

3. Trading Compliance

In shaping the RPS obligation, states could require each retail seller to generate electricity from its own renewable energy facilities or purchase electricity from a renewable facility owned by others. Alternatively, the state could require each retailer to acquire tradable renewable energy credits ("TREC) that represent the production of electricity from renewable facilities. The Commission has broached this issued in Rule 25-17.280, Florida Administrative Code, which specifies ownership of TRECs in the standard offer contract setting. SACE and NRDC recommend that the Commission request development of proprietary software to operate a TRECs program for the RPS and establish a task force to organize the infrastructure and procedure for the trading of TRECs in Florida.

4. Administration

i. *Regulatory Oversight.* SACE and NRDC propose that the Commission provide regulatory oversight of the RPS, essentially for certification and compliance requirements.

ii. *Compliance Verification.* SACE and NRDC propose further that information technology be specifically developed to facilitate fiscal administration of the RPS, and that the operation of this technology be assigned to an independent organization, perhaps the Florida Reliability Coordinating Council. In addition, SACE and NRDC propose that the RPS include compliance flexibility provisions that include: (1) annual accounting periods; (2) a three-month true-up period; (3) banking of renewable credits; and (4) force majeure exemptions.

Need and Recommendation for a Potential Study

The Legislature in 2002 directed the Commission, in collaboration with the Florida Department of Environmental Protection to conduct a study to assess the feasibility and potential of renewable energy in Florida, in anticipation of developing public policy positions.¹³ As a result of its detailed study of renewables, the Commission highlighted the need for clear and precise baseline data, and clear strategic direction if implementation of an RPS is to be successful.¹⁴ Further, in its agency long-range plan, the Commission's planning regarding renewable energy is characterized as follows:

“The Commission is also developing more comprehensive information on the availability and cost-effectiveness of renewable resources in the state. Only when we better understand the available options can we proactively require additional activity on the part of utilities.”¹⁵

The Commission, in its own words, recognizes the need for a comprehensive, strategic analysis of potential renewable technologies before an RPS can have a real potential to succeed.

¹³ Chapter 2002-276, Laws of Florida, HB 1601/SB1142.

¹⁴ Florida Public Service Commission-Florida Department of Environmental Protection, *An Assessment of Renewable Electric Generating Technologies for Florida*, January, 2003.

¹⁵ Florida Public Service Commission, *Long-Range Program Plan: Fiscal Year 2007-08 through 2011-12*, September, 2006, at 8.

In order to expedite the current rulemaking process and remain true to this standard, SACE and NRDC propose that the Commission utilize the comprehensive June, 2007 report of the American Council for an Energy Efficient Economy¹⁶ as a potential study in transition, while it authorizes a new potential study to be completed within 12 months.

Florida Public Service Commission's Jurisdiction
to Establish a Renewable Portfolio Standard

By powers delegated to the Commission in the Florida Energy Efficiency and Conservation Act, as well as its general powers, there is clear statutory authority supporting the Commission's establishment of an RPS. The fact that this action is initiated without express legislative initiative in no way diminishes that authority. While most of the RPS policies around the nation were established via express legislative statements, the policies in Arizona, New Mexico, and Pennsylvania were established through regulation (AZ and NM) or multi-party regulatory settlement (PA).

Respectfully submitted this 12th day of September, 2007.

¹⁶ N. Elliott, et. al., *Potential for Energy Efficiency and Renewable Energy to Meet Florida's Growing Energy Demand*, ACEEE Report No. E072, June, 2007.

Southern Alliance for Clean Energy
Natural Resources Defense Council

By:

/s/ E. Leon Jacobs, Jr.

E. Leon Jacobs, Jr.
Williams & Jacobs
1710 S. Gadsden St., MS 14
Suite 201
Tallahassee, Florida 32301
850-222-1246
850-599-9079 fax