July 18, 2008

Mr. Mark Futrell
Florida Public Service Commission
2540 Shumard Oak Blvd
Tallahassee, FL 32399

RE: Southern Alliance for Clean Energy's Comments on July 11, 2008 RPS Workshop

Dear Mr. Futrell:

Please accept the following comments by Southern Alliance for Clean Energy on the Florida Public Service Commission RPS rulemaking workshop held on July 11, 2008.

Introduction / Policy Objectives
Southern Alliance for Clean Energy (SACE) wishes to thank Governor Crist, the Florida Legislature and the Florida Public Service Commission for their commitment to expand the use of renewable energy in Florida.

In HB 7135, the Florida Public Service Commission is directed to establish a Renewable Portfolio Standard (RPS).[1] The RPS must require each utility to supply a minimum percentage of its total annual retail electricity sales from renewable energy produced in Florida. The utility may supply this renewable energy directly, by procurement, or through renewable energy credits. This draft rule must be presented to the Legislature by February 1, 2009.

The Commission is challenged to carefully balance several interests. Any interest, if taken to its extreme, could conflict with other statutory intent and state policy. Nevertheless, we see no obstacle to the state effectively balancing these competing objectives. Based on the testimony presented on July 11, we believe that there is wide agreement that a strong RPS is compatible with other interests of the state.

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 that must be considered in designing and implementing the RPS. Considering intent and policy in these two sections, there appear to be four values that should weigh most strongly in designing the RPS.

First, the RPS should contribute towards achieving substantial reductions in greenhouse gas emissions on a lifecycle analysis basis. We note that for many resources, there is considerable uncertainty in measuring lifecycle emissions of greenhouse gases, particularly when land use

[1] §366.92, Fla. Stat. (2008)

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change effects and resource import/export issues are taken into consideration. The Legislature's intent in linking the RPS to greenhouse gas emission reductions is also present in the direction to allow recovery of prudent costs by an energy provider of a *zero-emission technology* up to 110 megawatts.[2]

Second, the RPS should support a long-term strategy that promotes rapid development of new and more efficient renewable energy technologies. In particular, we note that the Legislature has appropriated $42.5 million for grants to renewable energy projects including those using biomass, solar photovoltaic, and wind resources, for fuels, small scale generation, and grid scale generation. Furthermore, the Legislature appropriated $8.75 million to Florida Atlantic University to advance ocean energy research.

Third, the RPS should be designed to stabilize and minimize energy costs to the consumer. As discussed below, an essential component of this concept is the minimization of cost risk – cost considerations should not be limited to some arbitrary average cost analysis. Given the skyrocketing capital costs of conventional power plant construction, especially new estimated nuclear costs, and natural gas fuel costs, alternative renewable technologies can insulate consumers from the price shocks of conventional generation construction and operation. The comment by Florida Crystals that the average price of retail electricity has increased over 40% in the past eight years, and that taxes represent nearly 15% of the average retail electricity bill, provides sound evidence that an RPS that raises overall electricity rates by even 15% cannot be considered "cost prohibitive." Nevertheless, we feel that such an increase in overall electricity prices is unlikely to occur due to implementation of an RPS.

Fourth, the RPS should be designed to maximize job and business development in Florida. This is clear from the emphasis on "renewable energy produced in Florida." Nevertheless, the RPS does not prohibit the import of, for example, biomass fuel from other states. These issues must be considered in the Commission's analysis.

Prepare the RPS in a Planning and Forecasting Framework

The Commission is directed to forecast the levelized cost and installed capacity of renewable energy through 2020.[3] The Commission is also leading or participating in other related policy matters, most notably, the five-year review of energy efficiency goals in the FEECA process. We urge the Commission to coordinate the development of the levelized cost and installed capacity forecast with the FEECA process in order to promote a more comprehensive and consistent forecast of electricity demand, electricity generation options, and energy efficiency program options.

The Commission's assessment of renewable energy potential for the RPS ties in to the FEECA goal-setting analysis in three ways.

[2] §366.92(3)(c)(4), Fla. Stat. (2008)
[3] §366.92(3)(a), Fla. Stat. (2008)

- First, the baseline forecast of energy sales against which the RPS goals will be set will be substantially affected by the FEECA goals. The approximate level that these goals could be set at should be available from the FEECA goal-setting analysis in January, which would be in time for the Commission to make a final adjustment to the RPS goal prior to submitting a draft rule to the legislature.

- Second, the energy generated by renewable energy resources will significantly affect the dispatch of non-renewable generation resources. As a result, the avoided costs estimated during the cost-effectiveness evaluation in the FEECA process will change substantially. Thus, the Commissions expectations for RPS goals should be integrated into the FEECA process to identify the mix of strategies that best complements renewable energy development.

- Third, the shift to renewable energy and energy efficiency may significantly affect the needs for transmission and distribution system improvements. These shifts in investment patterns need to be identified and included in the analyses.

Looking forward, we recommend that the commission assess and adjust the RPS goals periodically based on energy efficiency gains reflected in the FEECA goals, and likewise, assess as well as adjust FEECA assumptions based on the dispatch of renewable energy.

Ideally, the levelized cost and installed capacity forecast would provide the Legislature with a clear picture of utility system costs and future development options, including the following:

- Costs to operate the existing systems, broken down into component parts including distribution, transmission, generation, customer service, conservation, and demand response, with sufficient information to explain how these component costs of energy services are assembled into the total rates charged to customers on average. Planned and potential system retirements should be specifically identified and linked to estimates of potential cost savings.

- Forecast levels of system demand and energy use under baseline assumptions, identifying the impact of recent federal energy legislation, and projecting the potential impact of HB 7135 initiatives such as updated building and appliance codes.

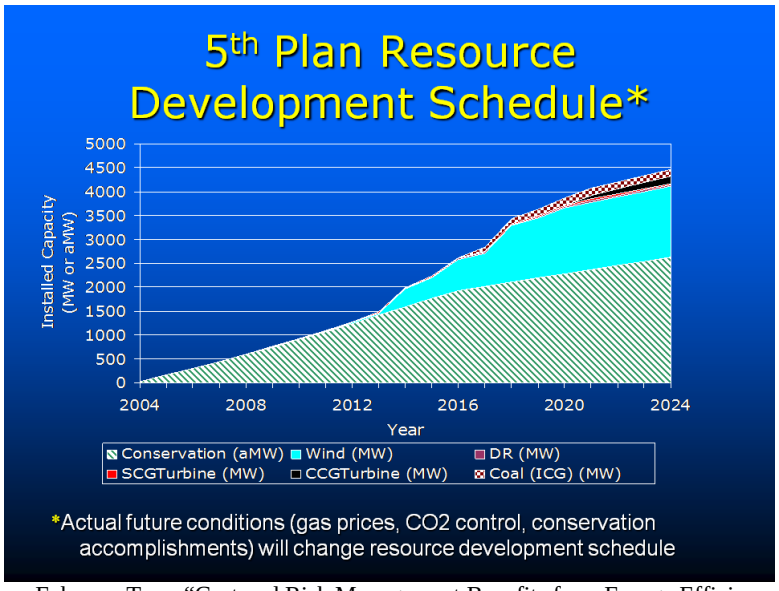
- Forecast costs of investment in infrastructure unrelated to the construction of specific generation projects (e.g., new transmission and distribution to serve growth).

- Costs of potential resources to meet future energy services needs, including natural gas, nuclear, renewable energy, energy conservation, and demand response. Costs should be expressed in four components as applicable to the specific resources: capacity cost, capital cost of energy, operations and maintenance, and energy cost (fuel and fuel-related costs). Assumptions as to the load or capacity factor associated with the deployment of each resource should be described, and varying assumptions would be appropriate.

While some of these elements go beyond the required evaluation of renewable energy resources, it would serve the public interest to coordinate the various forecasts under preparation at this time to ensure that cost, supply and demand forecasts are presented in consistent manner, now and in the future.

The Commission may also wish to initiate a statewide energy planning model to integrate all of these forecasts in a manner that allows for identification of least-cost, least-risk strategies. The "Fifth Power Plan" by the Northwest Power and Conservation Council provides an excellent model for setting goals for renewable energy, energy efficiency, and conventional generation resources in an integrated manner.

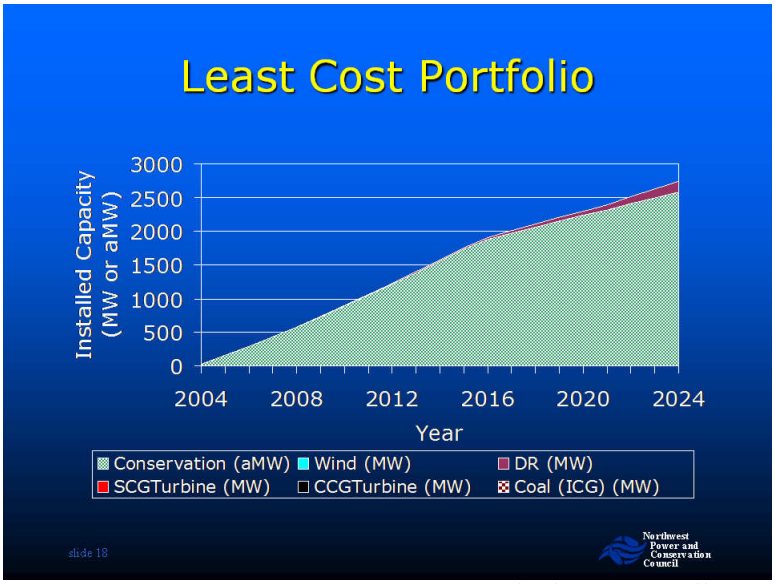
The Northwest Plan considered over 100 potential system plans with varying levels and timing of investment in generation options (including renewable energy) and energy efficiency programs. The selected resource development schedule, illustrated below, represents a "Lesser Risk Portfolio" analyzed by the Council.



Source: Eckman, Tom, "Cost and Risk Management Benefits from Energy Efficiency in the Northwest Power and Conservation Plan," NARUC presentation, February 2005.

The Council could have selected its "Least Cost Portfolio," illustrated below, which would have saved $1 billion in investment costs. By selecting the "Lesser Risk Portfolio," the system avoids risk estimated at $4 billion. This risk was derived from the financial risks associated with to load growth, natural gas fuel costs, spot market electricity costs, carbon tax, and hydroelectric and other resource performance. The Commission could have selected its "Least Risk Portfolio" which would have represented a somewhat more expensive "insurance policy" than the selected portfolio. In selecting a portfolio that more risk averse (rather than cost averse), the Council has taken a cost stabilization approach to management of customer costs.

In contrast, the "Least Cost Portfolio" requires less capital investment, but exposes utility customers to the risk of higher rates under future conditions in which the "Least Cost Portfolio" is not the optimal portfolio. If the Northwest Plan had recommended this approach, it would have been similar to buying a house without purchasing insurance.



Source: Eckman, Tom, "Cost and Risk Management Benefits from Energy Efficiency in the Northwest Power and Conservation Plan," NARUC presentation, February 2005.

The analysis for the Northwest Plan illustrates the advantage of considering goals for energy efficiency, renewable energy, and other generation options in an integrated multi-utility system planning framework. While building and operating a system planning model similar to that used for the Northwest Plan is not feasible in the next several months, insights from that planning approach could be used to assist the Commission with ensuring coordination among its renewable energy and energy efficiency planning processes.

It is our understanding that Department of Energy funding may be made available to the State of Florida through Lawrence Berkeley National Laboratories (LBNL) to assist with its renewable energy forecasting as required by statute. If LBNL is involved, the Commission may wish to make use of the existing contractual relationship between LBNL and the Northwest Power and Conservation Council to provide technical assistance in a coordinating forecasts as suggested above.

Set Incentives to Favor Low Greenhouse Gas Emission Strategies

The Commission is specifically and generally directed by HB 7135 to consider factors other than cost in setting the rules for renewable energy. In addition to being given specific authority to select some type of incentive for "wind and solar photovoltaic over other forms of renewable energy,"[4] the Commission is also directed to consult with the Florida Energy and Climate

[4] §366.92(3)(b)(3), Fla. Stat. (2008)

Commission. Its responsibilities include implementing broad Legislative intent and state policy including several provisions that affect how an RPS should be structured, including:

- Legislative intent that "there is significant value to Florida consumers that comes from investment in Florida's energy infrastructure that increases system reliability, enhances energy independence and diversification, stabilizes energy costs, and reduces greenhouse gas emissions."[5]

- Policy direction to "recognize and address the potential of global climate change wherever possible."[6]

- Policy direction to "[c]onsider, in [the state of Florida's] decisionmaking, the social, economic, and environmental impacts of energy-related activities, including the whole-life-cycle impacts of any potential energy use choices, so that detrimental effects of these activities are understood and minimized."[7]

Thus, HB 7135 provides the Commission with guidance to consider issues in addition to cost and technical potential in fashioning a state RPS.

We recommend that the Commission consider the following factors in structuring an RPS.

- The highest level of consideration should be given to wind and solar.

- Among other renewable energy types, the life-cycle greenhouse gas emissions should be explicitly considered in determining the extent to which a resource contributes towards achieving the renewable energy standard.

- For those renewable energy types that cause detrimental social, economic or environmental impacts, those impacts should be explicitly limited by constraining the extent to which a resource contributes towards achieving the renewable energy standard.

Viewed from a long-term perspective, these same policies are also in the economic interest of Floridians. In the early years of an RPS, emission free technologies may have higher levelized costs, but those technologies' costs will quickly attain parity with conventional generation. For instance, solar energy is expected to gain parity with conventional generation by 2015[8], but will require an RPS incentive to stimulate early investment to create economies of scale that will

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[5] §377.601(1), Fla. Stat. (2008)
[6] §377.601(2)(a), Fla. Stat. (2008)
[7] §377.601(2)(j), Fla. Stat. (2008)
[8] For the first time, solar power is beginning to reach cost parity with conventional energy sources. As solar prices decline, and the capital and fuel costs for coal, natural gas, and nuclear plants rise, the U.S. will reach a crossover point by around 2015. See Utility Solar Assessment Study, June 2008 at http://www.cleanedge.com/reports/pdf/USA_Study.pdf ; DOE is encouraging and anticipating solar competitiveness by 2015. *See* Solar America Initiative at http://www1.eere.energy.gov/solar/solar_america/

accelerate the development and implementation of solar technology in Florida coupled with the co-benefit of creating jobs in Florida.

Three primary approaches have been used in RPS structures existing in other states to encourage specific types of renewable energy: multipliers, carve outs, and tiered goals.

- Multipliers are commonly used to provide an extra incentive to particular renewable energy resources. For example, solar energy could be awarded 1.5 times the REC that bioenergy is awarded. However, the statutory definition 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."[9] Furthermore, several presentations at the workshop suggested that multipliers are ineffective tools for promoting solar energy or would need to be set at very high multiples to have a benefit.

- A carve out is an incentive that requires the utility to obtain a specific quantity of energy from a pre-selected renewable source. While carve outs offer less flexibility to utilities in meeting their RPS requirement than the multiplier approach, they provide more certainty in realizing the objective of increased utilization of the preferred resource.

- Tiered goals are similar to a carve out but tend to provide more flexibility in limiting the use of some resources, while promoting the use of others. It is an effective method for grouping resources by fuel source and emission eligibility criteria and limiting or promoting the use of certain resources over time.

We consider all three of these approaches to be acceptable, but suggest that the Commission focus on a combined carve out/tiered goal approach.

The approach we prefer is to classify renewable energy resources into three tiers as follows.

- Tier 1: Resources with negative or near-zero life-cycle greenhouse gas emissions;

- Tier 2: Resources that result in a significant net reduction in life-cycle greenhouse gas emissions when compared with an average state emissions profile associated with electricity service;

- Tier 3: Tier 1 or 2 resources that also have a significant social, economic or environmental impact in addition to associated greenhouse gas emissions.

The RPS should then be structured with specific limits as to how much of the total RPS may be met with resources from Tier 2 and Tier 3. The RPS should also be structured with a specific carve-out for wind and solar photovoltaic energy that establishes a separate minimum compliance level for those resources.

[9] §366.92(2)(d), Fla. Stat. (2008)

We expect that biomass resources will play the largest role in meeting the RPS, particularly during the first five to seven years. With the pressures of increasing fuel costs and fuel-supply volatility, rising construction costs and the likelihood of federal climate change legislation, the time is right for Florida to lead in the development of biomass resources. Florida is rich with woody biomass, logging residues, mill wastes, agricultural residues, and significant potential for energy crops.

Since transportation costs are more significant for biomass fuel plants than for fossil fuel plants, it is likely that biomass plants will be smaller and distributed more widely than conventional power plants. There are a wide range of technologies available to generate power from biomass; we tend to favor gasification approaches as causing less pollution and being more compatible with efficient combined cycle technology. With careful deployment of biomass-fueled gasification, combined heat and power (CHP), and pyrolysis, Florida can reap greater environmental and economic benefit than conventional electric generation can offer.

Balance Economic Impacts in a Long-Term Planning Framework

The Commission is directed to balance what are obviously conflicting considerations. Although it is charged to "minimize the costs of power supply," it is also directed to "minimize the volatility of fuel costs"[10] or, elsewhere, adopt policy that "stabilizes energy costs."[11] If the Legislature had intended a "least cost" policy, for example, it would not have limited the RPS to "renewable energy *produced in Florida*"[12] (emphasis added) or allowed for added weight to energy provided by solar photovoltaic panels[13] (which are currently a relatively high cost option). Clearly the Legislature realized that it was adopting something other than a "least cost" policy.

The Commission can effectively address cost considerations through setting the RPS at an aggressive, but not unreasonable, level, by using ongoing cost evaluation, and in the context of appropriate financial incentives. We anticipate that other parties may suggest some form of cost limitation or "safety valve" in consideration of the potential economic impact of higher energy costs. In order to promote the smooth functioning of the market, we oppose any arbitrary cap on cost or a "safety valve."

The statewide planning framework described above is an ideal approach for considering the cost impact of various levels of an RPS. Different levels of an RPS can be considered in such a system to determine the potential economic impacts, including both increased cost and decreased risks (e.g., more stable energy costs).

[10] §366.92(1), Fla. Stat. (2008). Although it provided such intent, HB 7135 did not provide any statutory direction as to the criteria or process that the Commission should use to minimize costs. In contrast, much of the remaining intent language is specifically reflected in directed actions or review standards set out in Section 42 of the law.
[11] §377.601(1), Fla. Stat. (2008)
[12] §366.92(2)(e), Fla. Stat. (2008)
[13] §366.92(3)(b)(3), Fla. Stat. (2008)

The ongoing review of individual renewable energy projects or REC transactions by the Commission provides an additional opportunity to consider the economic impact of renewable energy. The Commission is required to provide for "the conditions under which noncompliance shall be excused due to a determination . . . [that] the cost of securing renewable energy or renewable energy credits was cost prohibitive."[14] We suggest that the appropriate trigger for an "excuse" is a determination by the Commission that a utility proposal to secure renewable energy or renewable energy credits is too expensive and that the record does not indicate less costly alternatives. The Commission should not make such a determination solely on the basis of, for instance, inadequate response to an RFP that may include excessively burdensome timeframes or conditions.

Furthermore, in balancing consideration of economic impacts, the Commission should weigh not only the cost to energy consumers, but also the new job and business creation benefits resulting from the policy to "encourage investment within the state."[15] Such considerations will naturally lead to a *somewhat* more aggressive RPS and are clearly what is intended by the Legislature.

The Commission is directed to manage the cost of compliance with the RPS and is specifically authorized to use "annual cost recovery" and "incentive-based adjustments to authorized rates of return."[16] We interpret this to imply that the Commission should treat renewable energy using the same regulatory standards as other energy generation options, but that it may increase the authorized rate of return by some amount to reward compliance with the RPS. We encourage the Commission to authorize a further increase in the rate of return for any utility that substantially exceeds compliance with the RPS.

We note that the North Carolina General Assembly chose to direct its utility commission to authorize recovery of most costs associated with its portfolio standard through the existing annual fuel and fuel-related costs adjustment proceeding. We advise against this approach because it places investments in renewable energy at a disadvantage compared to conventional generation since immediate cost recovery for utility-owned generation facilities precludes the utility's opportunity to earn an ongoing return on its investment. While the Commission is directed to use this type of cost recovery for cost recovery for zero greenhouse gas emitting demonstration projects, the language authorizing "cost recovery under the environmental cost-recovery clause" is not used in any other context.[17]

Regarding noncompliance, the Commission could consider using a reduction in authorized rate of return for failing to meet the RPS. At a minimum, no increase in the authorized rate of return should be allowed if the Commission provides determination that a utility should be "excused" from compliance, as discussed above. Another option would be to require an expenditure on renewable energy research and development without allowing cost recovery of such expenditures. Regardless of what method is chosen, if RECs are available at a prudent cost and a

[14] §366.92(2), Fla. Stat. (2008)
[15] §366.92(1), Fla. Stat. (2008)
[16] §366.92(3)(b)(1), Fla. Stat. (2008)
[17] §366.92(4), Fla. Stat. (2008)

utility fails to purchase RECs, the penalty should be set at an amount that substantially exceeds the amount saved due to noncompliance.

Set Interim Goals to Motivate the Market

Since the PSC 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 3% in 2010, which is achievable based on current data, a midpoint of 8% by 2015 representing what may be the potential for readily developable renewable resources, and an end point of 20% (consistent with Gov. Crist's Executive Order 07-127).

Within this goal, we suggest that by 2015 the RPS should include a carve out for wind and solar photovoltaic of 15% of the annual standard, a maximum contribution of 15% of the annual standard for Tier 2, and Tier 3 resources. Our suggested approach is illustrated in the table below.

	Share	2010	2015	2020
Total Standard		**3%**	**8%**	**20%**
Solar/wind carve-out	15% minimum	> 0.45%	> 1.2%	> 3%
Tier 1		Up to 3%	Up to 8%	Up to 20%
Tier 2	15% max	< 0.45%	< 1.2%	< 3%
Tier 3	15% max	< 0.45%	< 1.2%	< 3%

The percentages we propose are illustrative and the Commission should use the results of its resource potential and cost analysis to establish the shares and standards for 2010 and 2015. Furthermore, designation of resources to the tiers will depend on the Commission's findings regarding resource availability and performance. To illustrate our approach, we anticipate that resources may be assigned as follows:

- Tier 1: Solar and wind are obviously Tier 1 resources due to their near-zero lifetime greenhouse gas emissions and near-zero lifetime environmental impacts. Other Tier 1 resources could include ocean energy and biomass gasification with biochar production (and sequestration).

- Tier 2: Biomass with negligible environmental impacts would qualify in this category when the resource is shown to have significant lifecycle greenhouse gas emissions.

- Tier 3: Biomass with significant environmental impacts would qualify in this category.

We also note that it appears that existing renewable energy generation is included in the qualifying definition, and thus existing generation should be taken into consideration when establishing the RPS for 2010.

We also recommend that by 2014 the Commission should reevaluate the 2020 goal in light of experience and technology development. Alternatively, the Commission could establish a reevaluation process on a regular schedule every three to five years.

Use Technology and Market Mechanisms to Ensure Compliance

The Commission should allow banking, but not borrowing, of RECs for compliance in the following year to encourage accelerated development of renewable energy resources. We believe this is the intent of allowing a period of time during "which renewable energy credits may be used."[18] It is notable that HB 7135 does not provide for a period of time during which renewable energy credits may be obtained; in other words, the RECs must be obtained prior to or during the compliance period. We do not see any need to limit the scale of banking as long as it is limited to one year.

We encourage the Commission to implement its own or a third party administered electronic issuance and tracking system for RECs to provide for monitoring of compliance with the RPS.[19] We advise against a system requiring registrations and compliance reports, for instance, due to the excessive administrative burden on utilities, Commission staff, and the public to track compliance.

Such a system will account for the creation, use for compliance, and retirement of RECs in a consistent manner for all renewable energy facilities and utilities affected by RPS requirements. The system's reports will provide a basis for the Commission and the public to monitor compliance with the RPS, which could be easily referenced by each utility's required annual report.[20] The system will facilitate the smooth functioning of a market for RECs by easing the ability to purchase and sell RECs and providing price transparency that may encourage market development.[21] Furthermore, such a tracking system will facilitate any necessary transition in the event that "new provisions of federal law" require national compliance.[22]

The Commission should also consider whether municipal electric utilities and rural electric cooperatives should be required to participate in such an electronic tracking system. For the reasons outlined above, and to facilitate consistency between the two utility reporting requirements, such a requirement would be in the public interest.[23]

Further Define Eligible Resources

The Florida Legislature has directed the Commission to use a fairly specific list of renewable energy resources.[24] One possible source of confusion is that renewable energy is defined twice in

[18] §366.92(3)(b)(4), Fla. Stat. (2008)
[19] §366.92(3)(b)(5 -7),Fla. Stat. (2008)
[20] §366.92(3)(c), Fla. Stat. (2008)
[21] North Carolina Utilities Commission, *Order Adopting Final Rules In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397*, Docket No. E-100, Sub 113, February 29th, 2008.
[22] §366.92(3)(b)(8), Fla. Stat. (2008)
[23] §366.92(3)(c) and (5), Fla. Stat. (2008)
[24] §366.91(2)(d), Fla. Stat. (2008) defines 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,

the statute. However, the reference to §377.803 defines "Florida renewable energy resources," a phrase that is no longer used in §366.92. The operative definition, provided in §366.91(2)(d) is a straightforward definition of what resources should be allowed to count towards energy efficiency.[25] Nevertheless, for the purpose of evaluating the potential for each resource to be installed by 2020, the Commission should refine the list in two ways.

First, the Commission should differentiate between commercially available technologies such as wind, solar and biomass, and other promising technologies, such as ocean energy. Alternatively, the Commission could consider the potential time frame for development of resources; solar and biomass being relatively easy to deploy in the next five years, while offshore wind and ocean energy would take at least seven years to deploy at utility scale.

We believe that the list of renewable resources and generation technologies presented at the workshop is reasonably complete, with one possible exception. Biomass pyrolysis leading to co-production of electricity and biochar may be useful to add explicitly to the list. While this technology could be considered a subcategory of gasification, the lifecycle greenhouse gas emissions associated with this technology will be substantially different from those of conventional biomass gasification.

Second, the Commission should develop a definition for biomass derived renewable energy that takes into account the source of biomass and the generation technology selected. As discussed below, social, economic and environmental impacts associated with renewable energy use should be considered in the application, and further definition of biomass is necessary to ensure that it is a stable, sustainable and desirable resource.

It is important to note that biomass resources have varying levels of lifecycle greenhouse gas emissions. Furthermore, these resources may be imported or exported. We recommend that biomass resources be evaluated by type and be assigned to Tier 1, 2 or 3 designation as may be most appropriate for each resource type considering current market and technology conditions. Reassignment could occur in the future when better information becomes available.

During the workshop, there seemed to be some confusion as to whether solar thermal energy used for electrical generation may count towards the RPS. We see no ambiguity and consider this included in the statutory definition. Solar preheating at a conventional fossil fuel plant, as proposed by Gulf Power, could be considered either a supply-side efficiency measure for purposes of the FEECA process, or as an eligible resource for purposes of RPS compliance.

Similarly, demand-side solar hot water, geothermal and wind should be considered within the context of the FEECA review process. To the extent that such resources are at grid scale and

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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."

[25] We interpret §366.91(2)(d) to incorporate §366.91(2)(a) by reference providing a clear definition of biomass resources.

financed with the intent to supply market power, these resources could be considered within the RPS. However, we do not believe that this will represent a significant component of the RPS.

There also seemed to be some confusion as to whether energy efficiency may count towards RPS compliance. While it can be appropriate to include energy efficiency as a means of compliance for a state portfolio standard, the Legislature considered and did not approve the use of energy efficiency as a compliance mechanism in the RPS. Accordingly, we recommend that the Florida PSC set energy efficiency goals in the FEECA process, not in the RPS process. As discussed above, these goals can be effectively coordinated through a statewide planning process.

We thank the commission for the opportunity to submit the comments above and welcome future opportunities to contribute to the commission's RPS rulemaking process.

Sincerely,

John D. Wilson, MPP
Director of Research