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July 7, 2008

Ms. Judy Harlow
Florida Public Service Commission
Division of Economic Regulation
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850
Jharlow@psc.state.fl.us

Dear Ms. Harlow:

Please accept the following comments in advance of the Florida Public Service Commission July 11, 2008 Workshop on Establishment of a Renewable Portfolio Standard pursuant to HB 7135.

Audubon of Florida Comments to the Florida Public Service Commission July 11, 2008 Workshop on Establishment of a Renewable Portfolio Standard pursuant to HB 7135 Energy Act

Thank you for the opportunity to address the Florida Public Service Commission today on the establishment of a Renewable Portfolio Standard (RPS) pursuant to the provisions in Section 42 of HB 7135 passed and signed into law this year.

The law directs the Commission to adopt rules for a RPS requiring each provider of electricity to supply renewable energy directly, by procuring, or through renewable energy credits. This goal should be cast in costs and capacity in 2020.

The Legislature clarified the focus of the proposed rule. It references existing definitions for renewable energy. The rule will apply to all providers. It provides for compliance issues. It gives priority to solar and wind. It allows for cost recovery and incentives. It establishes the value of a Renewable Energy Credit (REC). The rule is a wholesome assignment that should allow the Public Service Commission to act boldly to make renewable electricity a major part of Florida's energy future.

This directive is timely as Florida's government and its citizens are all involved in efforts to reduce our dependence on fossil fuels and imported fuels as well as to improve our economy and protect the state from the devastating impacts of global climate change.

There is considerable precedent in the nation for RPS as a strategy to accomplish the goals mentioned above. As of March, 25 states and the District of Columbia have

implemented mandatory renewable portfolio standards. RPS is one of a suite of measures that must be undertaken to free us from reliance on ever more expensive fossil and imported fuels, to reduce greenhouse gases and to build a clean-energy and low carbon economy.

The Commission has requested that this workshop focus on two specific areas: The RPS requirements of HB 7135 and specific recommendations for elements of an RPS that should be addressed in the Commission's rule.

Prior to addressing these areas it is important to note some baseline assumptions that must influence policy thinking and subsequent rulemaking.

- It is important to have an initial target for an RPS. In policy, as in archery, targets help refine aim. A target can be moved or changed, but plays an important role in helping to test assumptions about effort. The Legislature did not preclude a target number or percentage or even suggest constraints related to percentages or numbers.
- While the proposed rule will apply to suppliers, it is important to consider the policies upon which the rule will be predicated in the context of overall state capacity. Since the Legislature provides a mechanism for achieving the standard through the procuring of credits, participation by all suppliers is attainable.
- Contrary to current assumptions, demand for retail delivery of electricity, driven largely by fuel costs, will decline. As a consequence of that decline, a proposed RPS expressed as a percentage of total retail sales will be more attainable.
- As demand declines, older polluting and expensive to operate power plants will be shut down and will occupy a smaller percentage of the state's capacity.
- Cost per kilowatt hour from renewable sources will go down as technologies improve and capacity increases.
- The PSC, using its considerable research capacity, should provide projected ranges of costs for renewable capacity, especially for installed solar production.

Focusing upon the RPS requirements in HB 7135:

Intent language in HB 7135 finds that the state's "energy security can be increased by lessening its dependence on foreign oil; that impacts of global climate change can be reduced through the reduction of greenhouse gas emissions; and that the implementation of alternative energy technologies can be a source of new jobs and employment opportunities for many Floridians."

This language should help guide the Commission in weighting the policy objectives of an effective RPS. The March 2008 report, "PSC Staff Summary of the Information Gained

from Public Service Commission Workshops on a Renewable Portfolio Standard,” stated that “Among the objectives discussed during the workshops, one focus would be to promote fuel diversity, reduce dependence on natural gas and other fossil fuels, and minimize the volatility of fuel costs. Another objective would be to maintain and promote economic development within the state. Emphasis was also placed on improving environmental conditions such as the reduction of greenhouse gas (GHG) emissions.”

From Audubon’s perspective, reduction of greenhouse gas emissions is a top policy objective in establishing an effective RPS. This policy objective has been established through studies of the greenhouse gas stabilization scenarios produced by the Intergovernmental Panel on Climate Change’s Fourth Assessment Report (AR4) and recently synthesized in the “Climate Change 2007 Synthesis Report.” The international scientific consensus on climate change concludes that greenhouse gas emissions need to be stabilized at 450 ppm atmospheric carbon concentrations. Audubon supports the reduction of greenhouse gas emissions to 80 percent below 1990 levels by 2050. While there is no single effort that will accomplish this level of reduction, a mix of strategies that include more aggressive energy efficiency programs and state RPS are important tools to help reach the reductions.

Studies by Donald Aitken, PhD, Stanley Bull, PhD and Lynn Billman demonstrate that “in order to stabilize atmospheric concentrations of carbon dioxide in the 550- to 770-ppm range, assuming a modest one percent increase in world energy demand per year, the world will have to adopt renewable energy sources for total primary energy (all energy uses) at a pace roughly equal to 10 percent by 2010, 20 percent by 2020 and 50 percent by 2050, or what we call the 10/20/50 percent path. (“The Climate Stabilization Challenge: Can Renewable Energy Sources Meet the Target?” by D. Aitken, L. Billman and S. Bull, *Renewable Energy World*, Vol. 7, No. 6, pp. 56-69, November/December 2004.)

We note that other states have set ambitious targets of 20 percent renewable energy technologies by 2020 and that this target should be considered by Florida. Establishing a RPS that supplies at least 20 percent of Florida’s electricity by 2020 through safe, clean renewable energy helps meet the intent of HB 7135 and will serve to reduce greenhouse gas emissions and make an important contribution to stabilizing climate change, thereby positively contributing to a major policy objective for the state of Florida.

HB 7135 has begun to address the barriers to a wide deployment of clean energy technologies and energy efficiency, and a RPS will complement these other policies, placing the state on the front lines of solving global climate change and stimulating a new clean energy economy.

Regarding the specific recommendations for elements of a RPS, which should be addressed in the Commission's rule:

HB 7135 supports giving priority to solar and wind sources. This should be reflected and strengthened in the rule through a tiered system that gives preference to solar. Additionally, any renewable source that captures waste methane and converts it to fuel for electricity should be given preference.

Waste heat, cogeneration, hydrogen, biomass should be second tier sources. They will be part of Florida's energy mix regardless of the proposed rule and need no additional incentives to be used.

The law does not provide, and the rule should not provide, for including demand-side reduction or efficiency as a part of a RPS.

A large designated percentage of the RPS should be reserved for solar energy, often referred to as a "solar share." Of all the renewable sources of electric power, solar is the most promising for Florida. Solar fuel is free, non-polluting and provides for distributed production. Solar could be granted additional incentives by allowing multipliers for renewable energy credits. Indeed, RECs could be limited to solar.

Providing this share is consistent with the provisions of HB 7135, which states that the Commission may "provide added weight" to renewable energy such as solar photovoltaic. Additionally, HB 7135 begins to bring down the significant regulatory and financial barriers that have slowed the wide-scale deployment of solar technology and hindered the growth of Florida's solar market. Interconnection and net metering policies were incorporated into HB 7135 and should contribute to diversifying Florida's energy mix and allowing renewable energy to reach the grid from distributed sources.

The effectiveness of net metering and interconnecting the energy grid to stimulate growth of solar power in Florida will be bolstered by a robust RPS that reserves a specific share for solar. A solar share is a vital component of any renewable portfolio standard to provide long-term stability and investment to increase solar energy production in Florida.

Including a solar share specifically to encourage the growth of Florida's solar market will save consumers money and contribute to cutting greenhouse gas pollution in a manner that is safe and secure.

Thank you for the opportunity to make comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Draper". The signature is fluid and cursive, with the first name "Eric" being more prominent than the last name "Draper".

Eric Draper
Deputy Director/Policy Director