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**Florida Public Service Commission Rulemaking
FPL Proposal for a Florida Renewable Portfolio Standard (RPS)**

- 1. In order to best ensure an optimal design and implementation of a Florida RPS, there is a need for more education, information, and analysis.**
- 2. The primary objective of a Florida RPS should be to reduce emissions of Greenhouse Gases from the production of electricity with a focus on solar and wind while increasing energy security, maintaining reliable electric service and reasonable electricity prices for customers.**
- 3. A Florida RPS should foremost value clean/renewable energy sources that have the greatest effect on the objective of reducing Greenhouse Gas emissions. Therefore, clean energy sources such as nuclear, wind, and solar, as well as carbon reductions due to energy efficiency, should be recognized and play prominent roles in meeting a Florida RPS.**
- 4. To encourage the development of and investment in clean/renewable energy sources, up-front and expedited prudence determinations and cost recovery approvals with administrative finality are essential.**
- 5. Electric customers should be informed of their contribution to meeting a Florida RPS.**
- 6. The Florida Public Service Commission (FPSC) should set and periodically review the RPS targets to ensure they can be met without imposing unacceptable costs or adverse reliability effects on customers.**
- 7. In order to prevent Florida from becoming economically disadvantaged by higher electricity costs, a Florida RPS should be adjusted/harmonized with a Federal standard should one become law.**
- 8. The methods and incentives for complying with a Florida RPS need to be consistent with the objective to reduce emissions of Greenhouse Gases from the production of electricity with a focus on solar and wind while increasing energy security, maintaining reliable electric service and reasonable electricity prices for customers.**

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- 1. In order to best ensure an optimal design and implementation of a Florida RPS, there is a need for more education, information, and analysis.**
 - 1.1. The FPSC should hold educational workshops focused on the topics listed below:
 - 1.1.1. Renewable Energy Credits (RECs)
 - 1.1.2. Availability of clean/renewable resources in the State of Florida
 - 1.1.3. Current and projected development/implementation/operating costs of renewables in Florida and their relative effectiveness in reducing Greenhouse Gases
 - 1.1.4. Analysis of the impact a Florida RPS may have on electric customers' rates and bills

- 2. The primary objective of a Florida RPS should be to reduce emissions of Greenhouse Gases from the production of electricity with a focus on solar and wind while increasing energy security, maintaining reliable electric service and reasonable electricity prices for customers.**
 - 2.1. The achievement of this objective and the Greenhouse Gas reduction specified in the Governor's Executive Order 07-127 will require reliance on those resources traditionally included in the definition of "renewable resources" as well as "clean resources," e.g., nuclear generation, fossil fuel generation technology with full/partial carbon capture and sequestration, and energy efficiency measures.
 - 2.2. The inclusion of clean resources makes it possible to achieve Greenhouse Gas reductions in the amounts specified in the Executive Order. Traditionally-defined renewable resources alone, while valuable, will not meet Greenhouse Gas reduction targets.
 - 2.3. A narrower objective that does not include Greenhouse Gas reductions and clean energy would not be in the best interest of Florida's electric customers because it would result in higher cost and lower reliability.
 - 2.4. This objective should be met equally by all electric utilities, including municipal utilities and cooperatives, with retail sales of electricity greater than 500,000 megawatt hours (MWhs) per year in Florida. (This represents approximately 98% of total retail sales in Florida.)
 - 2.5. The structure for achieving a Florida RPS needs to address the substantial challenges of siting and permitting clean/renewable energy resources.

- 3. A Florida RPS should foremost value clean/renewable energy sources that have the greatest effect on the objective of reducing Greenhouse Gas emissions. Therefore, clean energy sources such as nuclear, wind,**

and solar, as well as carbon reductions due to energy efficiency, should be recognized and play prominent roles in meeting a Florida RPS.

- 3.1. A Florida RPS should be based on energy, i.e., MWhs as a percent of retail sales of electricity. The following clean/renewable energy sources should be included in a Florida RPS.
 - 3.1.1. New, i.e., post 2006, nuclear generation, including uprates
 - 3.1.2. Wind
 - 3.1.3. Solar
 - 3.1.3.1. Solar generated steam that displaces fossil fuel
 - 3.1.3.2. Solar array (e.g., trough and photovoltaic)
 - 3.1.3.3. Solar Photochemical
 - 3.1.3.4. Solar pool and residential water heaters
 - 3.1.4. All Energy efficiency
 - 3.1.5. All Sunshine energy subscriptions and other Green Pricing programs
 - 3.1.6. Fossil units with full/partial carbon capture and sequestration
 - 3.1.7. Landfill gas (e.g., methane)
 - 3.1.8. Geothermal
 - 3.1.9. Biomass
 - 3.1.10. Biodiesel
 - 3.1.11. Hydroelectric
 - 3.1.12. Waste to energy
 - 3.1.13. Waste heat
 - 3.1.14. Digesters
 - 3.1.15. Ocean
 - 3.1.15.1. Ocean thermal energy
 - 3.1.15.2. Ocean current energy
 - 3.1.15.3. Ocean tidal energy
 - 3.1.15.4. Wave energy
 - 3.1.15.5. Combination of ocean energy technologies
 - 3.1.16. Fuel Cells
 - 3.1.17. Hydrogen
 - 3.1.18. Combined heat and power co-generation
 - 3.1.19. Co-firing
 - 3.1.20. Biogas
 - 3.1.21. Liquid biofuel
 - 3.1.22. Power Plant efficiency improvements at existing fossil plants implemented post 2006
 - 3.1.23. Grid improvements (e.g., efficient transformers) implemented post 2006
 - 3.1.24. In and out of State RECs produced from the above types of resources
 - 3.1.25. Global Greenhouse Gas offsets
- 3.2. The energy sources includable in an RPS should be reviewed periodically for inclusion of new technologies.

4. **To encourage the development of and investment in clean/renewable energy sources, up-front and expedited prudence determinations and cost recovery approvals with administrative finality are essential.**
 - 4.1. Expedited approval and incentives should be provided to encourage utility investments in clean/renewable resources within Florida.
 - 4.1.1. In order to encourage the development of wind and solar, a multiplier, not set-asides, should be used. A multiplier of 3.5 should be applied to each MWh of energy produced from these sources for purposes of complying with a Florida RPS.
 - 4.1.2. If a utility needs to purchase RECs to satisfy the RPS requirement, to the extent they are available, Florida RECs should be purchased first, but at a price not to exceed 120% of the national market price for RECs produced by each technology and capped at an avoided cost of carbon of \$20/MWh.
 - 4.1.3. In order to expedite the development of wind and solar and to encourage utilities to invest in wind and solar projects, recognizing the significant siting and permitting challenges, the FPSC should issue an order for these projects within 60 days of receiving the utility's filing. Additionally, there should be no requirement for a site certification application, and the utilities should be allowed a return on equity adder of 2% above the utility's authorized return on equity for these projects.
 - 4.1.4. Approvals should be final with no re-evaluation of past decisions applying 20/20 hindsight.
 - 4.2. Cost recovery should be accomplished through existing mechanisms as follows:
 - 4.2.1. New, i.e., post 2006, Nuclear generation, including uprates – consistent with the FPSC rule for cost recovery of new nuclear generating units
 - 4.2.2. Energy Efficiency – Energy Conservation Cost Recovery Clause (ECCR) as specified by existing FPSC rules, expanded to recover all costs associated with such programs, in order to remove disincentives and thereby maximize energy efficiency penetration and program development.
 - 4.2.3. Self-build clean resource projects, other than new nuclear, nuclear uprates, and energy efficiency – Capacity Cost Recovery Clause (CCRC) with a higher return for investments, i.e., a return on equity adder of 2% above the utility's authorized return on equity.
 - 4.2.4. Sunshine energy program – Recovered from participating customers, consistent with existing FPSC rules
 - 4.2.5. Cost of RECs, other environmental attributes, and offsets (inside and outside of Florida)– Fuel Clause
 - 4.2.6. Recovery for research and development project cost – CCRC
 - 4.3. To the extent that electric utilities enter into contracts with developers of clean/renewable resources, there shall be a presumption until such time

as the contract is in default that the developers will perform as specified in the contract. For the purpose of meeting a Florida RPS, the anticipated benefit of such contract will be counted until a replacement facility can be contracted for and built.

- 4.4. The price paid to comply with a Florida RPS should not exceed an avoided cost of carbon of \$20/MWh plus the utility's cost of avoiding the next unit of conventional fossil generation, unless the utility determines a higher price is needed to encourage the development of emerging technologies which, in the utility's opinion, may have a significant potential to effectively reduce Greenhouse Gas emissions in the future and provide long-term benefits to customers. In which case, the utility may petition the FPSC for approval and cost recovery of such higher price.

5. Electric customers should be informed of their contribution to meeting a Florida RPS.

- 5.1. Utilities should educate customers on the cost attributable to meeting a Florida RPS through bill inserts or other mechanisms so customers can understand their contribution to clean/renewable energy.

6. The Florida Public Service Commission (FPSC) should set and periodically review the RPS targets to ensure they can be met without imposing unacceptable costs or adverse reliability effects on customers.

- 6.1. The point in time at which a Florida RPS of 20% could be met by utilities, including municipal utilities and cooperatives, at what cost, and the impact of such cost on Florida's economy are the subject of much debate. Rather than set irreversible targets at this point, it is recommended that the FPSC direct that a thorough assessment be conducted. This will facilitate the setting of appropriate targets, without interim targets, that could be met without imposing unacceptable costs or adversely impacting reliable and safe electric supply to Florida residents. This assessment should be subsequently updated every three years.
- 6.2. Utilities should not be required to add clean/renewable energy, pursuant to the renewable portfolio standard, above the reasonable cost threshold established by the Commission. The reasonable cost threshold for each year through 2017 should be set at 1% of annual retail revenues from the sale of electricity. After 2017, the reasonable cost threshold should be increased by one-fifth percent per year until January 1, 2022, at which time it will be two percent. Only RPS costs that exceed the utility's cost of avoiding the next unit of conventional fossil generation will be counted toward this reasonable cost threshold. RPS costs subject to the reasonable cost threshold shall include costs for research and development, but exclude costs for nuclear and energy efficiency.
- 6.3. As changing circumstances warrant, and after notice and hearing, the FPSC may prospectively modify the reasonable cost threshold applicable

to new contracts, but not the threshold applicable to existing contracts which have been previously approved by the FPSC to meet a utility's renewable portfolio standard. In modifying the reasonable cost threshold, the FPSC will take into account : (1) the price of clean/renewable energy at the point of sale to the utility; (2) transmission and interconnection costs required for the delivery of clean/renewable energy to retail customers; (3) the impact of the cost for clean/renewable energy on retail customer rates; (4) overall diversity, reliability, availability, dispatch flexibility, cost per kilowatt-hour and life cycle cost on a net present value basis of clean/renewable energy resources; and (5) other factors, including public benefits, the FPSC deems relevant.

6.4. Initial targets for all utilities should be set as follows:

6.4.1. 5% by 2017

6.4.2. 10% by 2025

6.4.3. 20% by 2030

6.4.4. In order to meet a Florida RPS requirement in the most cost-effective manner, it is important to know the MWhs required well in advance. The MWhs required to meet the RPS in any given year should be set based on the above percentages applied to an actual base year's retail MWh sales level increased by the average annual growth rate in retail MWh sales for the preceding ten calendar year period.

6.5. Utilities will report to the FPSC annually regarding progress towards achieving the above targets and will provide updated views regarding the availability and cost of clean/renewable energy resources and ability to meet the 2017, 2025, and 2030 targets.

6.6. These targets and the schedule for compliance should be re-evaluated every three years and modified as appropriate to account for changes in load growth, technology, costs, and other factors that affect the availability and cost of clean/renewable sources of energy. This re-evaluation should be used to adjust the targets, if necessary.

7. In order to prevent Florida from becoming economically disadvantaged by higher electricity costs, a Florida RPS should be adjusted/harmonized with a Federal standard should one become law.

8. The methods and incentives for complying with a Florida RPS need to be consistent with the objective to reduce emissions of Greenhouse Gases from the production of electricity with a focus on solar and wind while increasing energy security, maintaining reliable electric service and reasonable electricity prices for customers.

8.1. Compliance with a Florida RPS can be met through the purchase or production of clean/renewable energy or the purchase of RECs.

8.2. In order to avoid price volatility "borrowing/banking" of RECs should be allowed.

- 8.3. Consistent with section 6.2, the annual cost to comply with a Florida RPS should not exceed the reasonable cost threshold established by the FPSC. The reasonable cost threshold for 2017 should be set at 1% of annual retail revenues from the sale of electricity. After 2017, the reasonable cost threshold should be increased by one-fifth percent per year until January 1, 2022, at which time it will be two percent.
- 8.4. Consistent with section 6.3, as changing circumstances warrant, and after notice and hearing, the FPSC may prospectively modify the reasonable cost threshold applicable to new contracts, but not the threshold applicable to existing contracts which have been previously approved by the FPSC as part of a procurement plan to meet a public utility's renewable portfolio standard. In modifying the reasonable cost threshold, the FPSC will take into account : (1) the price of clean/renewable energy at the point of sale to the public utility; (2) transmission and interconnection costs required for the delivery of clean/renewable energy to retail customers; (3) the impact of the cost for clean/renewable energy on retail customer rates; (4) overall diversity, reliability, availability, dispatch flexibility, cost per kilowatt-hour and life cycle cost on a net present value basis of clean/renewable energy resources available from suppliers; and (5) other factors, including public benefits, the FPSC deems relevant.
- 8.5. If compliance is otherwise unachievable, utilities may make an Alternative Compliance Payment (ACP). However, the ACP should not exceed an avoided cost of carbon of \$20/MWh. The utility should administer and use the ACP funds for research and development and/or investment in renewable/clean energy sources.
- 8.5.1. The ACP shall be waived if events beyond the reasonable control of a utility prevent it from meeting its RPS requirement or compliance is not in the best interest of stakeholders. Events or circumstances that are outside of a party's reasonable control may include weather-related damage, mechanical failure, lack of transmission capacity or availability, strikes, lockouts, actions of a governmental authority that adversely effect the generation, transmission, or distribution of renewable energy from an eligible resource under contract to a purchaser.