

The Florida Senate
BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Communications, Energy, and Public Utilities Committee

BILL: PCS/SB 1154 Barcode 771854

INTRODUCER: Communications, Energy, and Public Utilities Committee

SUBJECT: Energy

DATE: March 24, 2009 REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Wiehle	Caldwell	CU	Pre-meeting
2.			EP	
3.			GA	
4.			RC	
5.				
6.				

I. Summary:

Section 1 creates a clean portfolio standard (CPS) using the Public Service Commission (PSC) renewable portfolio standard as a model. It:

- creates a definition of “clean energy” using the statutory definition of renewable energy and adding nuclear energy placed in commercial service after the effective date of this act and integrated gasification combined cycle with carbon capture and sequestration plans approved by the Department of Environmental Protection;
- retains 20 percent by 2020 and the phase-in schedule and amounts requested by the Governor and recommended by the PSC, but limits the amount of nuclear energy and integrated gasification combined cycle energy to be credited toward the CPS requirement to twenty-five percent of the amount of the clean portfolio standard requirement for each year, which will limit the final amount of that credit to five percent, or one-quarter of the total 20 percent;
- retains the two conditions of excusal from the requirement: 1) insufficient supply of clean energy and clean energy credits, 2) cost of compliance is cost-prohibitive in that it exceeds two percent of the investor-owned electric utility’s total annual revenue from retail sales of electricity;
- excludes expenses for nuclear and integrated gasification combined cycle energy sources from the cost-of-compliance calculations, and retains the concept of a division of compliance cost allocations among types of renewable energy but changes it to 50/50 for solar/wind versus all other types; and
- requires the PSC to annually report to the Legislature on further rulemaking activities; developments in production of clean energy; how much and what types of clean energy

are available in various regions of the state, and at what cost; and any impediments to further increases in clean energy in Florida.

It encourages electric utilities to pursue the joint-ownership of nuclear power plants. It also authorizes the PSC to consider, when it is more cost-effective, ordering the conversion of an existing plant to biomass instead of retiring the plant when it is made superfluous due to operation of a nuclear plant.

The bill also creates the Natural Gas Act to allow a natural gas utility to file a petition with the PSC for approval to establish a carbon reduction fee to be used by that utility to construct eligible installations in geographic areas of this state that are unserved or underserved with natural gas service. The fee can last for no more than 5 years, and the total amount of these fees in effect in any one year cannot exceed two percent of the utility's total annual non-fuel revenue for the prior year.

The bill clarifies that the terms of members of the Florida Energy and Climate Commission begin on October 1 and end on September 30.

The bill preserves the full amount of the fuel inspection fee revenue by adding alternative fuel containing alcohol to the list of fuels for which a fee must be paid. It also creates a carbon reduction charge on all types of motor vehicle fuels, including diesel, of one cent per gallon. It provides for the deposit of the carbon reduction charge, one-half of which is to be deposited into the Renewable Energy Trust Fund and one-half into the General Revenue Fund unallocated.

Finally, the bill requires the Florida Energy and Climate Commission to report to the Legislature on increasing energy-efficiency practices among low-income households.

The bill substantially amends the following sections of the Florida Statutes: 366.92, 366.93, 377.6015, 525.09, and 525.10. It also creates sections 366.99 and an as-yet unnumbered section of the Florida Statutes.

II. Present Situation:

Over the past decade, legislation has been filed almost every year to promote production and use of renewable energy, including:

- a 2000 bill to create an Energy 2020 Study Commission to look at the future of electric energy in Florida, including renewable energy, which failed to pass, but was used by Governor as model to create a study commission by executive order;
- a 2002 bill to require that the Public Service Commission and the Department of Environmental Protection to conduct a joint study to assess the cost, feasibility, deployment schedules, and impacts on the environment of increased use of renewable energy and report to the Legislature;
- bills and amendments in 2002, 2003, 2004, and 2007 to create a Renewable Portfolio Standard (RPS), a requirement that each specified type of utility ensure that at least a specified amount of renewable energy be sold each year; and

- a 2005 bill that, as an alternative to an RPS, created a requirement that specified utilities offer a standard contract to purchase renewable energy.

One factor in the failure of the RPS legislation was the projected fiscal impact on utilities' ratepayers. When the standard contract requirement was enacted, to protect the ratepayers, the statute¹ preserved the purchasing utility's full avoided costs, which is the cost the utility would have incurred to produce the electricity itself if not for the purchase, as the price to be paid for renewable energy. As renewable energy costs more to produce than energy produced by traditional methods, this statute has produced little new renewable energy.

In the 2007 Regular Session, the Legislature directed the Public Service Commission (PSC) to conduct a study and recommend an appropriate renewable portfolio standard to the Legislature.² Governor Crist vetoed this bill.

Later that year, Governor Crist requested that the PSC adopt a rule to require that utilities produce at least twenty percent of their electricity from renewable sources, with a strong focus on solar and wind energy.³ While Governor Crist did not set a time frame for the RPS requirement in the Executive Order, a press release on the order stated: "Governor Crist also requested that the Public Service Commission adopt a 20 percent Renewable Portfolio Standard by 2020"⁴

In the 2008 Regular Session, the Legislature amended s. 366.92, F.S., to direct the PSC to adopt rules for an RPS requiring each provider to supply renewable energy to its customers directly, by procuring, or through renewable energy credits.⁵ The bill required the PSC to submit a rule to the Legislature by February 1, 2009, and provided that the rule could not be implemented until ratified by the Legislature.

The PSC held workshops to develop an RPS rule and filed a report containing recommended (but not finalized and adopted) rules.⁶ The RPS recommendation includes the twenty percent by 2020 requirement. It applies only to investor-owned utilities (IOUs), excluding municipal and cooperative utilities. Each IOU is required to either produce through self-build renewable facilities or purchase renewable energy credits (RECs)⁷ from other utilities or non-utility renewable energy producers located in Florida. The renewable energy itself would still be used by the producer or sold to the utility at avoided costs.

The recommendation phases-in the requirement in the following amounts and timeframes, with percentages based on each investor-owned utility's prior year's retail sales.

¹ s. 366.91, F.S.

² s. 39, CS/HB 7123, Engrossed 2.

³ s. 3, Executive Order 2007-127. There was some question whether the PSC had the authority to adopt an RPS by rule as the Legislature had not delegated this authority to the PSC at that time.

⁴ <http://www.flgov.com/release/9217>

⁵ s. 42, ch. 2008-227, Laws of Florida (HB 7135)

⁶ Draft Renewable Portfolio Standard Rule, Florida Public Service Commission, January, 30, 2009

⁷ A renewable energy credit is a financial instrument that represents the renewable energy attributes associated with one mega-watt hour (1,000 kilowatt-hours) of renewable energy.

- 7 percent by January 1, 2013
- 12 percent by January 1, 2016
- 18 percent by January 1, 2019
- 20 percent by January 1, 2021

To limit the fiscal impact on IOUs' ratepayers, the recommendation has a cost cap of two percent of each IOU's total annual revenue from retail sales of electricity. Based on 2007 total IOU retail sales, a two percent cap would be \$370 million annually.

The recommendation creates two classes of renewable energy, Class I, which is solar and wind, and Class II, which is all other forms of renewable energy.⁸ It has a carve-out, requiring that a minimum of the RPS be provided by Class I sources. Also, the rate cap is divided among classes, with Class I compliance costs capped at 1.5 percent of each IOU's total annual revenues, and Class II compliance costs capped at .5 percent of those revenues.

The recommendation establishes a penalty for noncompliance with the RPS, to be paid by stockholders, of up to 50 basis points on the IOU's authorized rate of return. As such, it is considered to be a mandatory standard, not an aspirational goal. However, the recommendation also contains two conditions under which an IOU may be excused from compliance, those being where the supply of IOU-produced renewable energy and available RECs is not sufficient to meet the RPS, or where the cost of compliance is cost prohibitive in that it exceeds the two percent cap on costs of compliance.

The recommendation includes a requirement that each IOU issue a request for proposals for renewable energy resources every two years. This would use a market-based approach to encourage renewable energy developers to competitively participate in the Florida renewable energy market. It will also provide information necessary to evaluate the cost-effectiveness and need for an IOU self-build option.

The amount of renewable energy and RECs that will be available is not known and cannot be predicted with any level of certainty. However, it can be predicted with some certainty that until sufficient amounts of RECs are being produced to produce price competition, the price for any amount of available RECs will equal or exceed the amount remaining on the cost caps after subtracting any IOU self-build costs. As such, at least initially, it is more likely that the mandatory requirement is not to produce or purchase the required amounts of RECs, but to spend at least two percent of annual revenues from retail sales on attempting to meet the RPS.

The report also included an alternative recommendation that any RPS include "clean" energy, consisting of energy from new nuclear facilities or uprates approved by the PSC since 2006,

⁸ Renewable energy is defined by reference to s. 366.91, F.S., which defines the term to mean "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." The section defines the term "biomass" to mean "a power source that is comprised of, but not limited to, combustible residues or gases from forest products manufacturing, waste, byproducts, or products from agricultural and orchard crops, waste or coproducts 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."

integrated gasification combined cycle (coal-fired) plants with carbon capture and sequestration plans approved by the Department of Environmental Protection, energy savings associated with efficiency improvements to existing utility generation facilities, and savings associated with customer energy efficiency programs.

The report also included recommended rules on creation of a Florida Renewable Energy Credit Market and on reporting requirements for municipal and cooperative utilities.

III. Effect of Proposed Changes:

Section 1 of the bill creates s. 366.92, F.S., to create a clean portfolio standard, a minimum percentage of total annual retail electricity sales by an electric utility to consumers in Florida that must be supplied by clean energy or clean energy credits produced in Florida.

The bill defines the term “clean energy” to include all types of energy now included in the statutory definition of “renewable energy” plus nuclear energy placed in commercial service after the effective date of this act and integrated combined cycle with carbon capture and sequestration plans approved by the Department of Environmental Protection.

It creates the following three categories of clean energy:

- “Class I clean energy source” means Florida clean energy resources derived from wind or solar energy systems.
- “Class II clean energy source” means clean energy from all other sources.
- “Class III clean energy source” means clean energy derived from nuclear energy or integrated combined cycle with carbon capture and sequestration plans approved by the Department of Environmental Protection.

The bill requires each electric utility to meet or exceed the following clean portfolio standard through the production of clean energy or purchase of clean energy credits⁹:

- by January 1, 2013: 7 percent of the prior year’s retail electricity sales;
- by January 1, 2016: 12 percent of the prior year’s retail electricity sales;
- by January 1, 2019: 18 percent of the prior year’s retail electricity sales; and
- by January 1, 2021: 20 percent of the prior year’s retail electricity sales.

No more than twenty-five percent of the amount of the clean portfolio standard requirement for each year may be from Class III clean energy sources. A Florida utility that is a member of the South Eastern Reliability Council instead of the Florida Reliability Coordinating Council may purchase clean energy credits based on Class III energy sources located in other states.

To provide the Legislature with information on the progress toward meeting this requirement, the PSC must, by February 1, 2010, and each year thereafter, report to the Legislature detailing

⁹ A clean energy credit is a financial product that represents the unbundled, separable, clean renewable attribute of clean renewable energy produced in Florida and is equivalent to 1 megawatt-hour of electricity generated by a source of clean renewable energy located in Florida.

further rulemaking activities; developments in production of clean energy; how much and what types of clean energy are available in various regions of the state, and at what cost; and any impediments to further increases in clean energy in Florida.

Except under stated circumstances which require excusal from compliance, any investor-owned electric utility that fails to meet or exceed its clean portfolio standard is subject to a penalty pursuant to s. 366.095, F.S., for each day such failure continues, with the penalty not recoverable from the utility's ratepayers.¹⁰ Technically, the clean energy requirement applies to all electric utilities, including municipal and cooperative utilities, however, the bill contains no enforcement mechanism for municipal and cooperative utilities and so is not mandatory as to these utilities.

The PSC must excuse an investor-owned electric utility from compliance with the clean portfolio standard based upon a showing that:

- the supply of clean energy and clean energy credits is not adequate to satisfy the clean portfolio standard; or
- the cost of producing clean energy and securing clean energy credits is prohibitive in that the total costs of compliance with the clean portfolio standard exceeds 2.0 percent of the investor-owned electric utility's total annual revenue from retail sales of electricity.

The cost of compliance with the clean portfolio standards includes:

- the costs associated with the purchase of clean energy credits,
- the costs paid by the utility which are associated with the clean energy credit market, and
- the utility's cost of its self-build Florida clean energy resource which exceeds the cost to the utility of the generation source it would have otherwise built or the energy or capacity, or both, it would have purchased from another source.

Expenses for Class III clean energy sources are not to be included in the cost of compliance calculations.

The cost of compliance must be allocated separately for Class I and Class II clean energy sources, and for each class, the total cost of compliance is prohibitive if such costs exceed 1 percent of the investor-owned electric utility's total annual revenue from retail sales of electricity.

Each investor-owned electric utility seeking to construct a Florida clean energy project must select the technology and project most likely to be cost-effective for the general body of ratepayers for that clean energy technology class. In determining the most cost-effective construction option and in purchasing clean energy credits, an investor-owned utility must seek the least cost alternatives within each class of clean energy sources. The method of determining

¹⁰ Section 366.095, F.S., provides the penalty for refusal to comply with or to willful violation of any lawful PSC rule or order or any provision of chapter 366. The penalty is not more than \$5,000 for each offense. Each day that the refusal or violation continues constitutes a separate offense. Each penalty is a lien upon the real and personal property of the entity, enforceable by the commission as a statutory lien under chapter 85.

the least cost alternative is to be determined by the commission and may include requests for proposal, auctions, or another method.

A clean energy credit remains the property of the owner of the clean energy resource from which it was derived until it is sold or transferred.

The commission is directed to adopt rules providing for: implementation of the a clean renewable portfolio standard; determination of the method of establishing least cost construction or credit purchase options; determination of what entities are eligible to produce clean energy credits, recovery of costs of compliance with the clean portfolio standard, with these costs to appear as a separate line item on each customer's bill; filing of reports by the utilities concerning compliance with the clean portfolio standard; and creation of a clean energy credit market.

Section 2 amends s. 366.95, F.S., on advance cost recovery for nuclear power plants to encourage all electric utilities in this state to pursue the joint-ownership of nuclear power plants. Also, the statute currently provides that if any existing generating plant is retired as a result of operation of the nuclear plant, the PSC must allow for the recovery, through an increase in base rate charges, of the net book value of the retired plant over a period not to exceed 5 years. The bill authorizes the PSC to determine whether it would be more cost-effective to convert the existing generating plant to a biomass plant, and, if so, to allow for the recovery of the costs of conversion in base rate charges over a time period to be determined by the commission.

Section 3 creates s. 366.99, F.S., the Natural Gas Act, to create a carbon reduction fee relating to natural gas use. The bill creates legislative findings and definitions. It requires the PSC to allow a natural gas utility that files a petition for approval to establish a carbon reduction fee to be used by that utility to construct eligible installations in geographic areas of this state that are unserved or underserved with natural gas service. The fee can last for no more than 5 years, and the total amount of these fees in effect in any one year cannot exceed 2% of the utility's total annual non-fuel revenue for the prior year. It provides for true-up procedures to ensure that there are no under or over-charges. The section stands repealed on December 31, 2014 unless the legislature acts to reenact it; however, any fees approved prior to repeal, and the related procedures, remain in effect for the full term of those fees.

Section 4 amends s. 377.6015, F.S., to clarify that the terms of members of the Florida Energy and Climate Commission begin on October 1 and end on September 30.

Section 5 amends s. 525.09, F.S., to preserve the full amount of the Department of Agriculture and Consumer Services fuel inspection fee revenue by adding alternative fuel containing alcohol to the list of fuels for which a fee must be paid. It also creates a carbon reduction charge of one cent per gallon on all types of motor vehicle fuels, including diesel.

Section 6 amends s. 525.10, F.S., to provide that the carbon reduction charge is to be deposited one-half into the Renewable Energy Trust Fund and one-half into the General Revenue Fund unallocated.

Section 7 requires the Florida Energy and Climate Commission to do a report to the Legislature by December 1, 2009 that:

- identifies methods of increasing energy-efficiency practices among low-income households;
- determines the statewide impact of improving the level of the energy efficiency of rental housing stock, including, but not limited to, the environmental benefits of the improvements and the potential fiscal impact with respect to property tenants, owners, and landlords and to the economy; and
- provides recommendations for implementing energy efficiency practices among residents of low-income households.

Section 8 provides that the bill takes effect upon becoming a law.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

According to the PSC rule report, two percent of total retail sales for all investor-owned utilities combined would be \$370 million annually. According to the information on page 8 of the PSC's Statistics of the Florida Electric Utility Industry, 2007, total investor-owned utility retail sales for that period were 176,561 gigawatt hours. If the \$370,000 is divided by the 176,561 gigawatt hour total, the result is \$2095.59 per gigawatts hour, which translates to \$.002 per kilowatt hour. The average residential customer uses 1,200 kilowatt hours of electricity a month, so the average residential customer monthly bill impact would be \$.002 per kilowatt hour multiplied by the 1,200 kilowatt hours, or \$2.58.

According to proponents of the natural gas act, the maximum rate increase to a residential customer is approximately \$6.28 per year, or an average of \$.52 per month, per eligible project.

The total amount of the newly-created carbon reduction charge of one cent per gallon on all types of motor vehicle fuels is estimated to be approximately \$90 million.

C. Government Sector Impact:

The newly-created carbon reduction charge will generate approximately \$90 million, of which one-half will be deposited into the Renewable Energy Trust Fund and one-half into the General Revenue Fund unallocated.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.