#### HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/CS/HB 7117 PCB ENUS 12-02 Energy **SPONSOR(S):** State Affairs Committee, Finance & Tax Committee, Energy & Utilities Subcommittee, and Plakon

TIED BILLS: None. IDEN./SIM. BILLS: CS/CS/SB 2094 (c)

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
Orig. Comm.: Energy & Utilities Subcommittee	15 Y, 0 N	Keating, Whittier	Collins
1) Finance & Tax Committee	21 Y, 0 N, As CS	Aldridge	Langston
2) State Affairs Committee	17 Y, 0 N, As CS	Keating, Whittier	Hamby

## SUMMARY ANALYSIS

In an effort to establish a framework by which to encourage the appropriate development of renewable energy projects in Florida, the bill accomplishes the following:

- Revises the ten-year site plan process to specifically require electric utilities to provide information concerning actual and planned renewable energy production.
- Reinstates and revises the sales tax exemption for renewable energy technologies; the renewable energy technologies investment corporate income tax credit; and the renewable energy production corporate income tax credit.
- Clarifies that renewable energy producers not licensed as electric utilities are qualified to receive a tax refund.
- Requires the Department of Economic Opportunity to prepare an economic impact study for certain renewable energy projects prior to a public interest determination by the Public Service Commission (PSC).
- Authorizes a utility to petition the PSC for a determination that a proposed renewable energy facility is in the public interest and provides a list of criteria for the PSC to consider in making that determination. Allows for cost recovery of reasonable and prudent costs incurred by a utility for an approved project. Requires the PSC to adopt rules to establish a public interest determination process, including competitive bidding. Provides an effective date of July 1, 2013, for the rules to take effect.
- Requires the PSC to consider the need for fuel diversity to foster fuel supply reliability and rate stability when considering the need for a proposed power plant larger than 75 megawatts.
- Streamlines the permitting process for biofuel feedstock crops and revises financial assurance requirements.
- Requires the Department of Agriculture and Consumer Service (DACS) to conduct a statewide forest inventory analysis.

In addition, the bill addresses the following issues:

- Authorizes DACS to establish a website regarding cost savings associated with energy efficiency and conservation measures.
- Provides that the rates, terms and conditions of electric vehicle charging services by a non-utility are not subject to regulation by the PSC. Requires DACS to adopt rules related to sales at electric vehicle charging stations (labeling, price posting, methods of sale, etc.). Directs the PSC to conduct a study on the potential effects of electric vehicle charging stations on both energy consumption and the electric grid.
- Requires the PSC, in consultation with DACS, to contract for a study to evaluate the effectiveness of the Florida Energy Efficiency and Conservation Act, and appropriates funds for the study.
- Requires coordination between the Department of Management Services and the DACS in further developing the state energy management plan for state buildings over 5,000 square feet.
- Expands use of the local government infrastructure surtax proceeds, if a local government ordinance authorizing such use is approved by referendum.
- Expands the Renewable Fuel Standard to include "alternative fuel," as defined in the bill; clarifies that retail dealers are not prohibited from selling or offering to sell unblended gasoline; and directs DACS to compile a list of retail dealers that sell or offer to sell unblended gasoline in the state and post the list on the department's website.

The Revenue Estimating Conference estimates that provisions of the bill will have a negative impact on General Revenue of \$1.8 million in FY 2012-13 (\$15.8 million recurring); state trust fund revenue by a negative insignificant recurring amount; and local government revenue by a negative recurring \$0.2 million beginning in FY 2012-13.

#### **FULL ANALYSIS**

## I. SUBSTANTIVE ANALYSIS

## A. EFFECT OF PROPOSED CHANGES:

#### Office of Energy, Department of Agriculture and Consumer Services

#### **Background and Creation**

In response to the energy crisis in the 1970s, the State Energy Office was established by the Legislature in 1975<sup>1</sup>. Prior to becoming a part of the Department of Agriculture and Consumer Services, it has been housed in the Department of Administration, the Department of Community Affairs, the Department of Environmental Protection, and the Executive Office of the Governor. In 2006, the Legislature established the Florida Energy Commission, as an arm of the Legislature, to develop recommendations for legislation to establish a state energy policy.<sup>2</sup>

During the 2007 Legislative Session, the issue of fragmentation of energy policy governance began to be raised. At that time, there were many public sector entities playing a role in developing, implementing, or coordinating some aspect of Florida's energy policies: the Florida Energy Office within the Department of Environmental Protection; the Department of Community Affairs; the Florida Building Commission; the Department of Agriculture and Consumer Services; the Department of Management Services; the Department of Financial Services; the Public Service Commission; the Florida Energy Commission; and a host of colleges and universities.

In 2008<sup>3</sup>, the Legislature established the Florida Energy and Climate Commission (Commission or FECC) as the state entity for recommending, implementing, and coordinating Florida's energy policy and for coordinating all federal energy programs delegated to the state. The measure, in effect, merged the Department of Environmental Protection's Florida Energy Office with the Legislature's Florida Energy Commission and administratively placed the new entity within the Executive Office of the Governor. In 2009, the Senate failed to confirm the membership of the Commission.

In 2011<sup>4</sup>, the Legislature abolished the Florida Energy and Climate Commission and transferred all of the powers, duties, functions, records, personnel, and property; unexpended balances of appropriations, allocations, and other funds; administrative authority; administrative rules; pending issues; and existing contracts of the FECC from the Executive Office of the Governor to the Department of Agriculture and Consumer Services.

Among its responsibilities, the Department of Agriculture and Consumer Services' Office of Energy administers tax incentive programs; administers the provisions of the Florida Energy and Climate Protection Act; works cooperatively with other state entities regarding energy-related matters; and provides energy policy recommendations to the Legislature.

## 2012 Policy Recommendations to the Legislature

On January 12, 2012, Commissioner of Agriculture Adam Putnam presented the following policy recommendations to the House Energy and Utilities Subcommittee:

<sup>&</sup>lt;sup>1</sup> Chapter 75-256, L.O.F.

<sup>&</sup>lt;sup>2</sup> Former s. 377.901(5), F.S.

<sup>&</sup>lt;sup>3</sup> Section 46, ch. 2008-227, L.O.F.

<sup>&</sup>lt;sup>4</sup> Chapter 2011-142, L.O.F.

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#### Infrastructure Investment

**Proposal 1** — Reinstate the following tax incentives at the recommended caps and clearly define eligible cost. Reinstatement of these tax incentives will promote the development of renewable energy infrastructure which would give Florida an advantage over other states when investors are looking to build plants.

- Renewable Energy Technologies Sales Tax Exemption- \$1 million per year;
- Renewable Energy Technologies Investment Corporate Income Tax Credit Increase the recent cap of \$6.5 million to \$10 million per year; and
- Renewable Energy Production Corporate Income Tax Credit Remains the same at \$0.01 for each kilowatt-hour of energy produced and sold with a cap of \$5 million per year.

In order to avoid misinterpretations of which entities are eligible for tax credits, clarify that an "electric utility" refers to those utilities that sell electricity on a retail basis.

#### **Reporting Requirements**

**Proposal 2** — Require the Department of Agriculture and Consumer Services (DACS) to develop a comprehensive statewide forest inventory analysis identifying where available biomass is located and ensuring forest sustainability.

**Proposal 3** — Require utilities who file 10-year site plans with the Public Service Commission (PSC), to report the amount of renewable energy resources produced, purchased and proposed in Florida over the 10 year planning horizon and how it will impact present and future capacity and energy needs.

#### Power Plant (over 75 MW) Need Determination Process

**Proposal 4**—Require the PSC to take into account the need to diversify Florida's energy generation fuel supply during a Need Determination proceeding. By placing value on fuel diversity, opportunities for alternative sources of energy improve, strengthening Florida's energy security.

#### Public Interest Determination for Renewable Energy Projects

**Proposal 5** — Require the PSC to establish criteria for evaluating proposed renewable energy facilities or negotiated renewable energy power purchase agreements and establish reporting criteria. The requirement would create a consistent framework by which the PSC would evaluate renewable proposals and determine whether they are in the public interest, establish what information utilities must provide, and what criteria renewable projects will be evaluated against. Given this new framework, remove the current law that requires the PSC to adopt rules for a renewable portfolio standard.

Based on the criteria established in Proposal 5, require the PSC to set an investor-owned utility limit of 1 percent or 75 MW, whichever is less, of its overall generation capacity portfolio in any one year of approved renewable energy investments where those investment costs are above the least cost alternative. Placing a cap on the overall effect on the utilities' generation portfolio will avoid unreasonable rate impacts on customers.

**Proposal 6** — Allow a utility to invest in a PSC approved financing project with renewable energy facilities in Florida. Currently this type of utility financing project is allowed with government solid waste facilities, but not with private renewable energy facilities. A joint utility and private renewable energy financing project would allow the utility to recover its expenses and a reasonable profit. This would promote investment by utilities in renewable energy facilities, when such a contract is determined by the PSC to be in the public interest.

## Energy Efficiency

**Proposal 7** — Require all buildings in the state building fleet, 5,000 square feet or more of conditioned space, to report their energy consumption, and requires the Department of Management Services to go to rule making in coordination with DACS to establish standard and uniform benchmarking and reporting requirements. Currently this reporting is not standardized across state agencies making the reporting incomplete and inaccurate.

**Proposal 8**—The legislature should direct DACS's Office of Energy in coordination with the Florida Energy Systems Consortium to evaluate methods to promote energy conservation and efficiency. Further, it should provide the consumer clear guidance on energy efficiency savings. The report should be completed by March 1, 2013, and presented to the Governor and the legislature. Also, the legislature should require the PSC to evaluate how the Florida Energy Efficiency and Conservation Act (FEECA) statutes provide conservation and efficiency programs that are in the public interest and without undue burden on the customer.

# Removing Barriers to Future Investments

**Proposal 9**—Clarify that electric vehicle charging stations are a service to the public and not the retail sale of electricity. This ensures that government entities or businesses installing and providing this service are not subject to the undue burden of regulatory fees that may be instituted by the PSC if they were to be considered retailers of electricity.

- Would direct the Florida Building Commission in coordination with DACS and the PSC to adopt rules to standardize the building and electric codes, permitting, and installation of the charging stations.
- Also would direct DACS to adopt rules to address definitions, method of sale, labeling requirements and price posting requirements to allow for consistency for consumers and the industry.
- The PSC is also instructed to conduct a study of the effects of the charging stations on energy consumption in the state as well as the effects on the grid.

**Proposal 10** — Require DACS in consultation with the University of Florida/Institute for Food and Agriculture Sciences to determine whether a plant material is exempt from the regulatory permitting process based on scientific evidence and practical experience. This would streamline the permitting process for feedstock crops for biofuels.

**Proposal 11** — Task the PSC to evaluate its current interconnection and net metering rules.

# **Ten-Year Site Plans**

## Present Situation

Section 186.801, F.S., requires each electric utility in the state to submit, at least once every 2 years, a Ten-Year Site Plan that provides an estimate of the utility's power-generating needs and the general location of its proposed power plant sites. As a matter of practice, the PSC requires each utility to submit a plan on an annual basis. Upon preliminary study of a plan, the PSC must classify each plan as "suitable" or "unsuitable." However, it is recognized that Ten-Year Site Plans submitted by an electric utility are tentative information for planning purposes only and may be amended at any time at the discretion of the utility upon written notification to the PSC. In its preliminary study, the PSC must review:

- The need, including the need as determined by the commission, for electrical power in the area to be served.
- The effect on fuel diversity within the state.
- The anticipated environmental impact of each proposed electrical power plant site.

- Possible alternatives to the proposed plan.
- The views of appropriate local, state, and federal agencies, including the views of the appropriate water management district as to the availability of water and its recommendation as to the use by the proposed plant of salt water or fresh water for cooling purposes.
- The extent to which the plan is consistent with the state comprehensive plan.
- The plan with respect to the information of the state on energy availability and consumption.

#### Effect of Proposed Changes

The bill adds three items to the list of matters that the PSC must review when conducting its preliminary study of a utility's Ten-Year Site Plan. These items are:

- The amount of renewable energy resources the utility produces or purchases.
- The amount of renewable energy resources the utility plans to produce or purchase over the 10year planning horizon and the means by which such production or purchases will be achieved.
- The utility's indication of how the production and purchase of renewable energy resources affect the utility's present and future capacity and energy needs.

The addition of these items will provide decision-makers with annual information on the current and long-term outlook for new renewable energy generation in Florida's generation mix. These changes do not require utilities to increase their production or purchase of renewable energy.

## Local Government Infrastructure Surtax

#### **Present Situation**

## Energy Efficiency and Conservation

In recent years, the Florida Legislature has placed an increased emphasis on promoting renewable energy, energy conservation, and enhanced energy efficiency in Florida on a state and local level. For example, in Chapter 2008-227, L.O.F., the Legislature amended the energy goal of the state comprehensive plan to provide, in part, that the state shall reduce its energy requirements through enhanced conservation and efficiency measures in all end-use sectors and reduce atmospheric carbon dioxide by promoting an increased use of renewable energy resources. That act also declared it the public policy of the state to play a leading role in developing and instituting energy management programs that promote energy conservation, energy security, and the reduction of greenhouse gases. In Chapter 2008-191, L.O.F., the Legislature adopted new energy conservation and greenhouse gas reduction comprehensive planning requirements for local governments.

In 2010, the Legislature found that, "In order to make [renewable energy improvements or energy conservation and efficiency improvements] more affordable and assist property owners who wish to undertake such improvements...there is a compelling state interest in enabling property owners to voluntarily finance such improvements with local government assistance."<sup>5</sup>

#### Local Discretionary Sales Surtaxes

Local discretionary sales surtaxes, also referred to as local option sales taxes, are authorized under s. 212.055, F.S., and provide potential revenue sources for county and municipal governments and school districts. The local discretionary sales surtaxes apply to all transactions that are subject to the state tax imposed on sales, use, services, rentals, admissions, and other authorized transactions, pursuant to ch. 212, F.S., and communications services as defined for purposes of ch. 202, F.S. Discretionary sales surtax must be collected when the transaction occurs in, or delivery is into, a county

that imposes the surtax, and the sale is subject to the state's sales and use tax.<sup>6</sup> The surtax applies to the first \$5,000 of any single taxable item when sold to the same purchaser at the same time.<sup>7</sup> There are eight different types of local discretionary sales surtaxes currently authorized in law:

- Charter County and Regional Transportation System Surtax;
- Local Government Infrastructure Surtax;
- Small County Surtax;
- Indigent Care and Trauma Center Surtax;
- County Public Hospital Surtax;
- School Capital Outlay Surtax;
- Voter-Approved Indigent Care Surtax; and
- Emergency Fire Rescue Services and Facilities Surtax.

The local discretionary sales surtax rate varies from county to county, depending on the particular levies authorized in that jurisdiction.

#### Local Government Infrastructure Surtax

Section 212.055(2)(a)1., F.S., provides that the Local Government Infrastructure Surtax shall be levied at the rate of 0.5 or 1 percent pursuant to an ordinance enacted by a majority vote of the members of the county's governing body and approved by voters in a countywide referendum.<sup>8</sup> If the proposal to levy the surtax is approved by a majority of the electors, the levy shall take effect. The levy may only be extended by voter approval in a countywide referendum. There is no state-mandated limit on the length of levy for surtax ordinances enacted after July 1, 1993.<sup>9</sup>

All counties are eligible to levy this surtax.<sup>10</sup> During the 2012 calendar year, three counties will be levying at the 0.5 percent rate and 15 counties will be levying at the 1 percent rate.<sup>11</sup> Specifically, the following counties will be levying this surtax during the 2012 calendar year:

County	Percentage
Charlotte	1%
Clay	1%
Duval	0.5%
Escambia	1%
Flagler	0.5%
Glades	1%
Highlands	1%
Hillsborough	0.5%
Indian River	1%
Lake	1%
Leon	1%
Monroe	1%
Osceola	1%
Pasco	1%
Pinellas	1%
Putnam	1%

<sup>&</sup>lt;sup>6</sup> 2012 Florida Tax Handbook, p. 207.

<sup>&</sup>lt;sup>7</sup> Section 212.054(2)(b)1., F.S.

<sup>&</sup>lt;sup>8</sup> In lieu of action by the county's governing body, municipalities representing a majority of the county's population may initiate the surtax through the adoption of uniform resolutions calling for a countywide referendum on the issue.

<sup>&</sup>lt;sup>9</sup> If the surtax was levied pursuant to a referendum held before July 1, 1993, the surtax may not be levied beyond the time established in the ordinance. If the pre-July 1, 1993, ordinance did not limit the period of the levy, the surtax may not be levied for more than 15 years.

years. <sup>10</sup> The Local Government Infrastructure Surtax is one of four surtaxes subject to a combined rate limitation. A county cannot levy this surtax and the Small County Surtax, Indigent Care and Trauma Center Surtax, and County Public Hospital Surtax in excess of a combined rate of 1 percent.

Sarasota	1%
Wakulla	1%

Source: 2012 Florida Tax Handbook, pp. 212-213.

The following chart estimates what these counties will collect for the current and upcoming fiscal year and provides historical statewide collection amounts for the Local Government Infrastructure Surtax:

Fiscal Year	Total Collections
2012-2013 estimate	\$659,170,463
2011-2012 estimate	\$624,214,453
2010-2011	\$604,273,430
2009-2010	\$593,680,024
2008-2009	\$629,887,765
2007-2008	\$658,207,195
2006-2007	\$685,978,662

Source: 2012 Florida Tax Handbook, p. 218.

Pursuant to s. 212.055(2)(d), F.S., school districts, counties and municipalities<sup>12</sup> may expend the proceeds of the Local Government Infrastructure Surtax and any accrued interest for the following purposes:

- To finance, plan, and construct infrastructure;
- To acquire land for public recreation, conservation, or protection of natural resources; or
- To finance the closure of county-owned or municipally owned solid waste landfills that have been closed or are required to be closed by order of the Department of Environmental Protection.

For purposes of s. 212.055(2)(d), F.S., the term "infrastructure" means the following:

- Any fixed capital expenditure or fixed capital outlay associated with the construction, reconstruction, or improvement of public facilities that have a life expectancy of 5 or more years and any related land acquisition, land improvement, design, and engineering costs.
- A fire department vehicle, an emergency medical service vehicle, a sheriff's office vehicle, a police department vehicle, or any other vehicle, and the equipment necessary to outfit the vehicle for its official use or equipment that has a life expectancy of at least 5 years.
- Any expenditure for the construction, lease, or maintenance of, or provision of utilities or security for, facilities, as defined in s. 29.008, F.S.
- Any fixed capital expenditure or fixed capital outlay associated with the improvement of private facilities that have a life expectancy of 5 or more years and that the owner agrees to make available for use on a temporary basis as needed by a local government as a public emergency shelter or a staging area for emergency response equipment during an emergency officially declared by the state or by the local government.<sup>13</sup>
- Any land acquisition expenditure for a residential housing project in which at least 30 percent of the units are affordable to individuals or families whose total annual household income does not exceed 120 percent of the area median income adjusted for household size, if the land is owned by a local government or by a special district that enters into a written agreement with the local government to provide such housing.<sup>14</sup>

consideration for the construction of the residential housing project on land acquired pursuant to this sub-subparagraph. STORAGE NAME: h7117c.SAC

<sup>&</sup>lt;sup>12</sup> Pursuant to s. 212.055(2)(d), F.S., proceeds of the surtax may also be expended within another county in the case of a negotiated joint county agreement.

<sup>&</sup>lt;sup>13</sup> Such improvements are limited to those necessary to comply with current standards for public emergency evacuation shelters. The owner must enter into a written contract with the local government providing the improvement funding to make the private facility available to the public for purposes of emergency shelter at no cost to the local government for a minimum of 10 years after completion of the improvement, with the provision that the obligation will transfer to any subsequent owner until the end of the minimum period. <sup>14</sup> The local government or special district may enter into a ground lease with a public or private person or entity for nominal or other

Any Local Government Infrastructure Surtax imposed or extended after July 1, 1998, may allocate up to 15 percent of the proceeds to be deposited in a trust fund for the purpose of funding economic development projects having a general public purpose of improving local economies, including the funding of operational costs and incentives related to economic development.<sup>15</sup> This intention must be on the ballot statement.

A county with a total population of 50,000 or less on April 1, 1992, or any county designated as an area of critical state concern that imposed the surtax before July 1, 1992, may use the proceeds and accrued interest of the surtax for any public purpose if the county satisfies all of the following criteria:

- The debt service obligations for any year are met;
- The county's comprehensive plan has been determined to be in compliance with part II of ch. 163, F.S; and
- The county has adopted an amendment to the surtax ordinance pursuant to the procedure provided in s. 125.66, F.S., authorizing additional uses of the proceeds and accrued interest.<sup>16</sup>

Pursuant to s. 125.66(2)(a), F.S., a board of county commissioners at any regular or special meeting may enact or amend any ordinance, if notice of intent to consider the ordinance is given at least 10 days prior to the meeting by publication in a newspaper of general circulation in the county. A copy of the notice shall be kept available for public inspection during the regular business hours of the office of the clerk of the board of county commissioners.

The notice of proposed enactment must state the date, time, and place of the meeting; the title or titles of proposed ordinances; and the place or places within the county where the proposed ordinance(s) may be inspected by the public. The notice shall also advise that interested parties may appear at the meeting and be heard with respect to the proposed ordinance.

## Effect of Proposed Changes

The bill amends s. 212.055(2)(d), F.S., which provides specifications for which the Local Government Infrastructure Surtax may be used.

As listed in the Current Situation Section, school districts, counties and municipalities may expend the proceeds of the Local Government Infrastructure Surtax and any accrued interest for the following purposes:

- To finance, plan, and construct infrastructure;
- To acquire land for public recreation, conservation, or protection of natural resources; or
- To finance the closure of county-owned or municipally owned solid waste landfills that have been closed or are required to be closed by order of the Department of Environmental Protection.

The bill adds the following to the list of authorized uses of the surtax proceeds:

• To provide loans, grants, or rebates to residential property owners, with preference given to lowincome elders, Florida veterans of the Armed Forces, and disabled adults, who make energy efficiency improvements to their residential property, if a local government ordinance authorizing such use is approved by referendum.

The bill defines "energy efficiency improvement" as any energy conservation and efficiency improvement that reduces consumption through conservation or a more efficient use of electricity, natural gas, propane, or other forms of energy on the property, including, but not limited to:

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<sup>&</sup>lt;sup>15</sup> Section 212.055(2)(d)2., F.S.

<sup>&</sup>lt;sup>16</sup> Section 212.055(2)(f)1., F.S.

- Air sealing;
- Installation of insulation;
- Installation of energy-efficient heating, cooling, or ventilation systems;
- Installation of solar panels;
- Building modifications to increase the use of daylight or shade;
- Replacement of windows;
- Installation of energy controls or energy recovery systems;
- Installation of electric vehicle charging equipment; and
- Installation of efficient lighting equipment.

A local government choosing to expend funds under this new provision would be required to enact or amend its ordinance pursuant to s. 125.66, F.S., and have the ordinance approved by referendum in a subsequent election.

## Sales and Use Tax Exemption for Renewable Energy Technologies

## Present Situation

In 2006, the Legislature authorized a sales tax exemption,<sup>17</sup> in the form of a tax refund, for renewable energy technologies in Florida, occurring between July 1, 2006, and June 30, 2010. Taxpayers applying for the exemptions were required to submit an application to the Energy Office<sup>18</sup> to determine eligibility before submitting a sales tax refund claim to the Department of Revenue. The exemption applied to the following items:

- Hydrogen-powered vehicles, materials incorporated into hydrogen-powered vehicles, and hydrogen-fueling stations, up to a limit of \$2 million in taxes each state fiscal year for all taxpayers.
- Commercial stationary hydrogen fuel cells, up to a limit of \$1 million in taxes each state fiscal year for all taxpayers.
- Materials used in the distribution of biodiesel (B10-B100) and ethanol (E10-100), including fueling infrastructure, transportation, and storage, up to a limit of \$1 million in taxes each state fiscal year for all taxpayers. Gasoline fueling station pump retrofits for ethanol (E10-E100) distribution qualified for the exemption.

The sales tax exemptions for hydrogen-powered vehicles and hydrogen fuel cells were not well subscribed to during the duration of the program; however, the sales tax exemption for materials used in the distribution of biodiesel and ethanol made gains in use each year, reaching 100 percent of the funds being expended by the last year of the program. The program expired on July 1, 2010.

## Effect of Proposed Changes

The bill reinstates the biofuel portion of the sales and use tax exemption for another four years (FY 2012-2013 through FY 2015-2016) and expands it to include materials used in the distribution of other renewable fuels, up to a limit of \$1 million in taxes each state fiscal year for all taxpayers.

The bill defines "renewable fuel" as a fuel produced from biomass that is used to replace or reduce the quantity of fossil fuel present in motor fuel or diesel fuel. "Biomass" means biomass as defined in s. 366.91, F.S.,<sup>19</sup> "motor fuel" means motor fuel as defined in s. 206.01, F.S.,<sup>20</sup> and "diesel fuel" means diesel fuel as defined in s. 206.86, F.S.<sup>21</sup>

<sup>19</sup> Section 366.91(2)(a) , F.S., defines "biomass" as "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 **STORAGE NAME**: h7117c.SAC **PAGE: 9** DATE: 2/27/2012

<sup>&</sup>lt;sup>17</sup> See former s. 212.08(7)(ccc), F.S.

<sup>&</sup>lt;sup>18</sup> When the legislation was passed, the Energy Office was in the Department of Environmental Protection. Subsequently, in 2008, the office was moved to the Executive Office of the Governor, under the Florida Energy and Climate Commission.

The Department of Agriculture and Consumer Services and the Department of Revenue are to jointly administer the program, which expires July 1, 2016.

## Renewable Energy Technologies Investment Tax Credit

## Present Situation

In 2006, the Legislature created s. 220.192, F.S., which provided for a credit against either the corporate income tax or the franchise tax to be granted in an amount equal to the "eligible costs." "Eligible costs" were defined as seventy-five percent of all capital costs, operation and maintenance costs, and research and development costs, incurred between July 1, 2006, and June 30, 2010, in connection with an investment in the following:

- Hydrogen-powered vehicles and hydrogen vehicle fueling stations in the state, including, but not limited to, the costs of constructing, installing, and equipping such technologies in the state, up to a limit of \$3 million per state fiscal year for all taxpayers.
- Commercial stationary hydrogen fuel cells in the state, including, but not limited to, the costs of constructing, installing, and equipping such technologies in the state, up to a limit of \$1.5 million per state fiscal year for all taxpayers, and limited to a maximum of \$12,000 per fuel cell.
- Production, storage, and distribution of biodiesel (B10-B100) and ethanol (E10-E100) in the state, including the costs of constructing, installing, and equipping such technologies in the state [gasoline fueling station pump retrofits for ethanol (E10-E100) distribution qualified], up to a limit of \$6.5 million per state fiscal year for all taxpayers.<sup>22</sup>

Hydrogen-powered vehicles and hydrogen vehicle fueling station tax credits were not claimed during the first three fiscal years that the program was in existence, but 100 percent of the funds were expended during the last year of the program. Commercial stationary hydrogen fuel cell credits were not claimed during the first two years of the program; however, 100 percent of the funds were expended during the last two years of the program. Production, storage, and distribution of biodiesel and ethanol credits were issued for the first three fiscal years with varying balances, and 100 percent of the funds were of the funds were expended the last year of the program.

The credit could be used for tax years beginning on or after January 1, 2007. The Energy Office<sup>23</sup> and the Department of Revenue jointly administered the program, which expired on June 30, 2010.

#### Effect of Proposed Changes

The bill reinstates the biofuel portion of the Renewable Energy Technologies Investment Tax Credit for another four years, and expands it to include materials used in the distribution of other renewable fuels, up to a limit of \$10 million in taxes each state fiscal year for all taxpayers. The credit is capped at \$1 million per taxpayer per fiscal year.

The bill defines "renewable fuel" as a fuel produced from biomass that is used to replace or reduce the quantity of fossil fuel present in motor fuel or diesel fuel. "Biomass" means biomass as defined in s.

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."

<sup>&</sup>lt;sup>20</sup> Section 206.01(9), F.S., defines "motor fuel" as "all gasoline products or any product blended with gasoline or any fuel placed in the storage supply tank of a gasoline-powered motor vehicle."

<sup>&</sup>lt;sup>21</sup> Section 206.86, F.S., defines "diesel fuel" as "all petroleum distillates commonly known as diesel #2, biodiesel, or any other product blended with diesel or any product placed into the storage supply tank of a diesel-powered motor vehicle."

<sup>&</sup>lt;sup>21</sup> Section 220.192(1)(c), F.S.

<sup>&</sup>lt;sup>21</sup> When the legislation was passed, the Energy Office was in the Department of Environmental Protection. Subsequently, in 2008, the <sup>22</sup> Section 220.192(1)(c), F.S.

<sup>&</sup>lt;sup>23</sup>When the legislation was passed, the Energy Office was in the Department of Environmental Protection. Subsequently, in 2008, the office was moved to the Executive Office of the Governor, under the Florida Energy and Climate Commission.

366.91, F.S.,<sup>24</sup> "motor fuel" means motor fuel as defined in s. 206.01, F.S.,<sup>25</sup> and "diesel fuel" means diesel fuel as defined in s. 206.86, F.S.<sup>26</sup>

The credit can be used for tax years beginning on or after January 1, 2013, and will be granted in an amount equal to the eligible costs (seventy-five percent of all capital costs, operation and maintenance costs, and research and development costs in connection with an investment in the production, storage, and distribution of biodiesel, ethanol, and other renewable fuel in the state, including the costs of constructing, installing, and equipping such technologies in the state) incurred between July 1, 2012, and June 30, 2016. In the event of insufficient tax liability on the part of the corporation, the unused amount may be carried forward and used until December 31, 2018. The Department of Agriculture and Consumer Services and the Department of Revenue are to jointly administer the program.

## Florida Renewable Energy Production Credit

## Present Situation

In 2006, the Legislature created s. 220.193, F.S., which was designed to encourage the development and expansion of facilities that produce renewable energy in Florida. The credit was available to new renewable energy facilities that were operationally placed in service after May 1, 2006, or expanded renewable energy facilities that increased electrical production and sale by more than 5 percent over what they had produced during 2005. The tax credit was based on the taxpayer's production and sale of electricity. The program applied to electricity production and sales made between January 1, 2007, and June 30, 2010.

The tax credit was equal to \$0.01 for each kilowatt-hour of electricity produced and sold or used during a given tax year. The program was capped at \$5 million per state fiscal year for all taxpayers. The production tax credits were utilized every fiscal year of the program's duration. The program was administered by the Department of Revenue and expired June 30, 2010.

## Effect of Proposed Changes

The bill reinstates and modifies the Florida Renewable Energy Production Credit for electricity produced and sold<sup>27</sup> on or after January 1, 2013, through June 30, 2016. The term "new facility" is amended to include a Florida renewable energy facility that has had an expansion operationally placed in service after May 1, 2006, and whose cost exceeded 50 percent of the assessed value of the facility immediately before the expansion.

The tax credit is equal to \$0.01 for each kilowatt-hour of electricity produced and sold or used by a new or expanded Florida renewable energy facility during a given tax year up to a limit of \$1 million per taxpayer and \$5 million in taxes each state fiscal year for all taxpayers.

If the amount of credits applied for each year exceeds \$5 million, the Department of Revenue shall award to qualified applicants based on the following priority:

1. An applicant who places a new facility in operation after May 1, 2012, shall be granted credits first, up to a maximum of \$250,000 each, with remaining credits to be granted pursuant to subparagraph 3., but if there are insufficient funds authorized to grant all such credits, the credits granted under

<sup>&</sup>lt;sup>24</sup> Section 366.91(2)(a) , F.S., defines "biomass" as "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."

<sup>&</sup>lt;sup>25</sup> Section 206.01(9), F.S., defines "motor fuel" as "all gasoline products or any product blended with gasoline or any fuel placed in the storage supply tank of a gasoline-powered motor vehicle."

<sup>&</sup>lt;sup>26</sup> Section 206.86, F.S., defines "diesel fuel" as "all petroleum distillates commonly known as diesel #2, biodiesel, or any other product blended with diesel or any product placed into the storage supply tank of a diesel-powered motor vehicle."

<sup>&</sup>lt;sup>27</sup> The corporate renewable energy production tax credit may be earned both for electricity *sold* and electricity *used* by the producer when the producer would have otherwise been required to purchase the electricity.

this subparagraph shall be prorated based upon each applicant's qualified production and sales as a percentage of total qualified production and sales of all applicants in this category for the year;

- 2. An applicant who does not qualify under subparagraph 1., but who claims a credit of \$50,000 or less shall be granted credits next, and if there are insufficient funds authorized to grant all such credits, the credits shall be prorated based upon each applicant's qualified production and sales as a percentage of total qualified production and sales of all applicants in this category for the year;
- 3. An applicant who does not qualify under subparagraph 1. or subparagraph 2. and an applicant whose credits have not been fully awarded under subparagraph 1. shall be awarded credits from remaining authorized funds, and if there are insufficient authorized funds to grant all such remaining credits, the credits shall be prorated based upon each applicant's remaining claims for qualified production and sales as a percentage of total remaining claims for qualified production and sales of all applicants in this category for the year.

In the event of insufficient tax liability on the part of the corporation, the unused amount may be carried forward for a period not to exceed 5 years. The Department of Revenue is directed to administer the program. This section of the bill takes effect upon becoming law and applies to tax years beginning on and after January 1, 2013.

## **Energy Management in State Buildings**

#### Present Situation

Section 255.257, F.S., requires each state agency to collect data on energy consumption and cost for those state-owned facilities and metered state-leased facilities<sup>28</sup> that are 5,000 net square feet or more. The data is to be used to determine the effectiveness of the state energy management plan and the effectiveness of the energy management program of each of the state agencies. Collected data must be reported annually to the Department of Management Services (DMS or department) in a format prescribed by DMS. Each state agency, the Public Service Commission, the Department of Military Affairs, and the judicial branch are required to appoint a coordinator to implement the energy management program agreed upon by that entity.<sup>29</sup> According to the department, these coordinators are the energy liaison for their respective entities.

In accordance with s. 255.257(3), F.S., the department is required to develop a state energy management plan consisting of, but not limited to, the following elements:

- Data-gathering requirements;
- Building energy audit procedures;
- Uniform data analysis procedures;
- Employee energy education program measures;
- Energy consumption reduction techniques;
- Training program for state agency energy management coordinators; and
- Guidelines for building managers.

The plan is required to include a description of actions that state agencies must take to reduce consumption of electricity and nonrenewable energy sources used for space heating and cooling, ventilation, lighting, water heating, and transportation.

The department released the *State Energy Management Plan* (plan) in February 2010<sup>30</sup>. The first annual agency energy consumption and cost data reports are to be submitted in September 2012.

<sup>&</sup>lt;sup>28</sup> The term "metered state-leased facilities" does not include "full-service state-leased facilities" whereby the charge for utilities is factored into the rent.

<sup>&</sup>lt;sup>29</sup> Section 255.257(2), F.S.

<sup>&</sup>lt;sup>30</sup> <u>State Energy Management Plan</u>, February 2010.

Each element required under subsection (3) is a chapter within the plan. The following is a description of the components within each element of the plan:<sup>31</sup>

- 1. <u>Data Gathering Requirements / Sub-Metering Requirements</u> This plan establishes the following two categories of energy data gathering requirements:
  - Utility bill data consumption, peak demand, and cost data via monthly bill statements from the utility provider.
  - Sub-metered data consumption and real-time demand data from metering devices ("smart meters" in most cases) deployed by the agency.

In order to fulfill the sub-metered data reporting requirements, agencies will be required to install sub-meters for total building electrical consumption and demand at all state-owned and metered state-leased facilities larger than 5,000 net square feet. Where a building has particularly large energy consuming systems such as Heating, Ventilation & Air Conditioning (HVAC) or water heaters, additional sub-metering requirements may apply. This plan also outlines acceptable sub-metering schemes for all types of energy-consuming systems found in state buildings.

- 2. <u>Reporting System</u> -This plan introduces a utility reporting system that has been designed to accomplish the following goals simultaneously:
  - Provide accurate utility records for the agency.
  - Meet the reporting requirements of this plan.
  - Meet the previous two goals while only requiring energy consumption and cost data to be entered once.
  - Utilize a generic and common format (Microsoft Excel®).

Annual submission to DMS of the reporting forms presented in the plan is required. The reporting system consolidates energy consumption and cost data in a single format that automatically generates the reporting forms required in this plan. The reporting system has been developed to simultaneously meet the utility recordkeeping and energy management goals of state agencies. The reporting system will require some initial setup. Some basic/intermediate Microsoft Excel® training may be required. The result of such setup and training procedures will ultimately be a more thorough, yet necessary, understanding of the mechanics involved in effective energy management.

- 3. <u>Uniform Data Analysis Procedures</u> -This plan summarizes basic data analysis procedures for energy consumption data and, more importantly, energy demand data. The energy demand data required in the plan will be used to identify energy-related behaviors such as equipment schedules (start/stop times), occupancy schedules, and peak load occurrences so that energy usage can be managed optimally and very likely reduced.
- Building Energy Audit Procedures This plan provides recommended procedures for conducting a thorough energy audit in a state building. Energy audits are a vital part of an effective energy management strategy.
- 5. <u>Employee Energy Education Program Measures</u> These measures will be developed in the future based on input from agency energy management coordinators.
- 6. <u>Techniques to Reduce Energy Consumption</u> The energy reduction techniques presented in this plan go beyond day-to-day strategies to control energy consumption and costs. The techniques presented pertain to operations and renovations in existing buildings. Agencies in the position of replacing energy-consuming equipment through either fixed capital outlay or performance contracting methods should consult these techniques. Many of the

<sup>&</sup>lt;sup>31</sup> State Energy Management Plan, Executive Summary, February 10, 2010, pp. 1-3. **STORAGE NAME**: h7117c.SAC DATE: 2/27/2012

techniques presented address the urgency of considering the true relationship between energy efficiency and long-term costs when energy-related decisions are at hand.

- <u>Training Requirements</u> The training requirements of this plan center around the long-term goal of developing "certified energy managers" (CEM) by the Association of Energy Engineers. Qualified energy managers are essential to the goal of effectively reducing energy consumption and costs.
- 8. <u>Guidelines for Building Managers</u> The guidelines presented in this plan are general in nature and are intended to provide an account of the daily and weekly activities that can reduce building energy consumption. Building managers are encouraged to take an active role in energy conservation and the agencies should include them in all such efforts.

## Effect of Proposed Changes

The bill directs DMS in coordination with the Department of Agriculture and Consumer Services to further develop the *State Energy Management Plan*. The bill also expands the element of "uniform data analysis procedures" to include uniform reporting procedures.

## Tax Refund Program for Qualified Target Industry Businesses

#### **Present Situation**

Section 288.106, F.S., which creates the tax refund program for qualified target industry businesses, provides legislative findings that "retaining and expanding existing businesses in the state, encouraging the creation of new businesses in the state, attracting new businesses from outside the state, and generally providing conditions favorable for the growth of target industries creates high-quality, high-wage employment opportunities for residents of the state and strengthens the state's economic foundation." Further, the section provides that "it is the policy of the state to encourage the growth of higher-wage jobs and a diverse economic base by providing state tax refunds to qualified target industry businesses that originate or expand in the state or that relocate to the state."

Section 288.106(3), F.S., provides for a tax refund to a qualified target industry business for the amount of eligible taxes<sup>32</sup> certified by the department that were paid by the business. The amount of the refund is \$3,000 multiplied by the number of jobs created or \$6,000 multiplied by the number of jobs if the project is located in a rural community or an enterprise zone.

A qualified target industry business gets additional tax refund payments of:

- \$1,000 multiplied by the number of jobs if the jobs pay an annual average wage of at least 150 percent of the average private sector wage in the area, or equal to \$2,000 multiplied by the number of jobs if the jobs pay an annual average wage of at least 200 percent of the average private sector wage in the area;
- \$1,000 multiplied by the number of jobs if the local financial support is equal to that of the state's incentive award; and
- \$2,000 multiplied by the number of jobs if the business falls within one of the designated highimpact sectors or increases exports of its goods through a seaport or airport in the state by at least 10 percent in value or tonnage in each of the years that the business receives a tax refund under this section.

<sup>&</sup>lt;sup>32</sup> Eligible taxes are: Corporate income taxes under ch. 220, F.S., Insurance premium taxes under s. 624.509, F.S., sales and use tax under ch. 212, F.S., intangible personal property taxes under ch. 199, F.S., excise taxes on documents under ch. 201, F.S., ad valorem taxes paid, as defined in s. 220.03(1), F.S., and state communications services taxes administered under ch. 202, F.S. STORAGE NAME: h7117c.SAC PAGE: 14 DATE: 2/27/2012

"Target industry business"<sup>33</sup> is defined as a corporate headquarters business or any business that is engaged in one of the target industries identified pursuant to the following criteria developed by the Department of Economic Opportunity in consultation with Enterprise Florida, Inc.:

- Future growth.<sup>34</sup>
- Stability.<sup>35</sup>
- High wage.<sup>36</sup>
- Market and resource independent.<sup>37</sup>
- Industrial base diversification and strengthening.<sup>38</sup>
- Positive economic impact.<sup>39</sup>

The term "target industry business" does not include the following:

- Any business engaged in retail industry activities;
- Any electrical utility company;
- Any phosphate or other solid minerals severance, mining, or processing operation;
- Any oil or gas exploration or production operation; or
- Any business subject to regulation by the Division of Hotels and Restaurants of the Department of Business and Professional Regulation.<sup>40</sup>

The statute does not specify that the term "target industry business" includes renewable energy businesses; however, it does imply that they are included in that definition, whereby the "Market and Resource Independent" criterion includes a requirement that, "The location of industry businesses should not be dependent on Florida markets or resources as indicated by industry analysis, **except for businesses in the renewable energy industry**."<sup>41</sup>

The definition goes on, however, to specifically exclude "any electrical utility company." Reportedly, this exclusionary language has been interpreted to include any business that sells electricity, even to a utility at wholesale. This interpretation prevents a renewable energy producer from taking advantage of this tax refund in conjunction with either s. 366.051, F.S., (cogeneration; small power production) or s. 366.91(3) or (4), F.S., (standard offer purchase contract).

## Effect of Proposed Changes

The bill amends the tax refund program for qualified target industry businesses, by clarifying that an electrical utility company that is excluded from the definition of "target industry business" is one that

<sup>41</sup> Section 288.106(2)(q)4., F.S. **STORAGE NAME**: h7117c.SAC **DATE**: 2/27/2012

<sup>&</sup>lt;sup>33</sup> By January 1 of every 3rd year, beginning January 1, 2011, the Department of Economic Opportunity, in consultation with Enterprise Florida, Inc., economic development organizations, the State University System, local governments, employee and employer organizations, market analysts, and economists, shall review and, as appropriate, revise the list of such target industries and submit the list to the Governor, the President of the Senate, and the Speaker of the House of Representatives.

<sup>&</sup>lt;sup>34</sup> Industry forecasts should indicate strong expectation for future growth in both employment and output, according to the most recent available data. Special consideration should be given to businesses that export goods to, or provide services in, international markets and businesses that replace domestic and international imports of goods or services.

<sup>&</sup>lt;sup>35</sup> The industry should not be subject to periodic layoffs, whether due to seasonality or sensitivity to volatile economic variables such as weather. The industry should also be relatively resistant to recession, so that the demand for products of this industry is not typically subject to decline during an economic downturn.

<sup>&</sup>lt;sup>36</sup> The industry should pay relatively high wages compared to statewide or area averages.

<sup>&</sup>lt;sup>37</sup> The location of industry businesses should not be dependent on Florida markets or resources as indicated by industry analysis, except for businesses in the renewable energy industry.
<sup>38</sup> The industry should contribute toward expanding or diversifying the state's or area's economic base, as indicated by analysis of

<sup>&</sup>lt;sup>38</sup> The industry should contribute toward expanding or diversifying the state's or area's economic base, as indicated by analysis of employment and output shares compared to national and regional trends. Special consideration should be given to industries that strengthen regional economies by adding value to basic products or building regional industrial clusters as indicated by industry analysis. Special consideration should also be given to the development of strong industrial clusters that include defense and homeland security businesses.

<sup>&</sup>lt;sup>39</sup> The industry is expected to have strong positive economic impacts on or benefits to the state or regional economies. Special consideration should be given to industries that facilitate the development of the state as a hub for domestic and global trade and logistics.

<sup>&</sup>lt;sup>40</sup> Section 288.106(2)(q), F.S.

meets the definition of an "electrical utility" in s. 366.02(2), F.S. That subsection provides that an "electric utility" means "any municipal electric utility, investor-owned electric utility, or rural electric cooperative which owns, maintains, or operates an electric generation, transmission, or distribution system within the state."

This will allow renewable energy producers who only sell electricity to a utility at wholesale to be eligible for the tax refund.

## **Evaluation of Economic Benefits of New Renewable Energy Projects**

#### Present Situation

In 2011, the Legislature created the Department of Economic Opportunity (DEO) "to assist the Governor in working with the Legislature, state agencies, business leaders, and economic development professionals to formulate and implement coherent and consistent policies and strategies designed to promote economic opportunities for all Floridians."<sup>42</sup> To accomplish this purpose, the DEO is provided the following duties:

- Facilitate the direct involvement of the Governor and the Lieutenant Governor in economic development and workforce development projects designed to create, expand, and retain businesses in this state, to recruit business from around the world, and to facilitate other jobcreating efforts.
- Recruit new businesses to this state and promote the expansion of existing businesses by expediting permitting and location decisions, worker placement and training, and incentive awards.
- Promote viable, sustainable communities by providing technical assistance and guidance on growth and development issues, grants, and other assistance to local communities.
- Ensure that the state's goals and policies relating to economic development, workforce development, community planning and development, and affordable housing are fully integrated with appropriate implementation strategies.
- Manage the activities of public-private partnerships and state agencies in order to avoid duplication and promote coordinated and consistent implementation of programs in areas including, but not limited to, tourism; international trade and investment; business recruitment, creation, retention, and expansion; minority and small business development; rural community development; commercialization of products, services, or ideas developed in public universities or other public institutions; and the development and promotion of professional and amateur sporting events.<sup>43</sup>

Four divisions are created by statute within the DEO, including the Division of Workforce Services (the division).<sup>44</sup> This division includes the Labor Market Statistics Center, which, among other things, provides economic impact analysis to measure the economic effects of business start-ups and expansions, including effects on employment, labor income, county gross domestic product (value added), and output.<sup>45</sup>

## Effect of Proposed Changes

The bill requires the Department of Economic Opportunity, through its Division of Workforce Services, to prepare an independent economic impact study for each renewable energy project submitted to the Public Service Commission (PSC) for review under the public interest determination process established by the bill, which is discussed in detail below. The study must include the impacts of the

<sup>&</sup>lt;sup>42</sup> Section 1, ch. 2011-142, Laws of Florida.

<sup>&</sup>lt;sup>43</sup> Section 20.60(4), F.S.

<sup>&</sup>lt;sup>44</sup> Section 20.60(3), F.S.

<sup>&</sup>lt;sup>45</sup> <u>http://www.floridajobs.org/labor-market-information/products-and-services/economic-impact-analysis</u> (last viewed on February 24, 2012)

project on regional employment, income, compensation, and output. Under the public interest determination process, the PSC must consider, among other things, the regional and statewide net economic benefits associated with a proposed renewable energy project. The DEO's analysis is used to help guide this part of the PSC's review of a project.

#### **Renewable Energy Policy / Public Interest Determination Process**

#### Present Situation

Section 366.91(3), F.S., requires each investor-owned electric utility in the state to continuously offer a purchase contract to producers of renewable energy, though the utility is not permitted to pay more under the contract than the incremental costs to the utility if it had generated the power itself or purchased the power from another source (i.e., the utility's "full avoided costs"). To implement this provision, the PSC requires that each utility make available a separate standard offer contract based on the next planned fossil fuel generating plant of each technology type identified in the utility's Ten-Year Site Plan.<sup>46</sup> Currently, natural gas power plants are the only types of fossil-fuel power plants identified in the Ten-Year Site Plans filed by the state's investor-owned utilities. Thus, the utilities' full avoided costs are based on the costs of new natural gas power plants. Because the costs to produce renewable energy generally exceed the costs associated with new natural gas power plants, payments for renewable energy based on a utility's full avoided costs are often insufficient to support the development of many renewable energy projects.

As an alternative to the standard offer contracts required by s. 366.91(3), F.S., the PSC encourages utilities and renewable energy developers to negotiate contracts for the purchase of capacity and energy, where those contracts would allow the utility to avoid or defer construction of planned utility generating units and provide fuel diversity, fuel price stability, and energy security.<sup>47</sup> Still, PSC rules provide that these negotiated contracts may be deemed prudent only if the costs to the utility do not exceed its full avoided costs.<sup>48</sup>

Current law does not provide a dedicated, explicit process for determining the prudence of a utility's investment in a renewable energy power plant less than 75 megawatts in capacity or a utility's decision to enter into a contract to purchase renewable energy at a price above its full avoided costs, prior to the utility making a commitment to such an investment.<sup>49</sup> The PSC will permit the utility to recover its investment in such projects only if the PSC finds that the funds were prudently invested.<sup>50</sup> This determination is largely based on whether the project is the least-cost alternative to supply power

(Emphasis added.)

<sup>50</sup> See s. 366.06(1), F.S., which states, in pertinent part:

The commission shall investigate and determine the actual legitimate costs of the property of each utility company, actually used and useful in the public service, and shall keep a current record of the net investment of each public utility company in such property which value, as determined by the commission, shall be used for ratemaking purposes and shall be the money honestly and prudently invested by the public utility company in such property used and useful in serving the public . . ..

<sup>&</sup>lt;sup>46</sup> Rule 25-17.250(1), F.A.C.

<sup>&</sup>lt;sup>47</sup> Rule 25-17.240(1), F.A.C.

<sup>&</sup>lt;sup>48</sup> See Rule 25-17.240, F.A.C., which states:

Negotiated contracts will be considered prudent for cost recovery purposes if it is demonstrated by the investorowned utility that the purchase of firm capacity and energy from the renewable generating facility pursuant to the rates, terms, and other conditions of the contract can reasonably be expected to contribute towards the deferral or avoidance of additional capacity construction or other capacity-related costs by the purchasing utility and provide fuel diversity, fuel price stability, and energy security <u>at a cost to the utility's ratepayers which does not exceed full</u> <u>avoided costs</u>, giving consideration to the characteristics of the capacity and energy to be delivered by the renewable generating facility under the contract.

<sup>&</sup>lt;sup>49</sup> Nothing in current law explicitly prohibits a utility from requesting that the PSC make a determination as to the prudence of a proposed new plant or negotiated power purchase prior to the utility's commitment. Utilities have included provisions in some purchased power contracts to make the contracts contingent upon PSC approval and have sought a prudence determination from the PSC prior to the contract becoming effective. Further, a utility could seek approval through a limited proceeding pursuant to s. 366.076, F.S., though the PSC could expand the scope of the proceeding to include other matters.

needed by the utility to serve its ratepayers, though the PSC is not prohibited from considering other factors.

A utility will likely not invest in a new renewable energy project, such as a renewable energy facility or a renewable energy purchased power agreement, absent some certainty that it will be able to recover the costs of the project. In many cases, a renewable energy facility or purchase will not be the least-cost alternative available, and in some instances the facility may not make a significant contribution to electrical system reliability as compared to other resources. Still, the renewable energy facility or purchase may yield other benefits to the utility and/or the state. There is currently no clear statutory direction for the PSC to weigh these potential benefits in a prudence determination for renewable energy at a price above the utility's full avoided costs.

When determining the need for an electrical power plant with a capacity of 75 megawatts or higher, the PSC must consider, among other things, whether the proposed plant is the most cost-effective alternative available.<sup>51</sup> To assist it in evaluating this factor, the PSC requires each investor-owned electric utility, prior to filing a petition for determination of need, to evaluate supply-side alternatives to the proposed power plant by issuing a Request for Proposals (RFP).<sup>52</sup> The PSC's rule requires notice of the RFP by publication and specifies the minimum information required in the notice as well as the minimum information required in the RFP document. The rule establishes other procedural guidelines for the RFP process and for the evaluation of proposals received.<sup>53</sup>

In 2008, the Legislature directed the PSC to adopt rules for a renewable portfolio standard (RPS) to require each investor-owned electric utility to supply renewable energy to its customers by producing or purchasing the energy or by purchasing renewable energy credits.<sup>54</sup> The law, codified within section 366.92, F.S., provided that the PSC's rule could not be implemented until ratified by the Legislature. The commission presented a draft RPS rule for legislative consideration in early 2009. The Legislature has not ratified the draft rule.

#### Effect of Proposed Changes

The bill establishes a dedicated framework for the PSC to determine that a proposed renewable energy project is prudent and in the public interest. The bill defines "renewable energy project" to include the construction of a new renewable energy generating facility, the conversion of an existing fossil fuel generating facility to a renewable facility, or a contract to purchase renewable energy. Renewable energy facilities that require a determination of need pursuant to existing law<sup>55</sup> are not eligible under the process established in the bill. Thus, renewable energy generating facilities of 75 megawatts in capacity or higher would not be eligible and would continue to be reviewed by the PSC through the existing need determination process. Further, a public interest determination may be requested at the utility's discretion as an alternative to a determination of prudence through any other available process.

The bill provides that, in order to determine that a project is in the public interest, the PSC must find that the project provides an overall net benefit to the state. In making this determination, the PSC is required to consider the following seven factors:

- The estimated cost and estimated rate impacts of the project.
- The impact of the project on the reliability and integrity of the utility's system and the statewide electric grid.
- The extent to which the project strengthens fuel supply reliability to the utility and the state.
- The extent to which the project promotes rate stability by reducing the risk of fuel cost volatility.
- The extent to which the project retains energy expenditures in the state or regional economy.

<sup>52</sup> Rule 25-22.082, F.A.C.

<sup>&</sup>lt;sup>51</sup> Section 403.519(3), F.S.

<sup>&</sup>lt;sup>53</sup> Id.

<sup>&</sup>lt;sup>54</sup> Chapter 2008-227, s. 42, L.O.F.

<sup>&</sup>lt;sup>55</sup> A determination of need is required for any steam or solar electrical generating facility, except for such facilities with a capacity of less than 75 megawatts. Sections 403.503(14) and 403.519, F.S.

- The extent to which the project reduces the utility's regulatory costs associated with adverse environmental impacts.
- The regional and statewide net economic benefits associated with the project, taking into account the independent economic impact study prepared by the Department of Economic Opportunity.

Under current practice, the PSC typically would determine the prudence of a new electric generation facility or purchase based primarily on whether the project is the least-cost alternative to supply power needed by the utility to serve its ratepayers. The criteria set forth in the bill require the PSC to continue to look at the estimated cost and rate impacts of a project and the impacts of a project on system reliability and integrity. The bill expands the PSC's review to include other factors that the PSC must explicitly consider in making a public interest determination, including regional and statewide net economic benefits. The PSC historically has not been given the statutory responsibility or duty to conduct this type of economic analysis. Thus, the bill calls upon the DEO to provide an independent economic impact analysis for the PSC to consider in its review.

The bill allows the utility to select the type and technology of the renewable energy resource that it elects to use. The bill requires that a proposed renewable energy project be selected through a competitive bidding process, based on the utility's choice of technology. This process is intended to allow market forces to help shape projects submitted for review. As a result, this process should provide the PSC with some assurance that it is presented with the best alternative based on the type and technology of the renewable energy resource selected by the utility.

If the PSC determines through its review that a renewable energy project is in the public interest, the bill provides that all reasonable and prudent costs incurred for the project are recoverable through the utility's environmental cost recovery charges.<sup>56</sup> The bill specifies the types of costs recoverable for each type of project defined by the bill as a "renewable energy project," i.e., new construction, conversion of an existing fossil-fuel plant, and a purchase contract.

The bill requires the PSC to adopt rules to implement the public interest determination process as follows:

- Provide a process for competitive bidding of a renewable energy project based on the type and • technology of the renewable energy resource that the utility elects to use.
- Provide minimum requirements and information that a utility must include in a request for • proposals for a new renewable energy project and other information related to the request for proposal and competitive bidding processes.
- Establish minimum requirements and information that a utility must include in a petition for a public interest determination for a renewable energy project, including information required by the DEO to conduct its economic impact study.
- Provide for recovery through the environmental cost recovery clause of all reasonable and prudent costs incurred by a utility for a renewable energy project that the commission determines to be in the public interest.
- Establish a mechanism for the sharing of revenues derived from any renewable energy credit, • carbon credit, or other mechanism that attributes value to the production of renewable energy, either existing or hereafter devised, and received by a utility by virtue of the production or purchase of renewable energy found to be in the public interest.<sup>57</sup>
- Require a utility to report to the commission, on an annual basis, the status of the project, the • economic impacts of the project on the region and the state, the amount and type of fuel displaced by the project, operational statistics, and any other information deemed relevant by the commission.

<sup>&</sup>lt;sup>56</sup> Section 366.8255, F.S., establishes a mechanism for a utility to recover specified environmental compliance costs through a charge separate from the utility's base rates. This charge is referred to as the environmental cost recovery charge.

The bill provides that a utility may retain from these revenues no more than the amount deemed reasonable by the commission to cover the utility's transaction costs associated with the credit or other mechanism, plus 5 percent of the remaining revenues. The bill provides that the remainder of the revenues shall be credited to the utility's ratepayers. STORAGE NAME: h7117c.SAC

• Require a seller of renewable energy, under a purchased power agreement approved pursuant to the public interest determination process, to surrender to the utility all renewable attributes of the renewable energy purchased.

The bill provides that rules promulgated by the PSC to implement the public interest determination process shall not take effect prior to July 1, 2013.

The bill also establishes procedural guidelines for the public interest determination process. The bill requires the PSC, through its staff, to determine within 7 days whether a petition for a public interest determination is complete. If the PSC finds that the petition is not complete, it must notify the petitioner and provide an opportunity to correct any deficiency. When the petition is deemed complete, the PSC must forward a copy of the petition to the DEO within 3 days. The DEO may request additional information it deems necessary to complete its economic impact study. Within 45 days of receipt of the petition or 30 days after receipt of all additional information requested, whichever is later, the DEO must complete its economic impact study and submit a report reflecting the results of the study to the PSC. The bill recognizes the rights of parties to the PSC's public interest determination proceeding to present their own evidence relating to the regional and statewide net economic impacts of a proposed project. The bill requires the PSC to issue a final order within 180 days of receipt of the petition.

The bill specifies that the creation of the public interest determination process may not be construed to serve as a basis for renegotiating or repricing an existing contract. Further, the bill specifies that it may not be construed to apply to purchases required pursuant to s. 366.051 or 366.91, F.S. Thus, contracts entered into pursuant to these sections, which require pricing at or below the utility's full avoided cost, may not be made subject to the public interest determination process set forth in the bill.

The bill repeals the provisions of s. 366.92, F.S., that require the PSC to prepare a draft RPS rule and present it for legislative consideration.

## **Electric Vehicle Charging Stations**

## Present Situation

The Florida Supreme Court has found that a non-utility entity that develops an electrical generation project and sells power at retail to the public is considered under Florida law to be a "public utility" subject to regulation by the PSC.<sup>58</sup> A "public utility" is defined in s. 366.02(1), F.S., as "Every person, corporation, partnership, association, or other legal entity and their lessees, trustees, or receivers supplying electricity or gas (natural, manufactured, or similar gaseous substance) to or for the public within this state...."

Public electric vehicle charging is an emerging service which is for the most part unregulated, with the exception of building codes for installation of the stations. Article 625 of the National Electric Code (NEC), 2011 edition, provides requirements for the construction and installation of electric vehicle charging systems. The state's 2008 Florida Building Code contains basic electric vehicle charging systems requirements, adopted from the NEC prior to 2011. The Florida Building Commission plans to adopt the 2011 NEC as part of the 2013 Florida Building Code, with an expected effective date of March 2014.

There are many vehicle charging business models being implemented across the state, with varying levels of consistency. Some charging stations utilize a subscription mode whereby the user pays monthly for the service, similar to a cable service, and has access to a network of stations across the state. Some utilize a "pay as you go" model whereby the user pays an amount per kWh (kilowatt-hour) for usage. Other stations provide the service for free. Labeling and signage also varies across the state, as do policies for parking a non-electric vehicle in a parking space designed and specifically designated for charging an electric vehicle.

 <sup>&</sup>lt;sup>58</sup> <u>PW Ventures, Inc. v. Nichols</u>, 533 So. 2d 281 (Fla. 1988).
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Estimates vary as to the number of electric vehicle charging stations that have been built or are being built in the state. Reportedly, there are anywhere from 100 to 300 in existence and up to approximately 500 targeted over the next six months. The explanation for this influx of charging stations partially stems from federal funding for electric vehicles. In March 2009, as part of the American Recovery and Reinvestment Act, the U.S. Department of Energy announced the following solicitations:

- Up to \$2 billion in federal funding for competitively awarded cost-shared agreements for manufacturing of advanced batteries and related drive components (Recovery Act – Electric Drive Vehicle Battery and Component Manufacturing Initiative); and
- Up to \$400 million for transportation electrification demonstration and deployment projects (Recovery Act – Transportation Electrification).<sup>59</sup>

In August 2009, the U.S. Department of Energy awarded 48 grants to 25 states for projects in the following areas:

- \$1.5 billion in grants to U.S.-based manufacturers to produce batteries and their components and to expand battery recycling capacity;
- \$500 million in grants to U.S.-based manufacturers to produce electric drive components for vehicles, including electric motors, power electronics, and other drive train components; and
- \$400 million in grants to purchase thousands of plug-in hybrid and all-electric vehicles for test demonstrations in several dozen locations; to deploy them and evaluate their performance, to install electric charging infrastructure; and to provide education and workforce training to support the transition to advanced electric transportation systems.<sup>60</sup>

Some of the awards affecting Florida include the following;

- Saft America, Inc. Awarded \$95.5 million for the production of lithium-ion cells, modules, and battery packs for industrial and agricultural vehicles and defense application markets in Jacksonville.
- Coulomb's ChargePoint America program Awarded \$37 million to provide nearly 5,000 charging stations to program participants in Austin, Texas; Detroit, Michigan; Los Angeles, California; New York City, New York; Orlando, Florida; Sacramento, California; the San Jose/San Francisco Bay Area; Bellevue/Redmond, Washington; and Washington, D.C. The company has a partnership with Ford, Chevrolet, and Smart USA.

## Effect of Proposed Changes

The bill provides a legislative finding that the provision of electric vehicle charging to the public by a non-utility is a service and not the retail sale of electricity. Specifically, that rates, terms and conditions of electric vehicle charging services by a non-utility are not subject to regulation by the Public Service Commission.

It directs the Department of Agriculture and Consumer Services to adopt rules to provide definitions, methods of sale, labeling requirements, and price posting requirements for electric vehicle charging stations to allow for consistency for consumers and the industry.

The bill also prohibits the stopping, standing, or parking of a vehicle that is not capable of using an electrical recharging station within any parking space specifically designated for charging an electric vehicle and provides that doing so may result in a charge of a noncriminal traffic infraction, the penalty and corresponding amount of which may be determined by local government ordinance.

<sup>60</sup> 1<sup>st</sup>-in-hybrid.com website: <u>http://1st-in-hybrid.com/obama-and-the-next-generation-of-batteries-and-electric-vehicles/</u>.

<sup>&</sup>lt;sup>59</sup> U.S. Department of Energy website: <u>http://apps1.eere.energy.gov/news/daily.cfm/hp\_news\_id=159</u>.

## Determination of Need for New Power Plants (over 75 MW)

## **Present Situation**

The Florida Electrical Power Plant Siting Act (Siting Act), establishes a centrally coordinated process for the review of permit applications for electrical power plants.<sup>61</sup> The Department of Environmental Protection administers the process, and several affected agencies provide input in the certification proceeding concerning matters within their respective jurisdictions. Current law requires certification under the Siting Act for any steam or solar electrical generating facility, except for such facilities with a capacity of less than 75 megawatts.<sup>62</sup>

Section 403.519, F.S., requires that an applicant seeking approval of an electrical power plant that is subject to the Siting Act must obtain a determination of need for the plant from the PSC. In making its determination, the PSC must take into account the following factors:

- The need for electric system reliability and integrity. •
- The need for adequate electricity at a reasonable cost.
- The need for fuel diversity and supply reliability. •
- Whether the proposed plant is the most cost-effective alternative available.
- Whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available.

The PSC must also expressly consider the conservation measures taken by or reasonably available to the applicant which might mitigate the need for the proposed plant. The PSC may consider any other matters within its jurisdiction that it deems relevant.

In its Review of the 2011 Ten-Year Site Plans for Florida's Electric Utilities, the PSC addressed the issue of fuel diversity in the state, noting:

Because a balanced fuel supply can enhance system reliability and significantly mitigate the effects of volatile fuel price fluctuations, it is important that utilities have the greatest possible level of flexibility in their generation fuel source mix. Although the Commission has cited the growing lack of fuel diversity within the State of Florida as a major strategic concern for the past several years, the continuing trend of an increasing reliance on natural gas-fired generation is likely to persist into the foreseeable future. In previous Ten-Year Site Plans, Florida's utilities responded to fuel diversity concerns through the inclusion of multiple coal-fired power plants. Due to a combination of fuel cost uncertainties, high capital costs, and uncertainties regarding potential environmental costs related to possible carbon emission regulations, more than 4,000 MW of coal-fired generation has been canceled. In 2007 and 2008, the Commission approved the need for approximately 5,000 MW of new nuclear generation. However, over the course of the past two planning cycles, all of the new nuclear units have been delayed beyond the current ten-year planning horizon.

Currently, more than 50 percent of the electric power in Florida is generated by natural gas. The fact that the price of natural gas is expected to remain relatively low throughout the planning horizon is a major contributor to the forecast that natural gas will generate more than 55 percent of the electric energy in Florida by the year 2020.63

## Effect of Proposed Changes

The bill revises the current requirement that the PSC consider the need for fuel diversity and supply reliability when making a determination of need to require it to consider "the need for fuel diversity to

<sup>61</sup> Section 403.502, F.S.

<sup>&</sup>lt;sup>62</sup> Section 403.503(14), F.S.

Review of the 2011 Ten-Year Site Plans for Florida's Electric Utilities, Florida Public Service Commission, November 2011, p. 4. STORAGE NAME: h7117c.SAC

foster fuel supply reliability and rate stability" and "the need for supply reliability." Because each electric utility in the state relies on a different mix of generation resources, the bill's impact on the PSC's review of a proposed plant will vary to some extent based on the utility proposing the plant.

## **Renewable Fuel Standard**

#### Present Situation

In FY 2010-2011, Florida consumed approximately 8.2 billion gallons of gasoline<sup>64</sup> and is the third largest consumer of gasoline in the nation.<sup>65</sup> From January through August of 2011, approximately 2.65 billion gallons of unblended gasoline and approximately 7 billion gallons of blended gasoline (9 to 10 percent ethanol) were sold in the state.<sup>66, 67</sup>

#### Federal Renewable Fuel Standard

The federal government requires the U.S. Environmental Protection Agency (EPA) to develop and implement regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel, through a Renewable Fuel Standard (RFS). The RFS program was created under the Energy Policy Act of 2005, which established the first renewable fuel volume mandate in the United States. Originally, the program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012.<sup>68</sup> However, the federal Energy Independence and Security Act of 2007, signed into law on December 19, 2007, set the renewable fuel standard minimum annual goal for renewable fuel use at 9 billion gallons in 2008 and 36 billion gallons by 2022.<sup>69</sup>

## Florida Renewable Fuel Standard Act (Act)

In 2008, the Legislature passed the Florida Renewable Fuel Standard Act (ss. 526.201-526.207, F.S.), which provided findings that "it is vital to the public interest and to the state's economy to establish a market and the necessary infrastructure for renewable fuels in this state by requiring that all gasoline offered for sale in this state include a percentage of agriculturally derived, denatured ethanol." Further, "that the use of renewable fuel reduces greenhouse gas emissions and dependence on imports of foreign oil, improves the health and quality of life for Floridians, and stimulates economic development and the creation of a sustainable industry that combines agricultural production with state-of-the-art technology."<sup>70</sup>

Based on these findings, the Legislature established the standard that, beginning December 31, 2010, all gasoline sold or offered for sale in Florida by a terminal supplier, importer, blender, or wholesaler shall be blended gasoline.<sup>71</sup> The Act does not address the sale of gasoline at the retail level.

"Blended gasoline" is defined as a mixture of 90 to 91 percent gasoline and 9 to 10 percent fuel ethanol, by volume, that meets the specifications as adopted by the Department of Agriculture and Consumer Services (DACS or Department). The fuel ethanol portion may be derived from any agricultural source. "Fuel ethanol" means an anhydrous denatured alcohol produced by the conversion of carbohydrates that meets the specifications as adopted by the Department.<sup>72</sup> The Act does not include other types of renewable fuel in the standard.

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<sup>&</sup>lt;sup>64</sup> Fuel Tax Distributions spreadsheet found on Department of Revenue website: <u>http://dor.myflorida.com/dor/taxes/fuel</u>.

<sup>&</sup>lt;sup>65</sup> Texas and California lead Florida in amount of gasoline consumed.

<sup>&</sup>lt;sup>66</sup> By terminal suppliers, importers, blenders, and wholesalers.

<sup>&</sup>lt;sup>67</sup> Department of Revenue correspondence, December 2, 2011.

<sup>&</sup>lt;sup>68</sup>See the EPA website: <u>http://www.epa.gov/otaq/fuels/renewablefuels</u>.

<sup>&</sup>lt;sup>69</sup> EPA Proposes 2012 Renewable Fuel Standards and 2013 Biomass-Based Diesel Volume, EPA-420-F-11-018, Office of Transportation and Air Quality, June 2011, p. 1.

<sup>&</sup>lt;sup>70</sup> Section 526.202, F.S.

<sup>&</sup>lt;sup>71</sup> Section 526.203(2), F.S.

<sup>&</sup>lt;sup>72</sup> Section 526.203(1), F.S.

The Act provides specific exemptions from the standard.<sup>73</sup> They include the following:

- Fuel used in aircraft.
- Fuel sold for use in boats and similar watercraft.
- Fuel sold to a blender.
- Fuel sold for use in collector vehicles or vehicles eligible to be licensed as collector vehicles, offroad vehicles, motorcycles, or small engines.
- Fuel unable to comply due to requirements of the United States Environmental Protection Agency.
- Fuel transferred between terminals.
- Fuel exported from the state in accordance with s. 206.052.
- Fuel qualifying for any exemption in accordance with chapter 206.
- Fuel for a railroad locomotive.
- Fuel for equipment, including vehicle or vessel, covered by a warranty that would be voided, if explicitly stated in writing by the vehicle or vessel manufacturer, if the equipment were to be operated using fuel meeting the requirements of the Act.

# Ethanol

The U.S. Department of Energy (DOE) describes "ethanol" as a "clear, colorless liquid… [whose] molecules contain a hydroxyl group (-OH) bonded to a carbon atom." It may be produced from corn grain or sugar cane, in a process called biochemical conversion, or from cellulosic feedstocks, such as grass, wood, and crop residues, in a process called thermochemical conversion.<sup>74</sup>

There is great debate over the benefits of blending ethanol in gasoline. Proponents claim that there has not been enough time for the market to respond to the new standard. Florida currently has no operational ethanol production facilities.<sup>75</sup> According to the Florida Biofuels Association, there are several commercial advanced biofuel ethanol projects in development that encompass a total investment in excess of \$1 billion in capital.<sup>76</sup> The state has invested approximately \$39 million in grant awards for the development of ethanol since 2006.<sup>77</sup>

Proponents of ethanol also state that by reducing the amount of greenhouse gases and ozone created by car exhaust, ethanol is a much better alternative to pure gasoline. The DOE states, on a life-cycle analysis basis, corn-based ethanol production and use reduces greenhouse gas emissions (GHGs) by up to 52% compared to gasoline production and use, and that cellulosic ethanol use could reduce GHGs by as much as 86%.<sup>78</sup> Further, proponents assert that ethanol comes from a renewable energy source, reducing reliance on fossil fuels, thereby reducing dependence on other countries for the United States' energy. It is argued that the production of ethanol benefits the economy by increasing employment among many sectors within the industry, such as farming, processing, building plants, transportation, etc.

Opponents of ethanol rebut that in order to produce enough corn or other crops to meet the demands of the ethanol industry, farmers may have to restrict how much of their crop will be available for other uses, which would result in higher prices for corn, flour, animal feed, and many other products. Further, that the gasoline gallon equivalent (the number of gallons of a fuel that has the equivalent amount of energy as 1 gallon of gasoline) of ethanol is 1.5 gallons.<sup>79</sup>

<sup>&</sup>lt;sup>73</sup> Section 526.203(3), F.S.

<sup>&</sup>lt;sup>74</sup> U.S. Department of Energy website: <u>http://www.afdc.energy.gov/afdc/ethanol/what\_is.html</u>.

<sup>&</sup>lt;sup>75</sup> Department of Agriculture and Consumer Services staff correspondence, September 16, 2011.

<sup>&</sup>lt;sup>76</sup> These include, but are not limited to INEOS – New Planet BioEnergy; Highlands EnviroFuels, LLC; Vercipia Biofuels/BP Biofuels; Algenol; Petro Algae; LS9; and Southeast Renewable Fuels, LLC.

<sup>&</sup>lt;sup>77</sup> Correspondence with the Department of Agriculture and Consumer Services, December 5, 2011.

<sup>&</sup>lt;sup>78</sup> U.S. Department of Energy website: <u>http://www.afdc.energy.gov/afdc/ethanol/benefits.html</u>.

<sup>&</sup>lt;sup>79</sup> U.S. Department of Energy website: https://www.afdc.energy.gov/afdc/prep/popups/gges.html.

The DOE notes,

Ethanol is a high-octane fuel. Octane helps prevent engine knocking and is extremely important in engines designed to operate at a higher compression ratio, so they generate more power. These engines tend to be found in high-performance vehicles. Low-level blends of ethanol, such as E10 (10% ethanol, 90% gasoline), generally have a higher octane rating than unleaded gasoline. Low-octane gasoline can be blended with 10% ethanol to attain the standard 87 octane requirement.<sup>80</sup>

Most opponents, however, claim that the major disadvantage of ethanol is that it can be very corrosive and can damage certain types of engines. Ethanol can absorb water and dirt easily, which can impair and corrode the inside of the engine block. Many boaters have reported that ethanol use has damaged their boats.

Another common grievance is an inability to obtain unblended gasoline for engines that may be damaged by ethanol. In response to this problem, several websites have been created solely for the purpose of apprising consumers who need unblended gasoline of locations of retailers who sell unblended gasoline. For example, <u>pure-gas.org</u> contains sites of over 4,800 locations within the U.S. and Canada. The website provides the city, brand, octane, station name, address, and GPS coordinates. The website is updated daily and, as of February 27, 2012, lists 294 stations in Florida that sell unblended gasoline.

Currently, almost three-fourths of the gasoline sold by a terminal suppliers, importers, blenders, or wholesalers in Florida is blended gasoline. [See chart of Sales of Sales of Unblended and Blended Gasoline in 2011 by Terminal Suppliers, Importers, Blenders, and Wholesalers, provided by the Department of Revenue.]

Applied		Sales to	Sales to End Users, Retail		
Date	Product	Licensed Dealers	Dealers, and Resellers	<b>Total Sales</b>	Percentage
Jan-11	Gasoline (gallons)	133,122,218.5	179,181,280.4	312,303,498.9	26%
	Blended Gasoline (gallons)	394,813,484.6	483,919,593.9	878,733,078.5	72%
	Fuel Grade Ethanol (gallons)	28,926,219.0	172,469.0	29,098,688.0	2%
		556,861,922.1	663,273,343.3	1,220,135,265.4	
Feb-11	Gasoline (gallons)	128,673,786.0	177,676,295.7	306,350,081.7	26%
	Blended Gasoline (gallons)	393,227,566.0	473,265,347.6	866,492,913.6	72%
	Fuel Grade Ethanol (gallons)	27,323,303.0	187,201.0	27,510,504.0	2%
		549,224,655.0	651,128,844.3	1,200,353,499.3	
Mar-11	Gasoline (gallons)	154,097,393.7	201,083,439.0	355,180,832.7	27%
	Blended Gasoline (gallons)	391,984,009.5	530,492,055.9	922,476,065.4	71%
	Fuel Grade Ethanol (gallons)	30,568,416.0	217,713.0	30,786,129.0	2%
		576,649,819.2	731,793,207.9	1,308,443,027.1	
Apr-11	Gasoline (gallons)	163,416,476.5	177,333,814.1	340,750,290.6	26%
	Blended Gasoline (gallons)	422,141,685.8	524,391,530.9	946,533,216.7	72%
	Fuel Grade Ethanol (gallons)	27,677,517.0	200,127.0	27,877,644.0	2%

# Sales of Unblended and Blended Gasoline in 2011 by Terminal Suppliers, Importers, Blenders, and Wholesalers

<sup>&</sup>lt;sup>80</sup> U.S. Department of Energy website: <u>http://www.afdc.energy.gov/afdc/ethanol/what\_is.html</u>.

		613,235,679.3	701,925,472.0	1,315,161,151.3	
May 11		174,073,771.8	164,594,017.3		200
May-11	Gasoline (gallons)			338,667,789.1	269
	Blended Gasoline (gallons)	408,181,398.8	519,421,650.6	927,603,049.4	729
	Fuel Grade Ethanol (gallons)	29,428,611.0	214,853.0	29,643,464.0	29
		611,683,781.6	684,230,520.9	1,295,914,302.5	
Jun-11	Gasoline (gallons)	174,504,749.3	155,768,603.9	330,273,353.2	269
	Blended Gasoline (gallons)	392,350,247.1	501,925,409.2	894,275,656.3	719
	Fuel Grade Ethanol (gallons)	31,357,236.2	198,641.0	31,555,877.2	39
		598,212,232.6	657,892,654.1	1,256,104,886.7	
Jul-11	Gasoline (gallons)	177,875,092.7	152,965,003.3	330,840,096.0	269
	Blended Gasoline (gallons)	394,109,305.3	509,646,856.5	903,756,161.8	729
	Fuel Grade Ethanol (gallons)	28,819,213.0	200,656.0	29,019,869.0	29
		600,803,611.0	662,812,515.8	1,263,616,126.8	
Aug-11	Gasoline (gallons)	181,337,782.7	159,907,417.6	341,245,200.3	349
	Blended Gasoline (gallons)	349,092,848.1	285,682,474.0	634,775,322.1	63
	Fuel Grade Ethanol (gallons)	32,558,206.8	2,964,349.2	35,522,556.0	4
		562,988,837.6	448,554,240.8	1,011,543,078.4	
	Total Gasoline			2,655,611,142.5	279
	Total Blended Gasoline			6,974,645,463.8	719
	Total Fuel Grade Ethanol			241,014,731.2	29
	Total			9,871,271,337.5	
				* includes	
				ethanol	

Source: Department of Revenue

## Effect of Proposed Changes

The bill revises the renewable fuel standard to include "other alternative fuel," which is defined in the bill as "a fuel produced from biomass, as defined in s. 366.91, F.S., that is used to replace or reduce the quantity of fossil fuel present in a petroleum fuel that meets the specifications as adopted by the Department." "Biomass" is defined in Florida law as "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."<sup>81</sup>

The bill, in effect, may capture future renewable products, such as biobutanol,<sup>82</sup> that can be compatibly blended with gasoline and requires that the "other alternative fuel" meet the specifications as adopted by the Department of Agriculture and Consumer Services. This section of law applies to gasoline only. Therefore, the expansion does not include biodiesel or biomass-based diesel, which cannot be blended with gasoline.

The bill clarifies that the state Renewable Fuel Standard does not prohibit the sale of unblended fuel by retail dealers. Although the exemptions for using unblended gasoline are enumerated in statute, there has been confusion over whether the law prevents retailers from selling unblended gas. Since the law does not address retailers, this provision is added to provide clarification.

<sup>&</sup>lt;sup>81</sup> Section 366.91(2)(a), F.S.

<sup>&</sup>lt;sup>82</sup> Biobutanol is a four-carbon alcohol derived mainly from the fermentation of the sugars in organic feedstocks. (<u>http://alternativefuels.about.com/od/thedifferenttypes/a/biobutanol.htm</u>)

The bill directs the department to compile, and post on its website, a list of retail fuel stations that sell or offer to sell unblended gasoline based on information gathered as part of its routine retail fuel station inspections, as authorized under s. 525.07, F.S., and from information voluntarily submitted by retail dealers.

## Permitting Process for Cultivation of Nonnative Plants

## Present Situation

Section 581.083, F.S., prohibits the introduction into or release within this state of any plant pest, noxious weed, genetically engineered plant or plant pest, or any other organism which may directly or indirectly affect the plant life of this state as an injurious pest, parasite, or predator of other organisms, or any arthropod, except under special permit issued by the Department of Agriculture and Consumer Services (DACS or the department).

A person may not cultivate a nonnative plant, including a genetically engineered plant or a plant that has been introduced, for purposes of fuel production or purposes other than agriculture in plantings greater in size than 2 contiguous acres, except under a special permit issued by the department. This permit may not be required if the department determines, in conjunction with the Institute of Food and Agricultural Sciences at the University of Florida, that the plant is not invasive and subsequently exempts the plant by rule.<sup>83</sup>

Each application for a special permit must be accompanied by a fee and proof that the applicant has obtained a bond in the form approved by the department and issued by a surety company admitted to do business in this state or a certificate of deposit.<sup>84</sup> The application must include, on a form provided by the department, the name of the applicant and the applicant's address or the address of the applicant's principal place of business; a statement completely identifying the nonnative plant to be cultivated; and a statement of the estimated cost of removing and destroying the plant that is the subject of the special permit and the basis for calculating or determining that estimate.<sup>85</sup> Upon obtaining a permit, the permitholder may annually cultivate and maintain the nonnative plants as authorized by the special permit.

If the permitholder ceases to maintain or cultivate the plants authorized by the special permit, if the permit expires, or if the permitholder ceases to abide by the conditions of the special permit, the permitholder shall immediately remove and destroy the plants that are subject to the permit, if any remain. The permitholder must notify DACS of the removal and destruction of the plants within 10 days after such event.<sup>86</sup>

Each permitholder must maintain for each separate growing location a bond or a certificate of deposit in an amount determined by the department, but not less than 150 percent of the estimated cost of removing and destroying the cultivated plants. The amount of the bond or certificate of deposit may be increased or decreased, upon order of the department, at any time if the department finds such change to be warranted by the cultivating operations of the permitholder.<sup>87</sup>

## Effect of Proposed Changes

The bill amends the permitting process for cultivation of nonnative plants. The bill adds algae and bluegreen algae to the list of plants a person may not cultivate in plantings greater in size than 2 contiguous acres without a special permit issued by DACS, and removes language referring to cultivating such plants "for purposes of fuel production or purposes other than agriculture."

<sup>85</sup> Id.

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<sup>&</sup>lt;sup>83</sup> Section 581.083(4), F.S.

<sup>&</sup>lt;sup>84</sup> Section 581.083(4)(a)1. and 2., F.S

<sup>&</sup>lt;sup>86</sup> Section 581.083(4)(b), F.S.

<sup>&</sup>lt;sup>87</sup> Section 581.083(4)(e), F.S.

Blue-green algae is a plant-like organism which, using genetic manipulation, can be used to produce ethanol. The algae are produced by the millions in large plastic bladders, called generators. As this is a genetically engineered organism, there is some concern over larger scale production and environmental consequences should a spill or other breach of containment occur. Therefore, the biomass permitting process is being expanded to include algae and blue-green algae to evaluate and address the potential invasiveness of large scale production.<sup>88</sup>

The bill directs the department to exempt a from the permit requirement any plant or group of plants that, based on experience or research data, does not pose a threat of becoming an invasive species and is commonly grown in the state for the purpose of human food consumption, commercial feed, feedstuff, forage for livestock, nursery stock, or silviculture. The bill authorizes the department to adopt additional exemptions to the permitting requirements of this section if the department determines, after consulting with the Institute of Food and Agricultural Sciences at the University of Florida, that based on experience or research data, the nonnative plant, algae, or blue-green algae does not pose a threat of becoming an invasive species or a pest of plants or native fauna under conditions in this state and subsequently exempts the plant or group of plants by rule.

The bill allows, in addition to a bond or a certificate of deposit, any other type of security adopted by rule that would provide financial assurance of cost recovery for the removal of a planting. The bill decreases the bond requirement from "not less than 150 percent of the estimated cost" to "not more than 150 percent of the estimated cost."

The bill authorizes the decreasing or removal of a bond or certificate of deposit when a decrease in the cultivating operations of the permitholder occurs or research or practical field knowledge and observation indicates low risk of invasiveness by the nonnative species. The bill includes factors that may be considered when applying a decrease or removal of a bond or certificate of deposit.

## **Forestry Inventory Analysis**

## Present Situation

Woody biomass from forest materials is a renewable, low-carbon feedstock and has become a popular contributor to renewable energy supplies in the state. Florida is made up of approximately 16.9 million acres of timberland, ninety-four percent of which is considered available for timber production.<sup>89</sup>

In 2008, the Legislature directed the Department of Agriculture and Consumer Services (DACS or department), in conjunction with the Department of Environmental Protection, to conduct an economic impact analysis on the effects of granting financial incentives to energy producers who use woody biomass as fuel, including an analysis of the effects on wood supply and prices and impacts on current markets and forest sustainability.

The Division of Forestry within DACS contracted with the University of Florida to conduct the necessary analyses. The analyses indicated that a "significant amount of renewable energy can be developed through the utilization of woody biomass, while still keeping the forest resources of Florida sustainable and current forest industries strong. The key to this success is...to better utilize urban wood waste, logging debris and understory vegetation, and support the development of short rotation energy crops as renewable energy demands increase."<sup>90</sup> Although this report provided valuable analysis on the utilization and economic impacts of forest feedstocks, it did not address the identification of available forestry biomass in Florida.

<sup>&</sup>lt;sup>88</sup> Email correspondence with the Director of the Division of Plant Industry, Department of Agriculture and Consumer Services, February 6, 2012. <sup>89</sup> Woody Biomass Economic Study, Department of Agriculture and Consumer Services, Department of Environment of Agriculture and Consumer Services, Department of Environment of Agriculture and Consumer Services, Department of Environment of Agriculture and Consumer Services, Department of Agriculture and Consumer Services, Department of Environment of Agriculture and Consumer Services, Department of Agriculture and Consumer Services, Department of Agriculture and Consumer Services, Department of Consumer Ser

<sup>&</sup>lt;sup>89</sup> Woody Biomass Economic Study, Department of Agriculture and Consumer Services, Department of Environmental Protection, and the University of Florida, March 1, 2010, p. 3.

<sup>&</sup>lt;sup>90</sup> Correspondence from Commissioner of Agriculture Charles Bronson to Speaker of the House of Representatives Larry Cretul, March 1, 2010, (cover letter for *Woody Biomass Economic Study*).

According to DACS, the current state of forest inventory data is not comprehensive enough to be able to determine whether new wood-using facilities can be sustainably supplied in certain locations. More reliable information is necessary to determine the viability of biomass facilities, based on their proposed location, while also ensuring forest sustainability.<sup>91</sup>

#### Effect of Proposed Changes

The bill directs DACS to conduct a comprehensive statewide forest inventory analysis and study, utilizing a Geographic Information System,<sup>92</sup> to do the following:

- Identify where available biomass is located,
- Determine the available biomass resources, and
- Ensure forest sustainability within the state. •

The department must submit the results of the study to the Governor, the Senate President, and the Speaker of the House of Representatives no later than July 1, 2013.

## **Clearinghouse for Consumer Information**

#### **Present Situation**

Presently, a variety of information is available on the PSC website to help consumers save energy. According to the PSC, during the 2011 calendar year, more than 309,472 people accessed the PSC Web site consumer pages and the PSC's web Energy Conservation House had more than 58,401 visitors last year.<sup>93</sup> The interactive graphic house provides hyperlinks to access conservation information and tips geared for homes, with the goal of helping consumers discover ways to reduce their monthly utility bills.

The PSC also produces a quarterly *Consumer Connection E-Newsletter which* features current energy and water conservation topics and consumer tips, using text and video. This year, the Consumer Connection E-Newsletter was "tweeted" for the first time by the PSC and is also available on the PSC website.94

Energy Star has a website whereby consumers can research appliances to determine how best to invest in energy-efficiency and conservation. ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy that rates energy efficient products and practices.

There is, however, no singular "one-stop-shop" on-line source of information for Florida consumers who want to achieve energy-efficiency and conservation.

## Effect of Proposed Changes

The bill directs DACS, in consultation with the PSC, the Florida Building Commission, and the Florida Energy Systems Consortium,<sup>95</sup> to develop a clearinghouse of information regarding cost savings

<sup>&</sup>lt;sup>91</sup> Email correspondence from DACS staff, January 31, 2012.

<sup>&</sup>lt;sup>92</sup> A Geographic Information System (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

<sup>&</sup>lt;sup>93</sup> Annual Report on Activities Pursuant to the Florida Energy Efficiency and Conservation Act (Draft), Public Service Commission, February 2012, p. 24. <sup>94</sup> *Id.* 

<sup>&</sup>lt;sup>95</sup> The Legislature created the Florida Energy Systems Consortium in 2008 to "promote collaboration among experts in the State University System for the purposes of sharing energy-related expertise and assisting in the development and implementation of a comprehensive, long-term, environmentally compatible, sustainable, and efficient energy strategic plan for the state." It is composed of the 11 state universities and is housed at the University of Florida. See s. 1004.648, F.S.

associated with various energy efficiency and conservation measures. DACS is required to post the information on its website by July 1, 2013.

## **Electric Vehicle Charging Station Study**

#### **Present Situation**

Electric vehicle charging stations are expanding across the state. As discussed in the *Electric Vehicle Charging Stations* section of this analysis, there are many business models being implemented with varying levels of consistency. Some charging stations utilize a subscription mode whereby the user pays monthly for the service, similar to a cable service, and has access to a network of stations across the state. Some utilize a "pay as you go" model whereby the user pays an amount per kWh (kilowatthour) for usage. Other stations provide the service for free.

Estimates vary as to the number of electric vehicle charging stations that have been built or are being built in the state. Reportedly, there are anywhere from 100 to 300 in existence and up to approximately 500 targeted over the next six months. Figures are not readily available on the number of privately-owned home charging stations nor does there appear to be a clear picture of whether the interest in public charging is widespread.

A quantifiable projection of the effect these charging stations (public and privately-owned) might have on energy consumption, and as a result on Florida's electric grid, has not been established due to the undetermined number of charging stations being built in Florida. With the escalated implementation of projects resulting from the transportation electrification demonstration and deployment awards (discussed in the *Electric Vehicle Charging Stations* section of this analysis), a clearer picture is emerging of the number of stations that may be installed in the next six months to a year.

#### Effect of Proposed Changes

The bill directs the PSC to conduct a study of the potential effects of public charging stations and privately-owned electric vehicle charging on both energy consumption and the impact on the electric grid in the state. The bill also directs the PSC to investigate the feasibility of using off-grid solar photovoltaic power as a source of electricity for the electric vehicle charging stations. The results of the study are to be presented to the Governor, the President of the Senate, and the Speaker of the House of Representatives by December 31, 2012.

## Study of the Florida Energy Efficiency and Conservation Act (FEECA)

#### Present Situation

In 1980, the Legislature adopted the Florida Energy Efficiency and Conservation Act (FEECA).<sup>96</sup> In section 366.81, F.S., the Legislature summarizes its intent by expressing the following findings with respect to FEECA:

The Legislature . . . finds and declares that [the provisions of FEECA] are to be liberally construed in order to meet the complex problems of reducing and controlling the growth rates of electric consumption and reducing the growth rates of weather-sensitive peak demand; increasing the overall efficiency and cost-effectiveness of electricity and natural gas production and use; encouraging further development of demand-side renewable energy systems; and conserving expensive resources, particularly petroleum fuels.

The provisions of FEECA address two major topics:

- (1) Energy efficiency and conservation; and
- (2) The addition of new electrical power plants.

# Energy Efficiency and Conservation

With respect to energy efficiency and conservation, s. 366.82(2), F.S., requires PSC to set appropriate goals for increasing the efficiency of energy consumption and increasing the development of demandside renewable energy systems. The PSC expresses these as annual electric peak demand and energy savings over a ten-year period. The PSC may also allow efficiency investments across generation, transmission, and distribution systems. The PSC must adopt goals for each of seven electric utilities - Florida Power & Light Company, Progress Energy Florida, Inc., Tampa Electric Company, Gulf Power Company, Florida Public Utilities Company, Orlando Utilities Commission, and JEA. Based on legislative changes to FEECA in 2008, the PSC, in developing goals, must evaluate the full technical potential of all available demand-side and supply-side conservation and efficiency measures, including demand-side renewable energy systems and must consider:

- The costs and benefits to customers participating in each identified measure.
- The costs and benefits to the general body of ratepayers as a whole, including utility incentives and participant contributions.
- The need for incentives to promote both customer-owned and utility-owned energy efficiency and demand-side renewable energy systems.
- The costs imposed by state and federal regulations on the emission of greenhouse gases.<sup>97</sup>

Following the adoption of goals, the commission must require each utility to develop plans and programs to meet the overall goals within its service area. Utility programs may include variations in rate design, load control, cogeneration, residential energy conservation subsidies, or any other measures within the PSC's jurisdiction which it finds likely to be effective.<sup>98</sup>

The 2008 amendments to FEECA authorized the PSC to establish financial rewards and penalties for exceeding or failing to meet these goals. For those utilities subject to the PSC's ratesetting authority (Florida Power & Light Company, Progress Energy Florida, Inc., Tampa Electric Company, Gulf Power Company, Florida Public Utilities Company), the PSC may authorize a financial reward to a utility that exceeds its goals and may authorize a financial penalty upon a utility that fails to meet its goals.<sup>99</sup> The PSC is also authorized to allow a utility an additional return on equity of up to 50 basis points if it exceeds 20 percent of its annual load-growth through energy efficiency and conservation measures.<sup>100</sup>

Also under FEECA, the commission must require each utility to offer, or to contract to offer, energy audits to its residential customers.<sup>101</sup>

The PSC last set energy efficiency and conservation goals for the seven "FEECA utilities" in 2009.<sup>102</sup> In its order, the PSC determined that each utility had performed an adequate analysis of available demand-side conservation and efficiency measures, including demand-side renewable energy systems. Without evaluating the full technical potential of supply-side conservation and efficiency measures, as required by the 2008 amendments to FEECA, the PSC determined that supply-side conservation and efficiency measures would be best addressed in a separate proceeding because they required different analytical methods. It is not clear that such measures have been addressed since the PSC reached this conclusion.

- <sup>99</sup> Section 366.82(8), F.S.
- <sup>00</sup> Section 366.82(9), F.S.
- <sup>101</sup> Section 366.82(11), F.S.

<sup>&</sup>lt;sup>97</sup> Section 366.82(3), F.S.

<sup>&</sup>lt;sup>98</sup> Section 366.82(7), F.S.

<sup>&</sup>lt;sup>102</sup> Order No. PSC-09-0855-FOF-EG, issued December 30, 2009.

To arrive at goals for each investor-owned electric utility, the PSC, in considering the factors set forth in FEECA, as amended in 2008, utilized a test that made more demand-side conservation and efficiency measures appear cost-effective than would otherwise have been deemed cost-effective using tests historically applied by the PSC. This resulted in significantly higher goals for the investor-owned utilities. Each of the utilities submitted plans and programs to meet these new goals. After revisions, the PSC approved plans and programs for Gulf Power Company and Tampa Electric Company to meet the new goals. Based on concerns about customer rate impacts, the PSC retained the new goals for Florida Power & Light Company and Progress Energy Florida, but allowed these two utilities to continue utilizing their existing plans and programs.

In its 2009 order, the PSC determined that it was unnecessary to establish incentives at that time. The PSC determined that it would be in a better position to determine whether incentives are needed based on the utilities' experience in reaching the new goals.

To address FEECA's direction to establish demand-side renewable energy systems, the PSC directed each of the investor-owned utilities to establish pilot programs focused on encouraging solar water heating and solar photovoltaic technologies.

As noted above, the PSC did not evaluate supply-side conservation and efficiency measures, and it concluded that it was not appropriate to set goals for efficiency improvements in generation, transmission, and distribution, because those matters are continually reviewed through the utilities' planning processes.

## Power Plant Determination of Need

Section 403.519, F.S., requires that an applicant seeking approval of an electrical power plant that is subject to the Siting Act must obtain a determination of need for the plant from the PSC. In making its determination, the PSC must take into account the following factors:

- The need for electric system reliability and integrity.
- The need for adequate electricity at a reasonable cost.
- The need for fuel diversity and supply reliability.
- Whether the proposed plant is the most cost-effective alternative available.
- Whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available.

The PSC must also expressly consider the conservation measures taken by or reasonably available to the applicant which might mitigate the need for the proposed plant. The PSC may consider any other matters within its jurisdiction that it deems relevant.

## Effect of Proposed Changes

The bill requires the PSC, in consultation with the Department of Agriculture and Consumer Services, to contract for an independent evaluation of the effectiveness of FEECA in achieving the statutory objectives set forth in s. 366.81, F.S., which include the following: reducing and controlling the growth rates of electric consumption and reducing the growth rates of weather-sensitive peak demand; increasing the overall efficiency and cost-effectiveness of electricity and natural gas production and use; encouraging further development of demand-side renewable energy systems; and conserving expensive resources, particularly petroleum fuels. The bill provides a nonrecurring appropriation of \$250,000 from the Florida Public Service Regulatory Trust Fund for the 2012-2013 fiscal year for the purpose of contracting for the study.

The bill requires that the evaluation include an assessment of:

• The effectiveness of the act in accomplishing statutory objectives in a cost-effective manner, taking into account short-term and long-term costs and benefits.

- The models and methods used to establish conservation goals and programs to meet those goals.
- The strengths and weaknesses of the act relative to alternative methods available to achieve the statutory objectives.
- The coordination between the goal-setting process in section 366.82, F.S., and the determination of need process in s. 403.519, F.S., including the manner in which supply-side conservation and efficiency measures are addressed.
- The potential for time-based rates and advanced metering technology, or other mechanisms, to allow customers to manage their energy consumption and allow for peak load shaving.
- The potential for a low-interest loan program to provide a cost-effective means to encourage the development of demand-side renewable energy systems to achieve the statutory objectives of reducing and controlling the growth rates of electric consumption and reducing the growth rates of weather-sensitive peak demand.

The findings and recommendations of the evaluation must be submitted to the Governor, the President of the Senate, and the Speaker of the House of Representatives no later than January 31, 2013.

The bill provides an effective date of July 1, 2012.

## **B. SECTION DIRECTORY:**

**Section 1.** Amends 186.801, F.S.; requires utilities' 10-year site plans to address existing and proposed renewable energy production and purchases.

Section 2. Amends s. 212.055, F.S., revising uses for local government infrastructure surtaxes.

**Section 3.** Amends s. 212.08, F.S.; provides definitions for the terms "biodiesel," "ethanol," and "renewable fuel"; provides for tax exemptions in the form of a rebate for the sale or use of certain equipment, machinery, and other materials for renewable energy technologies; provides eligibility requirements and tax credit limits; authorizes the Department of Revenue and the Department of Agriculture and Consumer Services to adopt rules; directs the Department of Agriculture and Consumer Services to determine and publish certain information relating to exemptions; provides for expiration of the exemption.

**Section 4.** Amends s. 220.192, F.S.; provides definitions; reestablishes a corporate tax credit for certain costs related to renewable energy technologies; provides eligibility requirements and credit limits; provides rule-making authority to the Department of Revenue and the Department of Agriculture and Consumer Services; directs the Department of Agriculture and Consumer Services to determine and publish certain information; provides for expiration of the tax credit.

**Section 5.** Amends s. 220.193, F.S.; reestablishes a corporate tax credit for renewable energy production; provides definitions; provides a tax credit for the production and sale of renewable energy; provides for the use and transfer of the tax credit; provides rule-making authority to the Department of Revenue; provides for expiration of the tax credit.

**Section 6.** Amends s. 255.257, F.S.; directs the Department of Management Services in coordination with the Department of Agriculture and Consumer Services to further develop the state energy management plan.

**Section 7.** Amends s. 288.106, F.S.; further clarifies the definition of "target industry business" for purposes of the tax refund program for qualified target industry businesses.

**Section 8.** Amends s. 20.60, F.S.; requires the Department of Economic Opportunity to prepare an independent economic impact study for certain renewable energy projects.

**Section 9.** Amends s. 366.92, F.S.; provides definitions; authorizes a utility to petition the commission to determine that a proposed renewable energy facility is in the public interest; provides a standard of

review; provides for cost recovery for reasonable and prudent cost incurred by a utility for a financing project; requires the Public Service Commission to adopt rules to establish a public interest determination process for renewable energy projects; establishes procedural guidelines for public interest determination.

**Section 10.** Creates s. 366.94, F.S., provides legislative intent relating to electric vehicle charging stations; provides that the rates, terms and conditions of electric vehicle charging services by a non-utility are not subject to regulation by the Public Service Commission; provides rule-making authority to the Department of Agriculture and Consumer Services; prohibits parking in spaces specifically designated for charging an electric vehicle under specific circumstances; provides penalties.

**Section 11.** Amends s. 403.519, F.S.; requires the Public Service Commission to consider, in a need determination proceeding for an electrical power plant, the need for fuel diversity to foster fuel supply reliability and rate stability.

**Section 12.** Amends s. 526.203, F.S., revises the definitions of the terms "blended gasoline" and "unblended gasoline;" and defines the term "alternative fuel;" authorizes the sale of unblended fuels for certain uses; directs the Department of Agriculture and Consumer Services to compile a list of retail fuel stations that sell or offer to sell unblended gasoline and provide that information on the department's website.

**Section 13.** Amends s. 581.083, F.S.; prohibits the cultivation of certain algae in plantings greater in size than 2 contiguous acres; provides exceptions; provides for exemption from special permitting requirements by rule; revises certain bonding requirements.

**Section 14.** Requires the Department of Agriculture and Consumer Services to conduct a statewide forest inventory analysis.

**Section 15.** Requires the Department of Agriculture and Consumer Services, in consultation with other state agencies, to develop a clearinghouse of information regarding cost savings associated with energy efficiency and conservation measures; requires such information to be posted on its website.

**Section 16.** Directs the Public Service Commission to conduct a study on the potential effects of electric vehicle charging stations on both energy consumption and the electric grid.

**Section 17.** Requires the Public Service Commission, in consultation with the Department of Agriculture and Consumer Services, to contract for an independent evaluation of the effectiveness of the Florida Energy Efficiency and Conservation Act; provides an appropriation for the study.

Section 18. Provides an effective date of July 1, 2012.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

## A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

## Sales and Use Tax Exemption for Renewable Energy Technologies

The Revenue Estimating Conference estimated the following negative impacts for the Sales and Use Tax Exemption for Renewable Energy Technologies on state revenues:

Impact	FY 2012-2013	FY 2012-2013	FY 2013-2014	FY 2014-2015	FY 2015-2016
	Cash	Annualized	Cash	Cash	Cash
Total State Impact	(\$.8 m)				

## Renewable Energy Technologies Investment Tax Credit and the Florida Renewable Energy **Production Credit**

The Revenue Estimating Conference has estimated<sup>103</sup> the following negative impacts for the Renewable Energy Technologies Investment Tax Credit and the Florida Renewable Energy Production Credit on state revenues:

Impact	FY 2012-2013	FY 2012-2013	FY 2013-2014	FY 2014-2015	FY 2015-2016
	Cash	Annualized	Cash	Cash	Cash
Total State Impact	(\$1.0 m)	(\$15 m)	(\$5.5 m)	(\$11.3 m)	(\$13.4 m)

## 2. Expenditures:

## **Evaluation of Economic Benefits of New Renewable Energy Projects**

The bill requires the Department of Economic Opportunity to prepare an independent economic impact study for each renewable energy project submitted to the Public Service Commission for a public interest determination. The resources required to satisfy this duty are indeterminate as it will depend upon the number and frequency of petitions for public interest determination filed with the PSC. Presumably, application fees associated with the public interest determination process would be set to cover these costs.

## Public Interest Determination for New Renewable Energy Projects

The bill requires the Public Service Commission to adopt rules to implement a public interest determination process for new renewable energy projects and to process petitions for public interest determinations. The PSC will be required to dedicate resources to this rulemaking process. The resources required to satisfy the responsibility to process petitions is indeterminate as it will depend upon the number and frequency of petitions for public interest determination filed with the PSC. Presumably, application fees associated with the public interest determination process would be set to cover these costs.

## Study of the Florida Energy Efficiency and Conservation Act

The bill provides a nonrecurring appropriation of \$250,000 from the Florida Public Service Regulatory Trust Fund for the 2012-2013 fiscal year for the purposes of the PSC, in consultation with the Department of Agriculture and Consumer Service, contracting for an independent evaluation of the effectiveness of the Florida Energy Efficiency and Conservation Act in achieving its statutory objectives.

## B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

## 1. Revenues:

## Sales and Use Tax Exemption for Renewable Energy Technologies

The Revenue Estimating Conference estimated the following negative impacts for the Sales and Use Tax Exemption for Renewable Energy Technologies on local government revenues:

Impact	FY 2012-2013	FY 2012-2013	FY 2013-2014	FY 2014-2015	FY 2015-2016
	Cash	Annualized	Cash	Cash	Cash
Total Local Impact	(\$.2 m)				

<sup>&</sup>lt;sup>103</sup> The Revenue Estimating Conference has not determined an impact for the amendments to s. 220.193, F.S., adopted by the State Affairs Committee on February 24, 2012, however Finance and Tax Committee staff estimates that those amendments would not change the fiscal impact of the bill. STORAGE NAME: h7117c.SAC DATE: 2/27/2012

The Revenue Estimating Conference has determined that there is no fiscal impact on local governments for the Renewable Energy Technologies Investment Tax Credits and the Florida Renewable Energy Production Credits.

2. Expenditures:

None.

## C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

#### Public Interest Determination for New Renewable Energy Projects

As noted in the Effect of Proposed Changes section of this analysis, the PSC currently encourages utilities and renewable energy developers to negotiate contracts for the purchase of capacity and energy, where those contracts would allow the utility to avoid or defer construction of planned utility generating units and provide fuel diversity, fuel price stability, and energy security. However, the PSC's rules provide that these negotiated contracts may be deemed prudent only if the costs to the utility, which are passed on to its ratepayers, do not exceed its full avoided costs.

As also noted in the Effect of Proposed Changes section of this analysis, the Florida Electrical Power Plant Siting Act requires the PSC to consider, among other things, the need for fuel diversity and supply reliability in making a determination of need for a new power plant. However, this directive has had limited impact on the development of new renewable energy power plants under the determination of need process.

The bill establishes a dedicated framework for the PSC to determine if a proposed renewable energy project is prudent and in the public interest. The bill defines "renewable energy project" to include the construction of a new renewable energy generating facility, the conversion of an existing fossil fuel generating facility to a renewable facility, or a contract to purchase renewable energy. To the extent that this framework results in the addition of new renewable energy facilities in Florida that otherwise would not have been developed, the bill may spur new investment in the state and jobs in the development, operation, and maintenance of the new facilities.

Before any new renewable energy facility is approved, the PSC must determine that the project provides an overall net benefit to the state, taking into account a number of factors, including the costs and benefits of the project. If the PSC determines through its review that a renewable energy project is in the public interest, the bill provides that all reasonable and prudent costs incurred for the project are recoverable through the utility's environmental cost recovery charges, which are applied to all customers.

## D. FISCAL COMMENTS:

None.

## **III. COMMENTS**

## A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

The county/municipality mandates provision of Art. VII, section 18, of the Florida Constitution (mandates provision) may apply because the bill may reduce the authority that counties and municipalities have to raise revenues; however an exemption may apply because the Revenue Estimating Conference estimated that the sales tax exemption contained in the bill that would apply to local option sales surtaxes would have a fiscal impact on local governments that is insignificant for purposes of the mandates provision.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill gives the **Department of Agriculture and Consumer Services** rulemaking authority for the following provisions:

- Sales and Use Tax Exemption for Renewable Energy Technologies (s. 212.08(7)(hhh), F.S.)
- Renewable Energy Technologies Investment Tax Credit (s. 220.192, F.S.)
- Florida Renewable Energy Production Credit (s. 220.193, F.S.)
- Electric Vehicle Charging Stations (s. 366.94, F.S.)
- Permitting and Security of Nonnative Plants (s. 581.083, F.S.)

The bill gives the **Department of Revenue** rulemaking authority for the following provisions:

- Renewable Energy Technologies Investment Tax Credit (s. 220.192, F.S.)
- Florida Renewable Energy Production Credit (s. 220.193, F.S.)

The bill requires the **Public Service Commission** to adopt rules to implement a public interest determination process for new renewable energy projects (s. 366.92, F.S.).

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

# IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On February 15, 2012, the Finance & Tax Committee adopted an amendment that:

- Changes the definition of "new facility" contained in the bill by adding that "[n]ew facility" shall also include a Florida renewable energy facility that has had an expansion operationally placed in service after May 1, 2006, and whose cost exceeded 50% of the assessed value of the facility immediately before the expansion.
- Provides directions for proration of available credits, if the amount applied for exceeds the \$5 million annual credit limit for all taxpayers. New facilities in operation after May 1, 2012, with a claim of \$100,000 or less receive first priority. The second priority is to taxpayers with a claim of \$50,000 or less and, subject to availability of funds, each applicant shall receive the entire amount claimed with all remaining claims for the tax year being subject to proration, if necessary.
- Removes a restriction of \$500,000 per taxpayer annual credit limit. The amendment also conditions the credits for the production and sale of electricity from a new or expanded Florida renewable energy facility, by adding the term "non-utility generator."

The Committee passed the bill as a Committee Substitute.

On February 24, 2012, the State Affairs Committee adopted amendments that made the following changes:

- Renewable Energy Production Tax Credit: Revises the priority language and awards for corporate tax credits if the amount of credits applied for each year exceeds \$5 million; removes the prohibition of utilities applying for the credit; and creates a cap of \$1 million per tax payer per fiscal year.
- Renewable Fuel Standard: Clarifies that retail dealers are not prohibited from selling or offering to sell
  unblended gasoline; and directs the Department of Agriculture and Consumer Services to compile a list
  of retail dealers that sell or offer to sell unblended gasoline in the state and post the list on the
  department's website.

- Cultivation of nonnative plants, algae, or blue-green algae permitting: Creates a special permit statutory exemption for cultivation of plants or groups of plants that do not pose a threat of becoming an invasive species.
- Provides that the Department of Economic Opportunity (DEO), through its Division of Workforce Services, will conduct an economic impact study for each renewable energy project submitted to the Public Service Commission (PSC) for a public interest determination.
- Clarifies that the PSC, in its public interest determination process, must consider the "net" economic benefits associated with a proposed renewable energy project, taking into consideration DEO's economic impact analysis.
- Clarifies that a utility, at its discretion, may elect to use the public interest determination process as an alternative to a determination of prudence through any other available process.
- Requires the PSC, as part of rulemaking to implement the public interest determination process, to establish minimum filing requirements that include the information needed by DEO to conduct its economic impact analysis.
- Requires the PSC, in its existing need determination process (for electrical power plants larger than 75 megawatts) to consider the need for fuel diversity "to foster fuel supply reliability and rate stability."
- Removes all provisions from the bill that would transfer the Office of Public Counsel from the Legislature to the Financial Services Commission.
- Provides an appropriation of \$250,000 from the Florida Public Service Regulatory Trust Fund for the independent study of the Florida Energy Efficiency and Conservation Act (FEECA) that is required by the bill.
- Requires the independent study of FEECA to assess the potential for a low-interest loan program to provide a cost-effective means to encourage the development of demand-side renewable energy systems to achieve certain statutory objectives.

The Committee passed the bill as a Committee Substitute.