

SENATE STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

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

Prepared By: Communications and Public Utilities Committee

BILL: SB 2074

SPONSOR: Senator Constantine

SUBJECT: Hydrogen Energy Technology

DATE: March 16, 2005

REVISED: 3/21/05

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Wiehle</u>	<u>Caldwell</u>	<u>CU</u>	<u>Fav/2 amendments</u>
2.	<u></u>	<u></u>	<u>EP</u>	<u></u>
3.	<u></u>	<u></u>	<u>CM</u>	<u></u>
4.	<u></u>	<u></u>	<u>GEA</u>	<u></u>
5.	<u></u>	<u></u>	<u>GO</u>	<u></u>
6.	<u></u>	<u></u>	<u>WM</u>	<u></u>

Please see last section for Summary of Amendments

- Technical amendments were recommended
- Amendments were recommended
- Significant amendments were recommended

I. Summary:

The bill:

- creates the Florida Hydrogen Energy Technologies Act,
- provides for grants for demonstration and commercialization projects and for research and development relating to hydrogen energy technologies and electrical grid optimization,
- provides an exemption from the sales tax for the sale at retail, the rental, the use, the consumption, the distribution, and the storage to be used or consumed in this state of equipment, machinery, and other materials for hydrogen energy technologies, which is repealed July 1, 2009,
- creates the hydrogen energy technologies investment tax credit, which, except for the credit-carryover provisions, expires on July 1, 2009,
- authorizes regulated electric utilities to recover from customers all costs or expenses incurred by the utility in deploying hydrogen energy technologies, and
- requires the State Fire Marshall to establish uniform firesafety standards applying to hydrogen fueling, storage, and production facilities for stationary fuel cells and vehicles, including maintenance and repair facilities.

The bill substantially amends the following sections of the Florida Statutes: 212.08, 213.053, 220.02, 220.13, 366.8255, and 633.022.

It also creates the following sections of the Florida Statutes: 377.801, 377.802, 377.803, 377.804, 377.805, and 220.192.

II. Present Situation:

Chapter 212 provides for a tax on sales, use, and other transactions. Section 212.08, F.S., provides an exemption from that tax for the sale at retail, the rental, the use, the consumption, the distribution, and the storage to be used or consumed in this state of specified items or types of items.

Section 213.053, F.S., provides for confidentiality of information contained in returns, reports, accounts, or declarations received by the Department of Revenue relating to specified taxes, and provides for sharing of specified types of information with specified government entities for specified purposes.

Section 220.02, F.S., provides definitions for use in the Florida Corporate Income Tax Code.

Section 220.13, F.S., defines the term “adjusted federal income” and specifies additions to be made to that income in applying the Code.

Section 366.8255, F.S., provides for recovery by regulated electric utilities of environmental compliance costs. The term “environmental compliance costs” includes all costs or expenses incurred by an electric utility in complying with environmental laws or regulations, including but not limited to:

- Inservice capital investments, including the electric utility's last authorized rate of return on equity thereon;
- Operation and maintenance expenses;
- Fuel procurement costs;
- Purchased power costs;
- Emission allowance costs;
- Direct taxes on environmental equipment; and
- Costs or expenses prudently incurred by an electric utility pursuant to an agreement entered into on or after the effective date of this act and prior to October 1, 2002, between the electric utility and the Florida Department of Environmental Protection or the United States Environmental Protection Agency for the exclusive purpose of ensuring compliance with ozone ambient air quality standards by an electrical generating facility owned by the electric utility.

“Environmental laws or regulations” includes all federal, state, or local statutes, administrative regulations, orders, ordinances, resolutions, or other requirements that apply to electric utilities and are designed to protect the environment.

Environmental compliance costs are recovered by a utility through submission of a petition to the Public Service Commission describing the utility's proposed environmental compliance activities and projected environmental compliance costs, and seeking recovery of those. If the commission approves the petition, the utility's prudently incurred environmental compliance costs are recovered through an environmental compliance cost-recovery factor that is separate and apart from the utility's base rates.

Section 633.022, F.S., requires that the Chief Financial Officer, acting as State Fire Marshall, establish uniform firesafety standards that apply to specified circumstances.

III. Effect of Proposed Changes:

Section 1 creates s. 377.801, F.S., which states that sections 377.801-377.805 may be cited as the "Florida Hydrogen Energy Technologies Act."

Section 2 creates s. 377.802, F.S., and provides a statement of legislative intent for the act.

Section 3 creates s. 377.803, F.S., to provide the purpose of the act, which is to provide matching grants to stimulate capital investment in this state and to enhance the market for, and promote the statewide use of, hydrogen energy technologies. The grant program is designed to advance the already growing establishment of hydrogen energy technologies in the state and encourage the use of other incentives such as tax exemptions and to provide regulatory certainty in order to attract additional producers, developers, and users of hydrogen energy technology to this state.

Section 4 creates s. 377.804, F.S., to provide definitions for use in applying the act.

- "Balance of plant" means all equipment and components directly involved in the generation, storage, or use of hydrogen for energy production located at the site of hydrogen generation or use.
- "Department" means the Department of Environmental Protection.
- "Fuel cell" means equipment using an electrochemical process to generate energy or electricity or to transfer heat.
- "Electrical grid optimization" means the use of hydrogen energy technology to assist in decreasing electrical peak demand.
- "Hydrogen energy technology" means any technology that is used primarily for the purpose of generating or using hydrogen directly as a fuel in this state, including, but not limited to:
 - Stationary fuel cell systems, or internal combustion engine systems fueled with hydrogen, used for power generation, including prime power, supplemental power, and back-up power, and the balance of plant.
 - On-road and off-road vehicles and watercraft powered by fuel cells or internal combustion engines fueled with hydrogen.
 - Fueling systems and supportive infrastructure.
 - Renewable energy resource systems used to electrolytically produce hydrogen.
 - Reformer technologies used to produce hydrogen from the respective hydrogen carrier, including, but not limited to, steam-methane, biomass, and chemical.
 - Electrical grid electrolysis.

- Electrical grid optimization technologies.
- “Person” means an individual, partnership, joint venture, private or public corporation, association, firm, public service company, or any other entity, public or private, however organized.
- “Renewable energy resource” means any method, process, or substance, the use of which does not diminish its availability or abundance, including, but not limited to, solar energy, wind energy, thermal gradient power, hydroelectric power, and fuels derived from agricultural products, but does not include fossil fuel or nuclear power.

Section 5 creates s. 377.805, F.S., creating and providing for the Hydrogen Energy Technologies Grants Program. The program is established within the department to provide hydrogen energy matching grants for demonstration and commercialization projects and for research and development relating to hydrogen energy technologies and electrical grid optimization.

Matching grants may be made to any of the following based on the factors discussed below:

- Municipalities and county governments.
- Established for-profit companies licensed to do business in this state.
- State universities.
- Utilities located and operating within the state.
- Nonprofit organizations.
- Qualified persons.

Factors that the department is to consider in awarding grants include, but are not limited to:

- The extent to which the project stimulates in-state capital investment and economic development in metropolitan and rural areas, including job creation and future development of a commercial market for clean energy technologies.
- The availability of matching funds from an applicant, and the applicant's commitment to provide matching funds.
- The ability to administer a complete project.
- Project duration and the timeline for expenditures.
- The geographic area of the state in which the project is to be conducted in relation to other projects.
- Other in-kind contributions applied to the total project.
- The extent to which the project incorporates an innovative new technology or an innovative application of an existing technology.
- The degree to which a project generates thermal or electrical energy by means of a low or zero-emissions generation technology or renewable energy resource that has substantial potential for long-term production.
- The degree to which the project fosters an overall understanding and appreciation of clean energy technologies by the general public, students, or a specific government or sector of industry.
- The degree of public visibility and interaction.

Grants awarded to any entity may subsequently be increased by the department upon a determination that sufficient factors are met for the additional funds.

The department is required to adopt rules to administer the awarding of grants under this program.

The department is required to provide a progress report on grants awarded to the Governor, the President of the Senate, and the Speaker of the House of Representatives. The report must include:

- A description of the extent to which the grants program is benefiting the state's environment, public health, and economic development.
- A list of grant recipients.
- The amount of each grant.
- The amount of matching funds provided by recipients.
- The date of each grant.
- A description of each project or expansion funded by a grant.
- A description of each project's contribution to the state's knowledge and use of hydrogen energy technologies.

Section 6 amends s. 212.08, F.S., to provide an exemption from the sales tax for the sale at retail, the rental, the use, the consumption, the distribution, and the storage to be used or consumed in this state of equipment, machinery, and other materials for hydrogen energy technologies. The exemption is repealed July 1, 2009. The exemption is for sale or use of hydrogen energy technologies and of materials used in the manufacture of hydrogen energy. The Department of Environmental Protection is required to provide to the Department of Revenue a list of items considered to meet the definition of hydrogen energy technologies. Any person may request a determination from the Department of Environmental Protection as to whether an item that is not on the list meets the definition of hydrogen energy technology, and the Department must make a determination and issue a revised list if appropriate. The Department of Environmental Protection may adopt rules to administer the exemption paragraph, and the Department of Revenue may provide procedures by rule for purchasers to make tax-exempt purchases.

Section 7 amends s. 213.053, F.S., to provide that the Department of Revenue may share with the Department of Environmental Protection information, for use in conducting its official business, relating to sales tax on equipment, machinery, and other materials for hydrogen energy technologies and hydrogen energy technologies investment tax credit.

Section 8 amends s. 220.02, F.S., to include the hydrogen energy technologies investment tax credit in the list of tax credits to be applied against either the corporate income tax or the franchise tax.

Section 9 creates s. 220.192, F.S., to create the hydrogen energy technologies investment tax credit. The bill creates the following definitions for purposes of this credit.

- "Eligible costs" means all capital costs, operation and maintenance costs, and research and development costs incurred between July 1, 2005, and June 30, 2009, in connection with an investment in hydrogen energy technologies in this state, including, but not limited to, the costs of acquiring, leasing, constructing, installing, equipping, and

- financing hydrogen energy technologies in this state; all obligations incurred for labor; and obligations to contractors, subcontractors, builders, and materialmen in this state.
- “Hydrogen energy technology” means hydrogen energy technology as defined in s. 377.804(6), F.S.

For tax years beginning on or after January 1, 2005, a credit against the tax imposed by this chapter shall be granted in an amount equal 75 percent of the eligible costs. Credits may be used in tax years beginning on or after January 1, 2005, and ending on or before December 31, 2011, after which the credit expires and may not be used. If the credit under this section is not fully used in any one tax year because of insufficient tax liability on the part of the corporation, the unused amount may be carried forward and used in tax years beginning on or after January 1, 2006, and ending on or before December 31, 2011, after which the credit carryover expires and may not be used. A taxpayer that files a consolidated return in this state as a member of an affiliated group under s. 220.131(1), F.S., may be allowed the credit on a consolidated return basis up to the amount of tax imposed upon the consolidated group. Any eligible cost for which a credit is claimed and which is deducted or otherwise reduces federal taxable income shall be added back in computing adjusted federal income under s. 220.13, F.S.

Any corporation wishing to obtain tax credits available under this chapter must submit to the Department of Environmental Protection an application for the tax credit which includes a complete description of all eligible costs for which the corporation is seeking a credit and a description of the total amount of credit sought. The Department of Environmental Protection shall determine the eligibility of the applicant for the credits sought, and certify the determination to the applicant and to the Department of Revenue. The corporation must attach the Department of Environmental Protection's certification to the tax return on which the credit is claimed. The Department of Environmental Protection may adopt the necessary rules, guidelines, and application materials for the application process.

In addition to its existing audit and investigation authority, the Department of Revenue may perform any additional financial and technical audits and investigations, including examining the accounts, books, and records of the tax credit applicant which are necessary to verify the eligible costs included in the tax credit return and to ensure compliance with this section. The Department of Environmental Protection shall provide technical assistance when requested by the Department of Revenue on any technical audits or examinations performed pursuant to this section. It is grounds for forfeiture of previously claimed and received tax credits if the Department of Revenue determines, as a result of an audit or examination or from information received from the Department of Environmental Protection, that a taxpayer received tax credits pursuant to this section to which the taxpayer was not entitled. The taxpayer is responsible for returning forfeited tax credits to the Department of Revenue, and such funds shall be paid into the General Revenue Fund of the state. The Department of Environmental Protection may revoke or modify any written decision granting eligibility for tax credits under this section if it is discovered that the tax credit applicant submitted any false statement, representation, or certification in any application, record, report, plan, or other document filed in an attempt to receive tax credits under this section. The Department of Environmental Protection shall immediately notify the Department of Revenue of any revoked or modified orders affecting previously granted tax credits. Additionally, the taxpayer must notify the Department of Revenue of any change in its tax credit claimed. The taxpayer shall file with the Department of Revenue

an amended return or such other report as the Department of Revenue prescribes by rule and shall pay any required tax and interest within 60 days after the taxpayer receives notification from the Department of Environmental Protection that previously approved tax credits have been revoked or modified, if uncontested, or within 60 days after a final order is issued following proceedings involving a contested revocation or modification order. A notice of deficiency may be issued by the Department of Revenue at any time within 5 years after the taxpayer receives formal notification from the Department of Environmental Protection that previously approved tax credits have been revoked or modified. If a taxpayer fails to notify the Department of Revenue of any changes to its tax credit claimed, a notice of deficiency may be issued at any time. A taxpayer that receives a credit under this section for the construction or purchase of structures or the purchase of equipment shall recapture and repay the amount of credit attributable to such property if that property is not used by the taxpayer for hydrogen energy technologies through the warranty period of the complete system or system components. If a warranty is not provided by the equipment manufacturer, the equipment must be operated for the useful life of the complete system or system components. Credit may not be allowed under this section for an eligible cost associated with an investment in hydrogen energy technologies if the credit has previously been allowed for such eligible cost.

The Department of Revenue may adopt by rule the forms required to claim a tax credit under this section, the requirements and basis for establishing an entitlement to a credit, and procedures for the examinations and audits required to administer this section.

The provisions of this section, except the credit carryover provisions contained in subsection (2), expire on July 1, 2009.

Section 10 amends s. 220.13, F.S., to include in additions to adjusted federal income the tax credit claimed that tax year.

Section 11 amends s. 366.8255, F.S., which provides for recovery by a regulated electric utility of environmental compliance costs. The statute sets out a general definition of the term environmental compliance costs, then lists different types of costs that are included in the definition. The bill amends the general definition of “environmental compliance costs” by adding “all costs or expenses incurred by an electric utility in deploying hydrogen energy technologies as defined in s. 377.804(6),” (as created by this bill), then adds to the types of costs included in this term “costs incurred between July 1, 2005, and June 30, 2009, for hydrogen energy technologies, as defined in s. 377.804(6), which have the potential to contribute to the provision of adequate and reliable electric service to or for the public of this state and which have minimal rate impacts. The electric utility must demonstrate that the proposed hydrogen energy technology meets the definition in s. 377.804(6).”

Section 12 amends s. 633.022, F.S., to require the State Fire Marshall to establish uniform firesafety standards applying to hydrogen fueling, storage, and production facilities for stationary fuel cells and vehicles, including maintenance and repair facilities. The bill also authorizes the State Fire Marshal may adopt rules pertaining to or applicable to any building, structure, facility, condition, situation, or circumstance in which hydrogen is being used, produced, or stored, or in any other manner dealt with or treated as a fuel, which the State Fire Marshal finds are necessary to protect the public health, safety, and welfare and to protect the safety of persons and property

in this state, including, but not limited to, the adoption of the most recent edition of the National Fire Protection Association's NFPA 1 and any other applicable code, publication, or standard. The State Fire Marshal may require by rule that any equipment used in conjunction with any use specified in these rules be listed by a nationally recognized testing laboratory, such as Underwriters Laboratories, Inc., or Factory Mutual Laboratories, Inc. The State Fire Marshal may adopt by rule procedures to determine whether a laboratory is nationally recognized, taking into account the laboratory's facilities, procedures, use of nationally recognized standards, and any other criteria reasonably calculated to reach an informed determination.

Section 13 provides that the bill takes effect July 1, 2005.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

To the extent that the bill produces investments in hydrogen technology, private companies doing so will receive tax exemptions and credits. To the extent that regulated utilities invest in hydrogen technologies which they can demonstrate meet the definition of "hydrogen energy technology" and which have the potential to contribute to the provision of adequate and reliable electric service to or for the public of this state and which have minimal rate impacts, costs of these investments will be passed on to the investing utility's customers through an environmental compliance cost recovery proceeding at the Public Service Commission. Florida's citizens will benefit from the bill to the extent improvements in and deployment of hydrogen energy technology help this technology to become cost competitive with fossil fuels.

C. Government Sector Impact:

The state will forgo potential tax revenues as a result of the tax exemptions and credits created in the bill, and will, presumably, fund the grants administered by the Department of Environmental Protection in the Hydrogen Energy Technology Grants Program.

VI. Technical Deficiencies:

Section 11 amends s. 366.8255, F.S., to include in the general definition of “environmental compliance costs” “all costs or expenses incurred by an electric utility in deploying hydrogen energy technologies as defined in s. 377.804(6),” then adds to the types of costs included in this term “costs incurred between July 1, 2005, and June 30, 2009, for hydrogen energy technologies, as defined in s. 377.804(6) . . .” It is not clear that the stated time limitation applies to the costs of deploying hydrogen energy technologies as included in the general definition, and therefore it is not clear whether such general costs may be recovered through this procedure beyond this time limit.

VII. Related Issues:

None.

This Senate staff analysis does not reflect the intent or official position of the bill’s sponsor or the Florida Senate.

VIII. Summary of Amendments:

Bar Code 322362 by Communications & Public Utilities:

Makes a technical change

Bar Code 830934 by Communications & Public Utilities:

Makes a technical change to reflect the original intent.

This Senate staff analysis does not reflect the intent or official position of the bill's sponsor or the Florida Senate.
