



Governor's Action Team on Energy and Climate Change

Background Briefing: Florida Energy Programs

August 2007

INTRODUCTION

This purpose of this document is to provide a background briefing on Florida's current government organizational structure as it relates to the development and implementation of energy policy and relevant university-based research institutions in Florida.

LEGISLATIVE BRANCH

Florida Public Service Commission

The Florida Public Service Commission is charged with assuring that Florida's consumers receive some of their most essential services — electric, natural gas, telephone, water, and wastewater — in a safe, affordable, and reliable manner. In doing so, the PSC exercises regulatory authority over utilities in one or more of three key areas: rate base/economic regulation; competitive market oversight; and monitoring of safety, reliability, and service. Pursuant to Chapters 350, 361, 366 and 368, Florida Statutes, the Commission (which is composed of five Commissioners each appointed by the Governor) and its staff regulates various aspects of public utility operations.

Florida Energy Commission

Created by the Florida Legislature during the 2006 session, the Commission is responsible for developing recommendations for legislation to establish a state energy policy by the Legislature. The recommendations of the commission are based on the guiding principles of reliability, efficiency, affordability, and diversity. The commission is responsible for continually reviewing state energy policy and recommending to the Legislature any additional necessary changes or improvements via an annual report. The Commission operates under specific authority granted in section 377.901, F.S. The Commission is composed of nine members as appointed by the Speaker of the House and the President of the Senate.

EXECUTIVE BRANCH

Utility Siting Board

The Governor and Cabinet sit as the Utility Siting Board pursuant to Chapter 403, F.S. The Utility Siting Board provides the final deliberation on whether to grant siting certifications for power plants, electric transmission facilities, and natural gas transmission pipelines. The Department of Environmental Protection serves as staff to the Governor and Cabinet when sitting as the Utility Siting Board.

Department of Agriculture and Consumer Services

The Department of Agriculture and Consumer Services plays a key role in Florida's energy policy through its charter to protect consumers and market agricultural products for the benefits of Florida's economy.

Farm to Fuel Program

Pursuant to 570.954, F.S., the Department administers the Farm to Fuel Initiative to enhance the market for and promote the production and distribution of renewable energy from Florida-grown crops, agricultural wastes and residues, and other biomass and to enhance to value of agriculture products or expand agribusiness for Florida.

Bureau of Petroleum Inspection

Pursuant to Chapters 501, 525 and 526, F.S. the Department regulates the quality and measurement of petroleum products sold in Florida. Specific activities include field sampling and laboratory testing of gasoline, gasohol, diesel fuel, fuel oil, kerosene, antifreeze and brake fluid. Activities also include routine inspections of retail service station pumps and other commercial petroleum measures for accuracy and correctness and the investigation of citizen complaints on matters within the Bureau's regulatory authority.

Department of Community Affairs

The Department of Community Affairs is the principal clearinghouse for community concerns within Florida including growth management and the administration of state and federal grant funds allocated for use at the community level.

Energy Efficiency Code for Building Construction (Florida Building Commission)

The Florida Building Commissions establishes, updates and maintains the Energy Efficiency Code for Building Construction, a state minimum energy conservation code. The energy code is updated biennially to incorporate evolving technology and provides training and technical assistance for the building industry, local code officials and consumers.

Appliance Efficiency Standards – Division of Housing and Community Development

Pursuant to section 553.957, F.S., the Department regulates the minimum energy efficiency of certain consumer appliances sold within the State of Florida. Appliances governed under this authority include refrigerators, freezers, and lighting.

Weatherization Assistance Program – Division of Housing and Community Development

The Weatherization Assistance Program annually provides grant funds to community action agencies, local governments, Indian tribes and non-profit agencies to provide specific program services for low-income families of Florida. These entities provide program services throughout the state. Funding for the grant program originates from the U.S. Department of Energy with supplemental funding from the U.S. Department of Health and Human Services.

Low Income Home Energy Assistance Program – Division of Housing and Community Development

The Low Income Home Energy Assistance Program provides grant to local governments and non-profit agencies to assist eligible low-income households in meeting the costs of home heating and cooling. Grants administered under this program are provided by the federal government.

Department of Environmental Protection

The Department of Environmental Protection administers Florida's environmental regulatory programs with respect to energy production, transportation, and use across the economy. Instances of the environmental and energy interface include: resource permitting for pipelines, air pollution control permitting for power plants, and permitting for oil drilling. With the transfer of the Florida Energy Office to DEP in 2003, the Department has assumed additional duties with respect to Florida's energy policy including analytical support for the policy development process, the promotion of renewable energy via grants and rebates, and the provision of technical assistance to the public.

Florida Energy Office

Pursuant to Chapter 377, F.S., the Florida Energy Office (FEO) provides public information and administers state and federal grant funding for advanced clean energy sources, energy conservation and efficiency. During hurricane season and other natural disasters, FEO coordinates electricity recovery, fuel supply, and fuel requests by local governments, law enforcement and healthcare facilities throughout the state.

Siting Coordination Office

The Siting Coordination Office (SCO), in conjunction with the DEP Office of General Counsel, is the part of the Department of Environmental Protection which has been assigned the tasks for coordinating the interagency review and certification (licensing) under three "Siting Acts."

Electrical Power Plant Siting Act: The Power Plant Siting Act (PPSA), ss. 403.501-.518, F.S., is the State's process for the licensing of large power plants. The PPSA was designed to provide a streamlined process for the development of energy infrastructure, which is necessary for the health, welfare, and protection of the citizens of the state, while protecting the public and the environment from the impacts of the infrastructure. While most facilities need to get any number of permits or approvals from local and state agencies, large power plants in the State are treated differently. All local and state permits or approvals are pre-empted, and only one license is issued, called a "certification". However, all of the local governments or state agencies within whose jurisdiction the power plant is to be certified participate in the process, to assure that the issues normally subject to regulatory approval or other authorizations are addressed.

Transmission Line Siting Act: The Transmission Line Siting Act (TLSA), ss. 403.52-.5365, F.S., provides for certification of electrical transmission lines which are 230 kV or larger and which cross a county line and are 15 miles or more in length. However, if a line is to be constructed entirely within certain rights-of-way, the act does not apply. If an applicant so desires, it can request that a line which is less than 15 miles in length or which is within one county be allowed to use the Act.

Natural Gas Transmission Pipeline Siting Act: The Natural Gas Transmission Pipeline Siting Act (NGPSA), ss. 403.9401-.9425, F.S., applies to the construction and operation of intrastate (within Florida) natural gas pipelines. For interstate pipelines, the company would deal with the Federal Energy Regulatory Commission on a EIS and coordination of federal regulatory issues, plus the department for state-level regulatory matters such as wetlands crossings, discharge of hydrostatic test waters, etc; other state and local agencies may also be involved from a regulatory standpoint. Additional thresholds to determine whether an intrastate pipeline line must be licensed under the NGPSA include whether (a) it crosses a county line and is 15 miles or more in length; (b) it is owned and operated by a local distribution company; (c) it is being licensed as an

associated facility under the Power Plant Siting Act. However, an applicant can request that a project under these thresholds be allowed to use the Act.

Bureau of Geology

Pursuant to Chapter 377, F.S., the Department's Oil and Gas Section is the permitting authority within the Florida Geological Survey. Companies interested in exploration or production of hydrocarbons in Florida are regulated by the Oil and Gas Section. Primary responsibilities of the Section include conservation of oil and gas resources, correlative rights protection, maintenance of health and human safety, and environmental protection. These concerns are addressed through a system of permits and field inspections to insure compliance.

ENERGY & CLIMATE RELATED RESEARCH INSTITUTES

University of Central Florida

- Florida Solar Energy Center - (FSEC) was created by the Florida Legislature in 1975 to serve as the state's energy research institute. The main responsibilities of the center are to conduct research, test and certify solar systems and develop education programs.
- Center for Energy and Sustainability – CES is a unit within the UCF Physical Plant designed to further the University's efforts of promoting a community with all members taking active roles in energy conservation and sustainability. CES promotes wise energy use and a productive and comfortable work environment.

Florida State University

- Center for Advanced Power Systems – (CAPS) was created by The Florida State University and the FAMU-FSU College of Engineering in cooperation with the National High Magnetic Field Laboratory to focus on advanced power technologies with particular emphasis on transportation systems, as well as traditional utility systems. The center is developing an academic-industrial consortium focused on the application of recent advances in power semiconductors, materials, advanced controls and superconductivity to advanced power system technologies.

University of Florida

- Florida Center for Renewable Chemicals and Fuels – (CRCF) was established in January 2002 to facilitate research and graduate education throughout the State University System in the multi-disciplinary areas of renewable chemicals and fuels. The Center solves new technological challenges, serves as a forum to foster productive interactions among faculty and students, assists faculty in the development of competitive research grants, and increases the visibility of this important activity at the state and national levels.
- Program for Resource Efficient Communities – (PREC) integrates and applies the University of Florida's educational and analytical assets to promote the adoption of best design, construction, and management practices that measurably reduce energy and water consumption and environmental degradation in new residential community developments.
- Florida Institute for Sustainable Energy – (FISE) brings together the broad research capabilities of the University of Florida to address societal needs for a sustainable energy future. This includes energy efficiency, renewable energy generation, nuclear energy, energy policy/economics, and energy education/outreach. There are 22 energy related centers and laboratories at UF as well as the only Nuclear Engineering Department in the State. The Institute's structure covers numerous

units within the Colleges of Engineering, Business, Law, Building Construction, Liberal Arts and Sciences, SNRE, IFAS, and the UF Office of Sustainability, and provides the necessary umbrella organization to promote interdisciplinary research and education. Its facilities include a recently awarded Florida Center of Excellence, the *FISE Energy Technology Incubator*, to accelerate commercialization of energy technologies.

- Institute of Food and Agricultural Sciences – (IFAS) is a federal-state-county partnership dedicated to developing knowledge in agriculture, human and natural resources, and the life sciences, and enhancing and sustaining the quality of human life by making that information accessible. IFAS is the research and development center for Florida’s agricultural and natural resources industries that have a \$97.8 billion annual impact.
- Industrial Assessment Center – (IAC) funded by the US Department of Energy as part of a national program to perform no-cost energy audits for small to medium sized industries, the IAC program has established a record of quality performance that has cost-effectively improved the energy efficiency of over 3000 manufacturing plants. The operational goal of the IAC is to provide both on-site energy services and follow-up services in a timely and thorough manner that reflects the overall IAC record for quality and cost-effectiveness.
- Powell Center for Construction and Environment – (PCCE) is primarily a research organization dedicated to the resolution of environmental problems associated with planning and architecture and the determination of optimum materials and methods for use in minimizing environmental damage. The Center develops sustainable building codes for residential construction, conducts seminars, symposia, professional conferences and courses on the subject sustainable development and construction related environmental regulations, activities and research.
- Public Utility Research Center - (PURC) provides international training and strategic research in public utility regulation, market rules, and infrastructure management in the energy, telecommunications, and water industries. Its outreach activities support the expanded deployment and efficient delivery of telecommunications, energy and water/wastewater services, including the achievement of environmental objectives. To date, 1,810 participants from more than 130 nations have participated in the PURC/World Bank International Training Program in Utility Regulation and Strategy. In addition, PURC researchers have published numerous articles on incentive regulation, utility pricing, benchmarking, investor perspectives, and market reform; these studies form the foundation of training materials.

University of South Florida

- Clean Energy Research Center – (CERC) – serves to organize scientific research, technical development, infrastructure development, information transfer in collaboration with energy producers and the transportation sector to support economic development of manufacturing and high technology businesses.

University of North Florida

- IEA Clean & Renewable Energy Lab – (CREL) explores alternative energy sources including solar energy, fuel cell technology, and alternative fuels such as hydrogen and methanol. The lab also conducts exhaust and emission testing with alternative fuels.

Florida International University

- Applied Research Center – (ARC) is an applied research and technology development center designed to develop next-generation, integrated solutions to environmental, energy, and information challenges delivering the quality and value of a top-ranked research university to clients in government.

Florida Atlantic University

- Center for Excellence in Ocean Energy Technology – (CEOET) Center of Excellence in Ocean Energy Technology is a synergistic partnership among academia, industry and government laboratories combining expertise in ocean engineering and science, fabrication and testing, utilizing the South Florida Testing Facility range to foster the research, design, development, implementation, testing, and commercialization of cutting-edge ocean energy technologies that are cost-competitive with existing fossil-fuel-based power generation. Ocean current, thermal, wave, and tidal-based energy are focus areas for development as renewable power sources.

University of Miami

- Center for Ecosystem Science and Policy - the Leonard and Jayne Abess Center for Ecosystem Science and Policy (Abess Center) is to create innovative, interdisciplinary initiatives that bridge the gap between science and environmental policy. The Center is the nexus for a new and flexible undergraduate program that gives students the opportunity to learn in a problem-solving context and gain substantial field experience.