The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT

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

Prepared E	By: The Profes		ions Committee on vernment	Agriculture, Environment, and General		
BILL:	CS/SB 16	24				
NTRODUCER:	R: Regulated Industries Committee and Senator Collins					
SUBJECT:	Energy Ro	esources				
DATE:	February	12, 2024 REVISED:				
ANALYST		STAFF DIRECTOR	REFERENCE	ACTION		
. Scharader		Imhof	RI	Fav/CS		
. Davis		Betta	AEG	Pre-meeting		
	_		FP			

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/SB 1624 amends several sections of Florida law and creates new statutory provisions relating to energy resources. In summary, the bill:

- Creates limitations on local government regulation of natural gas resiliency and reliability infrastructure.
- Revises energy guidelines for public businesses, deleting requirements relating to the Florida Climate-Friendly Preferred Products List, and state vehicle fuel efficiency.
- Requires the Department of Management Services (DMS) to develop the Florida Humane Preferred Products List to identify certain products that appear to be largely made free from forced labor.
- Prohibits the Florida Department of Transportation (FDOT) from assigning or transferring its
 permitting rights across any transportation right-of-way operated by the FDOT to a third
 party or governmental entity that does not operate the transportation right-of-way without
 prior approval of the Legislature.
- Prohibits the FDOT and local government entities from requiring a utility within a public road operated by the authority to be relocated on behalf of any other third-party or governmental agency project related to a separate public or private road or transportation corridor.
- Adds "development districts" to a provision that prohibits a municipality, county, special district, or other political subdivision of the state from enacting or enforcing a resolution, ordinance, rule, code, or policy or taking any action that restricts or prohibits or has the effect of restricting or prohibiting the types or fuel sources of energy production which may be

used, delivered, converted, or supplied by utilities, gas districts, natural gas transmission companies, and certain liquefied petroleum gas dealers, dispensers, and cylinder exchange operators.

- Adds "development districts" to a provision that prohibits a municipality, county, special district, or other political subdivision of the state from restricting or prohibiting the use of an appliance using the fuels or energy types supplied by the entities above.
- Requires the Public Service Commission (PSC) to create targeted storm reserve amounts for public utilities.
- Authorizes the PSC to establish an experimental mechanism to facilitate energy infrastructure investment.
- Permits the PSC to approve voluntary public utility programs for residential, customerspecific electric vehicle (EV) charging if the PSC determines that the rates and rate structure of a proposed program would not adversely impact the public utility's general body of ratepayers.
- Requires the PSC to conduct an annual proceeding to determine prudently incurred natural
 gas facilities relocation costs for cost recovery by natural gas public utilities through a charge
 separate from the utility's base rates.
- Substantially revises legislative intent as it pertains to part II, of ch. 377, F.S., which provides
 energy resource planning and development policies for Florida. The revisions also provide
 updated energy policy goals and state policies as they relate to energy resource planning and
 development.
- Eliminates a requirement that the Department of Agriculture and Consumer Services (DACS), when analyzing the energy data collected and preparing long-range forecasts of energy supply and demand, forecasts contain plans for the development of renewable energy resources and reduction in dependence on depletable energy resources, particularly oil and natural gas. Instead, such forecasts must contain an analysis of the extent to which domestic energy resources, including renewable energy sources, are being utilized in the state. It also revises certain related considerations and assessments.
- Repeals the Florida Energy and Climate Protection Act (Renewable Energy and Energy-Efficient Technologies Grants Program), Florida Green Government Grants Act, Energy Economic Zone Pilot Program, and Qualified Energy Conservation Bonds provisions.
- Provides procedures for handling existing applications and contracts relating to the above repealed programs.
- Increases the minimum length of an intrastate natural gas pipeline that requires certification under the Natural Gas Transmission Pipeline Siting Act from 15 miles to 100 miles.
- Directs the Florida Department of Commerce (FDC) to expand eligibility for the Low-Income Energy Assistance Program (LIHEAP) to persons in certain federal disability programs.
- Directs the FDC to develop a process for automated LIHEAP payments to home energy suppliers.
- Prohibits homeowners associations from disallowing certain types or fuel sources of energy production and appliances that use such fuels in their governing documents.
- Directs the PSC to conduct an assessment of the security and resiliency of the state's electric grid and natural gas facilities against both physical threats and cyber threats. The provision also requires the PSC to submit a report to the Legislature.

Directs the PSC to study and evaluate the technical and economic feasibility of using
advanced nuclear power technologies, including small modular reactors (SMRs), to meet the
state's electrical power needs, and research means to encourage and foster the installation
and use of such technologies at military installations in the state. The provision also requires
the PSC to submit a report to the Governor, President of the Senate, and Speaker of the
House of Representatives.

- Directs the FDOT, in consultation with the Office of Energy within the DACS, to study and
 evaluate the potential development of hydrogen fueling infrastructure, including fueling
 stations, to support hydrogen-powered vehicles that use the state highway system. The
 provision also requires the FDOT to the Governor, President of the Senate, and Speaker of
 the House of Representatives.
- Makes conforming changes.

The bill may have a significant negative fiscal impact on state expenditures. See Section V., Fiscal Impact Statement.

Except as expressly otherwise provided, the bill takes effect July 1, 2024.

II. Present Situation:

The Florida Department of Transportation (FDOT) acquires land throughout the state to utilize for transportation facilities¹ and secure rights-of-way through purchase, lease, exchange, donation, or other types of acquisition.² The FDOT is authorized to convey acquired property it determines not to be needed for the construction, operation, and maintenance of a transportation facility.³

Generally, the FDOT may dispose of the property through negotiations, sealed competitive bids, auctions, or any other means the FDOT deems to be in its best interest.⁴ A sale of unneeded property may not occur at a price less than the FDOT's current estimate of value except that:

- If the property has been donated to the state for transportation purposes and a transportation facility has not been constructed for at least five years, plans have not been prepared for the construction of such facility, and the property is not located in a transportation corridor, the governmental entity may authorize reconveyance of the donated property for no consideration to the original donor or the donor's heirs, successors, assigns, or representatives.⁵
- If the property is to be used for a public purpose, including, but not limited to, affordable housing as provided in ss. 125.379 and 166.0451, F.S., the property may be conveyed without consideration to a governmental entity.⁶

¹ "Transportation facility" means any means for the transportation of people or property from place to place which is constructed, operated, or maintained in whole or in part from public funds. The term includes the property or property rights, both real and personal, which have been or may be established by public bodies for the transportation of people or property from place to place. *See* s. 334.03(30), F.S.

² Section 337.25(1), F.S.

³ Section 337.25(4), F.S.

⁴ *Id*.

⁵ Section 337.25(4)(a), F.S.

⁶ Section 337.25(4)(b), F.S.

• If the property was originally acquired specifically to provide replacement housing for persons displaced by transportation projects, the FDOT may negotiate for the sale of such property as replacement housing.⁷

- If the FDOT determines the property requires significant costs to be incurred or that continued ownership of the property exposes the FDOT to significant liability risks, the FDOT may use the projected maintenance costs over the next 10 years to offset the property's value in establishing a value for disposal of the property, even if that value is zero.⁸
- If, at the discretion of the FDOT, a sale to a person other than an abutting property owner would be inequitable, the property may be sold to the abutting owner for the FDOT's current estimate of value.

Payment for Moving or Removing Utilities and Exceptions

Section 337.403(1), F.S., requires utility owners to bear the cost of relocating utility facilities placed upon, under, over, or within the right-of-way limits of any public road or publicly owned rail corridor which is found by the authority⁹ to be unreasonably interfering in any way with the convenient, safe, or continuous use, or the maintenance, improvement, extension, or expansion, of such public road or publicly owned rail corridor. Utility owners, upon 30 days' notice, must eliminate the unreasonable interference within a reasonable time or an agreed time, at their own expense. Numerous exceptions are provided to this provision, and are located in ss. 337.403(1)(a)-(j), F.S. The requirements of s. 337.403(1), F.S., apply even if the utility facility is within a public utility easement and the utility has a franchise agreement with the authority, absent some other agreement to the contrary regarding costs of relocation. ¹⁰

Renewable Energy

Section 366.91, F.S., establishes a number of renewable policies for the state. The purpose of these policies, as established in statute, states that it is in the public interest to promote the development of renewable energy resources in this state. Further, the statute is intended to encourage fuel diversification to meet Florida's growing dependency on natural gas for electric production, minimize the volatility of fuel costs, encourages investment within the state, improve environmental conditions, and make Florida a leader in new and innovative technologies. 12

The section defines "renewable energy" to mean:

[E]lectrical energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen produced or resulting from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, and hydroelectric power. The term includes the alternative energy resource, waste heat,

⁷ Section 337.25(4)(c), F.S.

⁸ Section 337.25(4)(d), F.S.

⁹ As used in ss. 337.401-337.404, F.S., "the authority" means the FDOT and local government entities. Section 337.401(1)(a), F.S.

¹⁰ Lee County Electric Coop., Inc. v. City of Cape Coral, 159 So. 3d 126, 130 (Fla. 2d DCA 2014).

¹¹ Section 366.91(1), F.S

¹² *Id*.

from sulfuric acid manufacturing operations and electrical energy produced using pipeline-quality synthetic gas produced from waste petroleum coke with carbon capture and sequestration.¹³

The section defines "biogas" as "a mixture of gases produced by the biological decomposition of organic materials which is largely comprised of carbon dioxide, hydrocarbons, and methane gas," and "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." ¹⁵

Biofuels

Unlike other renewable energy sources, biomass can be converted directly into a liquid fuel. These fuels, called "biofuels" can be used for transportation fuel and other energy uses. The most common types of biofuels currently in use are ethanol and biodiesel. ¹⁶

Ethanol is made from various plant material and is an alcohol blending agent mixed with traditional gasoline to reduce emissions. The most common type is E10 (10 percent ethanol and 90 percent gasoline) and it is approved for use in most conventional gasoline powered engines. Some vehicles, called flexible fuel vehicles, are designed to run on E15 (15 percent ethanol and 85 percent gasoline). Approximately 97 percent of gasoline sold in the United States has some amount of ethanol in it. The most common method of producing ethanol is through fermentation, where microorganisms metabolize plant sugars to produce ethanol.¹⁷

Biodiesel differs from ethanol in that it is meant as a cleaner-burning replacement for conventional (i.e. petroleum-based) diesel fuel. It is derived, generally, from new and used vegetable oils and animal fats. Biodiesel is produced by combining alcohol with fats. ¹⁸ Biodiesel is generally blended with petroleum-based diesel for consumption as a vehicle fuel. ¹⁹

Renewable diesel fuel is a growing industry. The fuel, chemically similar to petroleum-based diesel fuel, can be used as a "drop-in" replacement for petroleum-based diesel fuel and can be seamlessly blended, transported, and even co-processed with petroleum-based diesel.²⁰ The production method for renewable diesel fuel is more complex than biodiesel and most is

¹³ Section 366.91(2)(e), F.S.

¹⁴ Section 366.91(2)(a), F.S.

¹⁵ Section 366.91(2)(b), F.S.

¹⁶ United States Department of Energy, *Biofuel Basics*, https://www.energy.gov/eere/bioenergy/biofuel-basics#:~:text=The%20two%20most%20common%20types,first%20generation%20of%20biofuel%20technology (last visited Feb. 1, 2024).

¹⁷ *Id*.

¹⁸ *Id*.

¹⁹ United States Energy Information Administration, *Biofuels explained*, Jul. 19, 2022, https://www.eia.gov/energyexplained/biofuels/ (last visited Feb. 1, 2024).

²⁰ United States Energy Information Administration. *Biofuels explained: Biodiesel, renewable diesel, and other biofuels*, Jul. 29, 2022, https://www.eia.gov/energyexplained/biofuels/biodiesel-rd-other-basics.php, (last visited Feb. 1, 2024).

produced by hydrogenation of triglycerides, a similar process to that used for desulfurization of petroleum diesel. Other methods can also be used for renewable diesel production, including gasification and pyrolysis.²¹

Other biofuels, including renewable heating oil, renewable jet fuel (sustainable aviation fuel, alternative jet fuel, biojet), renewable naphtha, and renewable gasoline are also currently in various stages of development and commercial implementation.²²

Natural Gas and Renewable Natural Gas

Natural gas is a fossil energy source which forms beneath the earth's surface. Natural gas contains many different compounds, the largest of which is methane. ²³ Conventional natural gas is primarily extracted from subsurface porous rock reservoirs via gas and oil well drilling and hydraulic fracturing, commonly referred to as "fracking." The term renewable natural gas (RNG) refers to biogas that has been upgraded to use in place of fossil fuel natural gas (i.e. conventional natural gas).²⁴

Section 366.91, F.S., identifies sources for producing RNG as a potential source of renewable energy.²⁵ The section specifically defines renewable natural gas as anaerobically generated biogas, landfill gas, or wastewater treatment gas refined to a methane content of 90 percent or greater. Under the definition, such gas may be used as a transportation fuel or for electric generation, or is of a quality capable of being injected into a natural gas pipeline.

Biogas used to produce RNG comes from various sources, including municipal solid waste landfills, digesters at water resource recovery facilities, livestock farms, food production facilities, and organic waste management operations.²⁶ Raw biogas has a methane content between 45 and 65 percent.²⁷ Once biogas is captured, it is treated in a process called conditioning or upgrading, which involves the removal of water, carbon dioxide, hydrogen sulfide, and other trace elements. After this process, the nitrogen and oxygen content is reduced and the RNG has a methane content comparable to natural gas and is thus a suitable energy source in applications that require pipeline-quality gas, such as vehicle applications.²⁸

²¹ *Id*.

²² United States Energy Information Administration, *Biofuels explained*, *supra* note 19.

²³ United States Energy Information Administration, *Natural gas explained*, Dec. 27, 2022, https://www.eia.gov/energyexplained/natural-gas/ (last visited Feb. 1, 2024)

²⁴ Environmental Protection Agency, *Landfill Methane Outreach Program (LMOP): Renewable Natural Gas*, https://www.epa.gov/lmop/renewable-natural-gas (last visited Feb. 1, 2024).

²⁵ Section 366.91(2)(e), F.S., defines "renewable energy, in part, as energy produced from biomass. Section 366.91(2)(b), F.S., defines "biomass" in part, as "a power source that is comprised of, but not limited to, combustible residues or gases from...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." RNG would be such a combustible gas.

²⁶ Environmental Protection Agency, *supra* note 24.

²⁷ Id.

²⁸ United States Department of Energy, *Renewable Natural Gas Production*, https://afdc.energy.gov/fuels/natural gas renewable.html (last visited Feb. 1, 2024).

RNG meeting certain standards, qualifies as an advanced biofuel under the Federal Renewable Fuel Standard Program.²⁹ This program was enacted by Congress in order to reduce greenhouse gas emissions by reducing reliance on imported oil and expanding the nation's renewable fuels sector.³⁰

Hydrogen Fuel

The production of hydrogen involves the separation of the element from other elements in which it occurs. While there are many different sources of hydrogen and methods for producing it as a fuel, the most common methods used currently are steam-methane reforming and electrolysis.³¹ Through either method, hydrogen is not an energy source, per se, since it is produced using other energy sources. Rather, produced hydrogen is an energy carrier.³²

Steam-Methane Reforming

The most-widely used method for hydrogen production, which accounts for nearly all commercially-produced hydrogen in the United States, is steam-methane reforming. With steammethane reforming, hydrogen atoms are separated from carbon atoms in methane using high temperature (1,300-1,800 degrees Fahrenheit) under 3-25 bar pressure³³ in the presence of a catalyst. The end-result of this process is the production of hydrogen, carbon-monoxide, and a small amount of carbon dioxide.³⁴

For industrial facilities and petroleum refineries, natural gas is the typical base material from which to produce hydrogen by steam-methane reforming. Biogas and landfill gas is also a base material to produce hydrogen used by several fuel cell power plants in the United States.

Electrolysis

Electrolysis, in the sense of hydrogen production, means a process where hydrogen is split from water using an electric current. On a large, commercial scale, the process may be referred to as power-to-gas, where power is electricity and gas is hydrogen.³⁵ This hydrogen is then captured

²⁹ United States Department of Energy, *Renewable Fuel Standard*, https://afdc.energy.gov/laws/RFS#:~:text=The%20Renewable%20Fuel%20Standard%20(RFS,Act%20of%202007%20(EISA)) (last visited: Feb. 1, 2024).

³⁰ Environmental Protection Agency, *Renewable Fuel Standard Program*, https://www.epa.gov/renewable-fuel-standard-program (last visited Feb. 1, 2024).

³¹ United States Energy Information Administration, *Hydrogen Explained: Production of Hydrogen*, Jan. 21, 2022, https://www.eia.gov/energyexplained/hydrogen/production-of-

hydrogen.php#:~:text=The%20two%20most%20common%20methods,electrolysis%20(splitting%20water%20with%20electricity.(last visited Feb. 1, 2024)

³² International Renewable Energy Agency, *Hydrogen*, available at https://www.irena.org/Energy-Transition/Technology/Hydrogen (last visited Feb. 1, 2024).

³³ One bar equals 14.5 pounds per square inch of pressure. For comparison, at sea level, the average air pressure on Earth is 1.0132 bars. National Oceanic and Atmospheric Administration, *Air Pressure*, https://www.noaa.gov/jetstream/atmosphere/air-

pressure#:~:text=The%20standard%20pressure%20at%20sea,the%20atmosphere%20decreases%20with%20height (last visited Feb. 1, 2024).

³⁴ United States Energy Information Administration, *Hydrogen Explained: Production of Hydrogen, supra* note 31. ³⁵ *Id.*

and used or sold as an end product or as a fuel to generate electricity.³⁶ The electrolysis process itself is emission-free and has no by-products other than hydrogen and oxygen. However, the energy source used to power the electrolysis (which could be from renewables, nuclear, or fossil fuels) may or may not be emission-free or have other byproducts.

Hydrogen Categories

Recently, to distinguish between the energy sources used to power hydrogen production, hydrogen producers, marketers, government agencies, and others have used a color-coded system. The nine commonly used color categories are detailed below:

- Green: Hydrogen produced by water electrolysis and employing renewable electricity as the fuel source. It is so called because the process itself does not produce emissions.
- Blue: Hydrogen produced from fossil fuels, but the carbon dioxide produced by the process is sequestered underground. Thus, the process is considered carbon neutral.
- Gray: Hydrogen produced by steam-methane reforming and the emissions produced from the burning of fossil fuels in the method are released into the atmosphere.
- Black or Brown: Hydrogen produced from the burning of coal, "black" being from the burning of bituminous coal and "brown" being from the burning of lignite coal. A comparatively large amount of carbon dioxide and carbon monoxide is released into the atmosphere with this type of production.
- Turquoise: This now experimental method of hydrogen production involves the thermal splitting of methane through pyrolysis. Though carbon is formed in this process, it is in a solid state that can be stored and not a carbon dioxide gas.
- Purple: Hydrogen made using nuclear power and heat through the combined chemo thermal electrolysis splitting of water.
- Pink: This is the production of hydrogen through electrolysis where the energy source is electricity from a nuclear power plant.
- Red: Hydrogen produced through high-temperature catalytic splitting of water using nuclear power thermal energy as an energy source.
- White: Naturally-occurring hydrogen.³⁷

Transmission and Use of Hydrogen Fuel

Due to hydrogen's low volumetric energy density, transportation, storage, and final delivery to the point of use, it can have a significant impact on the cost of using hydrogen as a fuel carrier. These factors can lead to inefficiencies that increase the farther hydrogen must be transported before reaching its end use.³⁸ Thus, currently, most hydrogen is produced in close proximity to its end use.³⁹ However, technology is in development that may bring these costs down and allow for easier transport and transmission of hydrogen.⁴⁰

³⁶ Florida Public Service Commission, *Bill Analysis for SB 1162* (Mar. 14, 2023) (on file with the Senate Regulated Industries Committee).

³⁷ Bulletin H2, *Hydrogen Colours Codes*, available at https://www.h2bulletin.com/knowledge/hydrogen-colours-codes/ (last visited: Jan. 25, 2024).

³⁸ United States Office of Energy Efficiency and Renewable Energy, *Hydrogen Delivery*, available at https://www.energy.gov/eere/fuelcells/hydrogen-delivery (last visited: Feb. 1, 2024).

³⁹ Florida Public Service Commission, *Bill Analysis for SB 1162, supra* note 36.

⁴⁰ See Florida Public Service Commission, *Bill Analysis for SB 1162, supra* note 36, which describes potential new technologies that can overcome the transportation and transmission cost hurdle for hydrogen.

The two typical methods for transporting hydrogen fuel currently are via pipeline or by truck through the use of cryogenic liquid tanker trucks or gaseous tube trailers. Pipelines are most popular in areas where demand is high and expected to remain stable or grow. Trucking of hydrogen is used in areas with less demand.⁴¹

Potential uses for hydrogen are in:⁴²

- Industrial uses such as powering oil refineries and powering ammonia, methanol, and steel production. Currently, this is the largest use, by far, for hydrogen.
- Transportation, powering hydrogen-fueled vehicles.
- Buildings where hydrogen can be blended into existing natural gas networks. It is possible
 currently to blend small amounts of hydrogen in existing natural gas transmission systems
 with little to no changes to infrastructure, equipment, and appliances.
- Power generation where emerging technology is available to use hydrogen as a medium to store renewable energy, such as solar and wind. Hydrogen and ammonia can be used in gas turbines to increase power system flexibility, and ammonia can be used to reduce emissions from coal-fired power plants.

Florida Public Service Commission

The Florida Public Service Commission (PSC) is an arm of the legislative branch of government.⁴³ The role of the PSC is to ensure Florida's consumers receive utility services, including electric, natural gas, telephone, water, and wastewater, in a safe, affordable, and reliable manner.⁴⁴ In order to do so, the PSC exercises authority over public utilities in one or more of the following areas: rate base or economic regulation; competitive market oversight; and monitoring of safety, reliability, and service issues.⁴⁵

Electric and Gas Utilities

The PSC monitors the safety and reliability of the electric power grid⁴⁶ and may order the addition or repair of infrastructure as necessary.⁴⁷ The PSC has broad jurisdiction over the rates and service of investor-owned electric and gas utilities⁴⁸ (called "public utilities" under ch. 366, F.S.).⁴⁹ However, the PSC does not fully regulate municipal electric utilities (utilities owned or operated on behalf of a municipality) or rural electric cooperatives. The PSC does have jurisdiction over these types of utilities with regard to rate structure, territorial boundaries, bulk power supply operations, and planning.⁵⁰ Municipally-owned utility rates and revenues are

⁴¹ United States Office of Energy Efficiency and Renewable Energy, *supra* note 38.

⁴² International Renewable Energy Agency, *supra* note 32.

⁴³ Section 350.001, F.S.

⁴⁴ See Florida Public Service Commission, Florida Public Service Commission Homepage, http://www.psc.state.fl.us (last visited Feb. 1, 2024).

⁴⁵ Florida Public Service Commission, *About the PSC*, https://www.psc.state.fl.us/about (last visited Feb. 1, 2024).

⁴⁶ Section 366.04(5) and (6), F.S.

⁴⁷ Section 366.05(1) and (8), F.S.

⁴⁸ Section 366.05, F.S.

⁴⁹ Section 366.02(8), F.S.

⁵⁰ Florida Public Service Commission, *About the PSC*, *supra* note 45.

regulated by their respective local governments or local utility boards. Rates and revenues for a cooperative utility are regulated by its governing body elected by the cooperative's membership.

Municipal Electric and Gas Utilities, and Special Gas Districts, in Florida

A municipal electric or gas utility is an electric or gas utility owned and operated by a municipality. Chapter 366, F.S., provides the majority of electric and gas utility regulations for Florida. While ch. 366, F.S., does not provide a definition, per se, for a "municipal utility," variations of this terminology and the concept of these types of utilities appear throughout the chapter. Currently, Florida has 33 municipal electric utilities that serve over 14 percent of the state's electric utility customers.⁵¹ Florida also has 27 municipally-owned gas utilities and four special gas districts.⁵²

Rural Electric Cooperatives in Florida

At present, Florida has 18 rural electric cooperatives, with 16 of these cooperatives being distribution cooperatives and two being generation and transmission cooperatives.⁵³ These cooperatives operate in 57 of Florida's 67 counties and have more than 2.7 million customers.⁵⁴ Florida rural electric cooperatives serve a large percentage of area, but have a low customer density. Specifically, Florida cooperatives serve approximately 10 percent of Florida's total electric utility customers, but their service territory covers 60 percent of Florida's total land mass. Each cooperative is governed by a board of cooperative members elected by the cooperative's membership.⁵⁵

Public Electric and Gas Utilities in Florida

There are four investor-owned electric utility companies (electric IOUs) in Florida: Florida Power & Light Company (FPL), Duke Energy Florida (Duke), Tampa Electric Company (TECO), and Florida Public Utilities Corporation (FPUC). In addition, there are eight investor-owned natural gas utility companies (gas IOUs) in Florida: Florida City Gas, Florida Division of Chesapeake Utilities, FPUC, FPUC-Fort Meade Division, FPUC-Indiantown Division, Peoples Gas System, Sebring Gas System, and St. Joe Natural Gas Company. Of these eight gas IOUs, five engage in the merchant function servicing residential, commercial, and industrial customers: Florida City Gas, FPUC, FPUC-Fort Meade Division, Peoples Gas System, and St. Joe Natural Gas Company. Florida Division of Chesapeake Utilities, FPUC-Indiantown Division, and Sebring Gas System are only engaged in firm transportation service. 7

⁵¹ Florida Municipal Electric Association, *About Us*, https://www.flpublicpower.com/about-us (last visited Feb. 1, 2024).

⁵² Florida Public Service Commission, 2023 Facts and Figures of the Florida Utility Industry, pg. 13, Apr. 2023 (available at: https://www.floridapsc.com/pscfiles/website-

files/PDF/Publications/Reports/General/Facts And Figures/April% 202023.pdf). A "special gas district" is a dependent or independent special district, setup pursuant to ch. 189, F.S., to provide natural gas service. Section 189.012(6), F.S., defines a "special district" as "a unit of local government created for a special purpose, as opposed to a general purpose, which has jurisdiction to operate within a limited geographic boundary and is created by general law, special act, local ordinance, or by rule of the Governor and Cabinet."

⁵³ Florida Electric Cooperative Association, *Members*, https://feca.com/members/ (last visited Feb 1, 2024).

⁵⁴ Florida Electric Cooperative Association, *Our History*, https://feca.com/our-history/ (last visited Feb. 1, 2024). ⁵⁵ *Id.*

⁵⁶ Florida Public Service Commission, 2023 Facts and Figures of the Florida Utility Industry, supra note 52, at 5.

⁵⁷ *Id* at 14. Firm transportation service is offered to customers under schedules or contracts which anticipate no interruption under almost all operating conditions. *See* Firm transportation service, 18 CFR s. 284.7.

Electric IOU and Gas IOU rates and revenues are regulated by the PSC and the utilities must file periodic earnings reports, which allow the PSC to monitor earnings levels on an ongoing basis and adjust customer rates quickly if a company appears to be overearning.⁵⁸

Section 366.041(2), F.S., requires public utilities to provide adequate service to customers. As compensation for fulfilling that obligation, s. 366.06, F.S., requires the PSC to allow the IOUs to recover honestly and prudently invested costs of providing service, including investments in infrastructure and operating expenses used to provide electric service.⁵⁹

Natural Gas Transmission

Natural gas transmission companies are regulated by the PSC under ch. 368, F.S. The term "natural gas transmission company," as defined in s. 368.103, F.S., "means any person owning or operating for compensation facilities located wholly within this state for the transmission or delivery for sale of natural gas." The term does not include "any person that owns or operates facilities primarily for the local distribution of natural gas or that is subject to the jurisdiction of the Federal Energy Regulatory Commission under the Natural Gas Act, 15 U.S.C. ss. 717 et seq., or any municipalities or any agency thereof, or a special district created by special act to distribute natural gas." Section 364.104, F.S., authorizes the PSC to "fix and regulate rates and services of natural gas transmission companies, including, without limitation, rules and regulations for:"

- Determining customers and services classifications;
- Determining rate applicability; and
- "Ensuring that the provision (including access to transmission) or abandonment of service by a natural gas transmission company is not unreasonably preferential, prejudicial, or unduly discriminatory."

Section 368.105, F.S., provides the procedures for the PSC to set rates and services requirements for natural gas transmission companies in Florida.

Under chapter 368, F.S., the PSC is authorized to inspect intrastate natural gas systems to ensure compliance with rules and regulations regarding safety standards. ⁶⁰ Currently, Florida has three major pipelines: Florida Gas Transmission Company, Gulfstream Natural Gas System, and Sabal Trail Interstate Pipeline. The state also has two minor pipelines: Gulf South Pipeline Company and Southern Natural Gas. ⁶¹

Experimental and Transitional Rates

Section 366.075, F.S., authorizes the PSC to approve experimental or transitional rates for the purpose of encouraging energy conservation or efficiency. This provision is used by the PSC to

⁵⁸ PSC, 2022 Annual Report, p. 6, (available at: https://www.floridapsc.com/pscfiles/website-files/PDF/Publications/Reports/General/AnnualReports/2022.pdf) (last visited Feb. 1, 2024).

⁶⁰ Florida Public Service Commission, 2023 Facts and Figures of the Florida Utility Industry, supra note 52, at 13. ⁶¹ Id.

allow electric and natural gas utilities under its rate-regulatory jurisdiction to conduct limited scope pilot programs.

Such rates must be limited in geographic area and be for a limited period of time. The PSC may approve the area used in testing experimental rates and must specify in the order setting those rates the area that will be affected by those rates. The PSC can extend this time period "if it determines that further testing is necessary to fully evaluate the effectiveness of such experimental rates."

Preemption over Utility Service Restrictions

Section 366.032, F.S., provides that "a municipality, county, special district, or other political subdivision of the state may not enact or enforce a resolution, ordinance, rule, code, or policy or take any action that restricts or prohibits or has the effect of restricting or prohibiting the types or fuel sources of energy production which may be used, delivered, converted, or supplied" by the following:⁶²

- Investor-owned electric utilities:
- Municipal electric utilities;
- Rural electric cooperatives;
- Entities formed by interlocal agreement to generate, sell, and transmit electrical energy;
- Investor-owned gas utilities;
- Gas districts:
- Municipal natural gas utilities;
- Natural gas transmission companies; and
- Category I liquefied petroleum gas dealers, category II liquefied petroleum gas dispensers, or category III liquefied petroleum gas cylinder exchange operator as defined in s. 527.01, F.S.

Section 366.032(2), F.S., also prohibits (except to enforce the Florida Building Code and Florida Fire Prevention Code) a municipality, county, special district, or other political subdivision of the state from restricting or prohibiting the use of an appliance using the fuels or energy types used, delivered, converted, or supplied by the entities above.

The section also provides that it acts retroactively to any provision that existed before its enactment in 2021.

Electric Vehicles

The U.S. Department of Energy's Alternative Fuels Data Center (AFDC) uses the term, "electric-drive vehicles," as referring collectively to hybrid electric vehicles (HEV), plug-in hybrid electric vehicles (PHEV), and all-electric vehicles (EV).⁶³ According to the AFDC:

• HEVs are primarily powered by an internal combustion engine that runs on conventional or alternative fuel and an electric motor using energy stored in a battery. The battery is charged

⁶² To the extent of serving the customers they are authorized to serve.

⁶³ U.S. Dept. Energy, AFDC, *Hybrid and Plug-In Electric Vehicles*, https://afdc.energy.gov/vehicles/electric.html (last visited Feb. 1, 2024).

through regenerative braking and the internal combustion engine, not by plugging in to charge.

• PHEVs are powered by an internal combustion engine and an electric motor using energy stored in a battery. They can operate in all-electric mode through a larger battery, which can be plugged in to an electric power source to charge. Most can travel between 20 and 40 miles on electricity alone, and then will operate solely on gasoline, similar to a conventional hybrid.

EVs use a battery to store the electric energy that is charged by plugging the vehicle into charging equipment. EVs always operate in all-electric mode and have typical driving ranges from 150 to 400 miles.⁶⁴

The primary difference between an EV and a traditional internal combustion engine (ICE) vehicle lies in their drive trains. The main components of an EV power train are its battery, a motor, and ancillary systems. The main components of an ICE power train are its liquid fuel storage, combustion chambers and related cooling system, transmission, and an exhaust system. ⁶⁵

For purposes of vehicle registration, Florida law currently defines the term "electric vehicle" to mean "a motor vehicle that is powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, or other sources of electrical current."

Increased interest in EVs has been driven by higher gas prices and greenhouse gas emission concerns.⁶⁷ However, limited EV range (and the related and range anxiety⁶⁸), limitations in charging infrastructure, charging speed as it relates to time to refuel a traditional gasoline vehicle, and EV cost are some of the factors negatively impacting EV adoption.⁶⁹

Electric Vehicle Charging Stations

EVs need access to charging stations. For most EV users, charging starts at home or at fleet facilities. Charging stations at other commonly-visited locations, however, such as work, public destinations, and along roadways, can offer more flexible fueling charging opportunities. The growth of charging stations has made longer distance travel with EVs more feasible and has helped grow the market for EVs. ⁷⁰

There are three general types of chargers:

⁶⁴ I.A

⁶⁵ Brandon S. Tracy, Cong. Research Serv., R47227, *Critical Minerals in Electric Vehicle Batteries*, (2022) (available at https://crsreports.congress.gov/product/pdf/R/R47227).

⁶⁶ Section 320.01(36), F.S.

⁶⁷ Id

⁶⁸ Range anxiety is the feeling an EV driver has when the battery charge is low, and the usual sources of electricity are unavailable, striking a fear of being stranded. J.D. Power, *What is Range Anxiety with Electric Vehicles?*, Nov. 3, 2020, https://www.jdpower.com/cars/shopping-guides/what-is-range-anxiety-with-electric-vehicles (last visited Feb. 1, 2024).

⁶⁹ EV Connect, 10 Factors That Affect Widespread EV Adoption, https://www.evconnect.com/blog/10-factors-affecting-ev-adoption (last visited Feb. 1, 2024).

⁷⁰ U.S. Dept. of Energy, *Developing Infrastructure to Charge Electric Vehicles*, https://afdc.energy.gov/fuels/electricity infrastructure.html (Feb. 1, 2024).

• Level 1: Level 1 chargers use a standard 120-volt home outlet (i.e. a standard wall socket). Often EV automakers will include with the vehicle a charging cord that can plug directly into a 120-volt outlet. These are the slowest types of chargers and, on average, provide about five miles of driving distance per hour of charging.

- Level 2: Level 2 chargers use a 240-volt outlet. Such outlets are often used for larger home appliances with greater power needs, such as electric ovens and clothes dryers. To use such chargers at home, homeowners may need a professional to install a 240-volt outlet in a vehicle-accessible location and additional equipment installation may be necessary. Level 2 chargers can also be found in some public charging stations. Level two chargers, on average, provide about 25 miles of driving distance per hour of charging.
- Direct Charge Fast Chargers (DCFC): DCFC are the fastest types of chargers. These are not typically not found in homes, but are available at public charging stations and along roadways and highway routes. These types of chargers provide approximately 100 to 300 miles of driving for a 30-minute charge; some DCFC can charge even faster than this.⁷¹

EV Charging in Florida

Since the current regulatory structure of electric utilities in Florida includes exclusive service territories, the sale of electricity to retail, or end-use customers by a third party is not permitted.⁷² The Florida Legislature created an exemption for electric vehicle charging in 2012, under s. 366.94(4), F.S., declaring that the provision of electric vehicle charging to the public by a non-utility is not considered a retail sale of electricity under ch. 366, F.S. The rates, terms, and conditions of EV charging by a non-utility are not subject to PSC regulation.⁷³

Statistics provided by the U.S. Department of Energy show that Florida has the third largest EV charging infrastructure in the country, behind California and New York. As of January 14, 2022, Florida has the following numbers of charging infrastructure:

- Station locations 3,260.
- EV supply equipment ports 9,072.
- Level 1 chargers 24.
- Level 2 chargers 6,843.
- DCFC 2,205.

Natural Gas Transmission Pipeline Siting Act

Part VIII of ch. 403, F.S., is the Natural Gas Transmission Pipeline Siting Act (NGTPSA), and is Florida's process for licensing the construction and operation of natural gas pipelines in the state. The Federal Energy Regulatory Commission regulates interstate natural gas transmission and reviews proposals to build interstate natural gas pipelines. The Florida Department of Environmental Protection's (DEP's) role regarding pipelines is to handle in-state environmental regulatory matters for wetlands crossings, discharge of hydrostatic test waters and other

⁷¹ Environmental Protection Agency, *Plug-in Electric Vehicle Charging: The Basics*, https://www.epa.gov/greenvehicles/plug-electric-vehicle-charging-basics (Feb. 1, 2024).

⁷² FDOT, EV Infrastructure Master Plan (July 2021), p. 16, https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/fdotevmp.pdf (last visited Feb 1, 2024).

⁷³ Section 366.94(1), F.S.

⁷⁴ United States Department of Energy, *Alternative Fuels Data Center*, https://afdc.energy.gov/ (last visited Feb. 1, 2024).

applicable areas.⁷⁵ Under s. 403.9422, F.S., the PSC also has the responsibility to determine the need for a proposed natural gas pipeline regulated by NGTPSA and issue certificates of need as appropriate.

Section 403.9405(2), F.S., provides that the NGTPSA does not apply to:

- Natural gas transmission pipelines which are less than 15 miles in length or which do not cross a county line, unless the applicant has elected to apply for certification of that pipeline;
- Natural gas transmission pipelines for which a certificate of public convenience and necessity
 has been issued under s. 7(c) of the Natural Gas Act, 15 U.S.C. s. 717f, or a natural gas
 transmission pipeline certified as an associated facility to an electrical power plant pursuant
 to the Florida Electrical Power Plant Siting Act, ss. 403.501-403.518, F.S., unless the
 applicant elects to apply for certification of that pipeline; and
- Natural gas transmission pipelines that are owned or operated by a municipality or any
 agency thereof, by any person primarily for the local distribution of natural gas, or by a
 special district created by special act to distribute natural gas, unless the applicant elects to
 apply for certification of that pipeline.

Storm Reserves for Public Utilities

Storm reserves are a form of self-insurance used by utilities to "collect in advance" (from ratepayers) for costs incurred to recover from storms. Such reserves are an accounting technique allowing utilities to reduce the immediate impact of storms on ratepayers and spread them over time.⁷⁶

In Florida, the PSC allows utilities to establish storm reserve accounts and fund them according to rule and orders of the PSC. Many storm restoration cost orders at the PSC include provisions for impacted utilities to replenish their storm reserve accounts.⁷⁷

Until 2004, the self-insurance programs of the state's electric IOUs were adequate to cover the costs incurred for storm restoration. However, the combined effects of Hurricanes Charley, Frances, Ivan and Jeanne during 2004 far exceeded the amounts held by the state's electric IOUs. Refer a number of proceedings regarding storm reserves and recovery, in 2007, PSC staff "recommended rule amendments to establish a single, consistent, and uniform methodology for determining which storm damage restoration costs can appropriately be charged to the property damage reserve by each of the Florida IOUs." The result were amendments to Fla. Admin. Code R. 25-7.0143. The amendments required:

⁷⁵ Florida Department of Environmental Protection, *Natural Gas Pipeline Siting Act*, https://floridadep.gov/water/siting-coordination-office/content/natural-gas-pipeline-siting-act (last visited Feb. 1, 2024).

⁷⁶ Energy South, *Enabling Energy Resiliency Through a Storm Reserve Fund*, https://medium.com/@EnergySouth/enabling-energy-resiliency-through-a-storm-reserve-fund-add806aa0b59, Aug. 19, 2015 (last visited Feb 1, 2024).

⁷⁷ See, for example, In Re: Petition for Ltd. Proceeding for Recovery of Incremental Storm Restoration Costs Related to Hurricane Idalia, by Duke Energy Florida, LLC. in Re: Petition for Ltd. Proceeding for Recovery of Incremental Storm Restoration Costs Related to Hurricanes Elsa, Eta, Isaias, Ian, Nicole, & Tropical Storm Fred, by Duke Energy Florida, LLC., 2023 WL 8879275 (Dec. 19, 2023); In Re: Petition for Recovery of Costs Associated with Named Tropical Sys. During the 2018-2022 Hurricane Seasons & Replenishment of Storm Reserve, by Tampa Elec. Co., 2023 WL 8119138 (Nov. 20, 2023); and In Re: Petition for Rate Increase by Florida City Gas., 2023 WL 3966515 (June 9, 2023).

⁷⁸ Florida Public Service Commission, *Bill Analysis for SB 1548* (Jan. 30, 2024) (on file with the Senate Regulated Industries Committee).

The establishment of a separate subaccount for storm related damage expenses and accruals, the "storm damage subaccount." The rule amendments also require use of the Incremental Cost and Capitalization Approach (ICCA) methodology and delineate types of expenses that are expressly allowed or prohibited from being charged to the storm damage subaccount. The ICCA methodology is designed to prevent double recovery. Under the ICCA, a utility only charges to the storm damage subaccount those storm restoration costs that are not already being recovered through base rates ("incremental" costs). For example, a utility would not be able to charge the normal base salaries of employees working on storm restoration, but would be able to charge overtime costs related to storm restoration activities to the storm damage subaccount.⁷⁹

Under PSC rule, the types of storm-related costs that can be charged to a storm reserve include:

- Additional contract labor hired for storm restoration activities incurred in any month in
 which storm damage restoration activities are conducted, that are greater than the actual
 monthly average of contract labor costs charged to operation and maintenance expense for
 the same month in the three previous calendar years;
- Logistics for providing meals, lodging, and linens for tents and other staging areas;
- Transportation of crews and other personnel for storm restoration;
- Vehicles specifically rented for storm restoration activities;
- Waste management costs specifically related to storm restoration activities;
- Rental equipment specifically related to storm restoration activities;
- Materials and supplies used to repair and restore service and facilities to pre-storm condition, excluding those costs that normally would be charged to non-cost recovery clause operating expenses in the absence of a storm;
- Payroll and payroll-related costs for utility personnel included in storm restoration activities
 incurred in any month in which storm damage restoration activities are conducted, that are
 greater than the actual monthly average of payroll and payroll-related costs charged to
 operation and maintenance expense for the same month in the three previous calendar years;
- Fuel company and contractor vehicles used in storm restoration activities incurred in any month in which storm damage restoration activities are conducted, that are greater than the actual monthly average of fuel costs charged to operation and maintenance expense for the same month in the three previous calendar years;
- Public service announcements regarding key storm-related issues, such as safety and service restoration estimates;
- Vegetation management expenses specifically related to storm restoration activities incurred
 in any month in which storm damage restoration activities are conducted, that are greater
 than the actual monthly average of vegetation management costs charged to operation and
 maintenance expense for the same month in the previous three calendar years; and
- Other costs or expenses not specifically identified above that are directly and solely attributable to a storm restoration event.⁸⁰

The current storm reserves held by the state's four electric IOUs are:81

⁷⁹ *Id*.

⁸⁰ Fla. Admin. Code R. 25-7.0143(1)(e).

⁸¹ Florida Public Service Commission, *Bill Analysis for SB 1548*, *supra* note 78.

Utility	Most recent storm			
	reserve amount			
	(\$ million)			
FPL	220			
DEF	132			
TECO	56			
FPUC	1.5			

Nuclear Power

Nuclear power plants work, in a way, similarly to any other turbine-based power plant. In turbine-based power plants a moving fluid—water, steam, combustion gases, or even air—pushes blades mounted on a rotor. The force of the moving liquid spins the shaft of a generator. That generator then converts the kinetic energy of the spinning rotor to electrical energy. Types of turbines include steam, combustion (i.e. gas), hydroelectric, and wind.⁸²

Nuclear power plants work the same way, in that steam is used to spin a turbine to produce electricity. The unique part of a nuclear power plant is how that steam is produced. In a nuclear power plant, heat is used to make steam, and this heat is produced by a controlled fission nuclear reaction.⁸³

In a traditional nuclear power plant, uranium, which has been processed into small ceramic pellets and stacked together in a sealed metal tube (called a fuel rod), is the fuel source. Fuel rods are bundled together (typically in bundles of more than 200 rods) to form a fuel assembly. Reactor cores are generally made up of around 200 assemblies, depending on power level. In the reactor, fuel rods are immersed in water, which acts as a coolant and moderator. Control rods are then inserted into the reactor core to reduce the nuclear reaction or removed to increase the nuclear reaction. This reaction creates heat to turn water into the steam that fuels the turbine.

There are over 400 commercial reactors worldwide, including 93 in the United States.

Advanced Small Modular Reactors

Advanced small modular reactors (SMRs) are currently under development in the United States. SMRs differ from traditional large nuclear power plants—which can take over a decade to build between planning, regulatory approval, and construction—⁸⁴in that they are made in factories and transported to sites ready to "plug and play" upon arrival. This reduces both capital costs and construction times. The smaller size of these reactors also makes them ideal for smaller electric grids and other locations where a large nuclear power plant is not feasible.⁸⁵

⁸² United States Energy Information Administration, *Electricity Explained*,

https://www.eia.gov/energyexplained/electricity/how-electricity-is-generated.php (last visited Feb. 1, 2024).

⁸³ United States Department of Energy, *NUCLEAR 101: How Does a Nuclear Reactor Work?*, https://www.energy.gov/ne/articles/nuclear-101-how-does-nuclear-reactor-work (last visited Feb. 1, 2024).

⁸⁴ United States Energy Information Administration, *Nuclear explained*, https://www.eia.gov/energyexplained/nuclear/us-nuclear-industry.php (last visited Feb. 1, 2024).

⁸⁵ United States Department of Energy, Office of Nuclear Energy, *Nuclear Reactor Technologies*, https://www.energy.gov/ne/nuclear-reactor-technologies (last visited Feb. 1, 2024).

Advanced Reactor Technologies

The Office of Nuclear Energy's Office of Advanced of Advanced Reactor Technologies (ART) sponsors research, development, and deployment of emerging nuclear reactor technologies. While the technologies are varied, ART's main areas of focus currently are:

- Developing assessment methods for evaluating advanced SMR technologies and characteristics;
- Developing and testing of materials, fuels and fabrication techniques;
- Resolving key regulatory issues identified by Nuclear Regulatory Commission and the nuclear industry; and
- Developing advanced instrumentation and controls and human-machine interfaces.⁸⁶

Customer-Owned Renewable Generation

Section 366.91(2)(c), F.S., defines "customer-owned renewable generation" as "an electric generating system located on a customer's premises that is primarily intended to offset part or all of the customer's electricity requirements with renewable energy." Under the traditional utility model, an electric utility would produce (or purchase at wholesale) energy which it, in turn, would provide to customers to power their homes and businesses through its energy grid. However, with the advent of technologies like electric vehicles, rooftop solar systems, battery storage systems, and smart appliances, customers are now able to provide services to support grid operations. ⁸⁷

Customer-owned generation, such as rooftop solar and other small-scale distributed energy resources (DERs), offer a number of benefits to both customers and utilities, including:

- Reduction in reliance on the centralized grid which can increase energy resilience in times of power-interruption in times such as extreme weather events;
- Supplying affordable electricity to customers; and
- Supporting decarbonization efforts.⁸⁸

Despite its benefits, DERs can present challenges for electric utilities. Many of the electric grids today were designed, originally, for the 20th century where distributed energy generation was comparatively small or non-existent. ⁸⁹ The grid was traditionally designed for centralized power generation and, primarily, a one-way power flow. ⁹⁰ Greater system flexibility is needed where inputs of power may not be as predicable or controllable by the utilities themselves. The challenges for many grids include:

⁸⁶ United States Department of Energy, Office of Nuclear Energy, *Advanced Reactor Technology*, https://www.energy.gov/ne/advanced-reactor-technologies (last visited Feb. 1, 2024).

⁸⁷ Utility Dive, Consumers as partners: The evolving utility business model, Jan. 17, 2023, https://www.utilitydive.com/spons/consumers-as-partners-the-evolving-utility-business-model/640195/ (last visited Feb. 1, 2024).

⁸⁸ International Energy Agency, *Executive summary: Unlocking the Potential of Distributed Energy Resources*, https://www.iea.org/reports/unlocking-the-potential-of-distributed-energy-resources/executive-summary (last visited Feb. 1, 2024).

⁸⁹ *Id.*90 Dynamic Ratings, *What are Distributed Energy Resources*, https://www.dynamicratings.com/solutions/smart-infrastructure-solutions/distributed-energy-resources/ (Feb 1, 2024).

- The complexity of integrating a wide variety of highly-distributed energy sources.
- Variability of power production as wind and solar are not "always on" type of energy
 production methods, as this can present challenges in effective energy storage and
 management, reliability, and resilience.
- DERs can significantly influence electricity demand patterns, sometimes unpredictably. This can create issues with demand response and electricity load management.
- The wide deployment of DERs and smart technology has raised data privacy and security concerns as these devices integrate with the grid.⁹¹

Smart demand response programs and load management strategies can help mitigate or reduce these issues. 92

Climate Friendly Public Business

Section 286.29, F.S., requires state agencies to follow certain procedures to reduce greenhouse gas emissions in conducting public business. The section requires that state agencies:

- Consult with the "Florida Climate-Friendly Preferred Products List" produced by the Department of Management Services (DMS), 93 in procuring products from state term contracts. 94 If the price is comparable, they must procure such products. 95
- Contract only with hotels or conference facilities for meetings and conferences as recognized by the Green Lodging Program. 96,97
- Ensure vehicles meet minimum maintenance schedules shown to reduce fuel consumption and report such compliance to the DMS. 98
- When state agencies, state universities, community colleges, and local governments that purchase vehicles under a state purchasing plan that such vehicles are selected for greatest fuel efficiency available for a given use class when fuel economy data is available. 99
- Use ethanol and biodiesel blended fuels when available. 100
- Procure biofuels for fleet, to the greatest extent practicable, if the agency administers central fueling operations. ¹⁰¹

⁹¹ *Id*.

⁹² Id

⁹³ The DMS keeps a Florida Climate-Friendly Preferred Products List at https://www.dms.myflorida.com/business operations/state purchasing/state contracts and agreements/florida climate frien dly preferred products list, (last visited Feb. 1, 2024).

⁹⁴ Section 286.29(1), F.S.

⁹⁵ Id.

⁹⁶ The Florida Department of Environmental Protection designates and recognizes lodging facilities that make a commitment to conserve and protect Florida's natural resources through the Florida Green Lodging Program. To become designated, facilities must conduct a thorough property assessment and implement a specified number of environmental practices in five areas of sustainable operations: (1) communication and education with customers, employees, and the public; (2) waste reduction, reuse and recycling; (3) water conservation; (4) energy efficiency; and (5) indoor air quality. Florida Department of Environmental Protection, *Green Lodging*, https://floridadep.gov/osi/green-lodging/content/about-florida-green-lodging-program (Last visited Feb. 1, 2024).

⁹⁷ Section 286.29(2), F.S.

⁹⁸ Section 286.29(3), F.S.

⁹⁹ Section 286.29(4), F.S.

¹⁰⁰ Section 286.29(5), F.S.

¹⁰¹ *Id*.

Department of Agriculture and Consumer Services

The Department of Agriculture and Consumer Services (DACS) is a state agency created by s. 20.14, F.S., and is headed by an elected Commissioner of Agriculture—who is also designated by the Florida Constitution as one of the three members of the Florida cabinet. The DACS's responsibilities are wide-ranging, however, in general, they are to:

- Support and promote Florida agriculture;
- Protect the environment;
- Safeguard consumers; and
- Ensure the safety and wholesomeness of food. 103

Energy Planning and Development

Section 377.601, F.S., provides the legislative intent in regards to part II, of ch. 377, F.S., which provides energy resource planning and development policies for Florida. The section states that the legislature finds that:

[T]he state's energy security can be increased by lessening dependence on foreign oil; that the impacts of global climate change can be reduced through the reduction of greenhouse gas emissions; and that the implementation of alternative energy technologies can be a source of new jobs and employment opportunities for many Floridians. The Legislature further finds that the state is positioned at the front line against potential impacts of global climate change. Human and economic costs of those impacts can be averted by global actions and, where necessary, adapted to by a concerted effort to make Florida's communities more resilient and less vulnerable to these impacts. In focusing the government's policy and efforts to benefit and protect our state, its citizens, and its resources, the Legislature believes that a single government entity with a specific focus on energy and climate change is both desirable and advantageous. Further, the Legislature finds that energy infrastructure provides the foundation for secure and reliable access to the energy supplies and services on which Florida depends. Therefore, there is significant value to Florida consumers that comes from investment in Florida's energy infrastructure that increases system reliability, enhances energy independence and diversification, stabilizes energy costs, and reduces greenhouse gas emissions.

Relatedly, s. 377.601(2), F.S., provides that it is the policy of the state to:

- Develop and promote the effective use of energy, discourage all forms of energy waste, and recognize and address the potential of global climate change wherever possible;
- Play a leading role in developing and instituting energy management programs aimed at promoting energy conservation, energy security, and the reduction of greenhouse gas emissions;
- Include energy considerations in all state, regional, and local planning;
- Utilize and manage effectively energy resources used within state agencies;
- Encourage local governments to include energy considerations in all planning and to support their work in promoting energy management programs;

¹⁰² FLA. CONST. art. IV, s. 4.

¹⁰³ Florida Department of Agriculture and Consumer Services, *About Us*, https://www.fdacs.gov/About-Us (last visited Feb. 1, 2024).

• Include the full participation of citizens in the development and implementation of energy programs;

- Consider in its decisions the energy needs of each economic sector, including residential, industrial, commercial, agricultural, and governmental uses, and reduce those needs whenever possible;
- Promote energy education and the public dissemination of information on energy and its environmental, economic, and social impact;
- Encourage the research, development, demonstration, and application of alternative energy resources, particularly renewable energy resources;
- Consider in its decision-making, the social, economic, and environmental impacts of energy-related activities, including the whole-life-cycle impacts of any potential energy use choices, so that detrimental effects of these activities are understood and minimized; and
- Develop and maintain energy emergency preparedness plans to minimize the effects of an energy shortage within Florida.

Section 377.6015, F.S., ¹⁰⁴ provides the role of the DACS in the state's energy resource planning and development. The section provides that the DACS may employ staff and counsel as needed in the performance of its duties, prosecute and defend legal actions in its own name, and form advisory groups consisting of members of the public to provide information on specific issues.

The section also requires the DACS to:

- Administer the Florida Renewable Energy and Energy-Efficient Technologies Grants Program under s. 377.804, F.S.;
- Develop policy for requiring grantees to provide royalty-sharing or licensing agreements with state government for commercialized products developed under a state grant;
- Administer the Florida Green Government Grants Act pursuant to s. 377.808, F.S., and set annual priorities for grants;
- Administer the information gathering and reporting functions pursuant to ss. 377.601-377.608, F.S.;
- Administer the provisions of the Florida Energy and Climate Protection Act pursuant to ss. 377.801-377.804, F.S.;
- Advocate for energy and climate change issues and provide educational outreach and technical assistance in cooperation with the state's academic institutions;
- Be a party in the proceedings to adopt goals and submit comments to the PSC pursuant to s. 366.82, F.S., which requires the PSC to adopt appropriate goals for increasing the efficiency of energy consumption and increasing the development of demand-side renewable energy systems; and
- Adopt rules pursuant to ch. 120, F.S., in order to implement all powers and duties described in the section.

Florida Renewable Energy and Green Government Programs

Part III of ch. 377, F.S., provides the state's renewable energy and green government programs, including the Florida Energy and Climate Protection Act in ss. 377.801-377.804, F.S.

¹⁰⁴ Section 377.703, F.S., also provides an extensive list of the DACS functions regarding energy supply and demand.

The purpose of the Florida Energy and Climate Protection Act is to "provide incentives for Florida's citizens, businesses, school districts, and local governments to take action to diversify the state's energy supplies, reduce dependence on foreign oil, and mitigate the effects of climate change by providing funding for activities designed to achieve these goals." The act's grant programs "are intended to stimulate capital investment in and enhance the market for renewable energy technologies and technologies intended to diversify Florida's energy supplies, reduce dependence on foreign oil, and combat or limit climate change impacts." ¹⁰⁵

The grants provided under the act, as part of the Renewable Energy and Energy-Efficient Technologies Grants Program administered by the DACS, "provide renewable energy matching grants for demonstration, commercialization, research, and development projects relating to renewable energy technologies and innovative technologies that significantly increase energy efficiency for vehicles and commercial buildings" Grants under the program may be provided to municipalities and county governments, established for-profit companies licensed to do business in Florida, universities and colleges in the state, utilities located and operating within the state, not-for-profit organizations, and other qualified persons as determined by the DACS.

Part III of ch. 377, F.S., also includes additional programs not under the Florida Energy and Climate Protection Act:

- The energy and conservation clearinghouse which develops a clearinghouse of information regarding cost savings associated with various energy efficiency and conservation measures.¹⁰⁷
- The Florida Green Governments Grant Act which provides grants to assist local governments in the development and implementation of programs that achieve green standards. ¹⁰⁸
- The Energy Economic Zone Pilot Program to develop "a model to help communities cultivate green economic development, encourage renewable electric energy generation, manufacture products that contribute to energy conservation and green jobs, and further implement chapter 2008-191, Laws of Florida, relative to discouraging sprawl and developing energy-efficient land use patterns and greenhouse gas reduction strategies." 109
- The Natural Gas Fuel Fleet Vehicle Rebate Program which provides rebates for eligible expenses relating to investments in in the conversion, purchase of a natural gas fleet vehicles.¹¹⁰
- The Municipal Solid Waste-to-Energy program which provides grants to" municipal solid waste-to-energy facilities to incentivize the production and sale of energy from municipal solid waste-to-energy facilities while also reducing the amount of waste that would otherwise be disposed of in a landfill."¹¹¹

¹⁰⁵ Section 377.802, F.S.

¹⁰⁶ Section 377.804, F.S.

¹⁰⁷ Section 377.805, F.S.

¹⁰⁸ Section 377.808, F.S.

¹⁰⁹ Section 377.809, F.S.

¹¹⁰ Section 377.810, F.S.

¹¹¹ Section 377.814, F.S.

• A program where the DACS is authorized to post information on its website information about the alternative fueling stations or electric vehicle charging stations available in the state. 112

• A program operated by Office of Energy within the DACS for allocating or reallocating the qualified energy conservation bond volume limitation provided by 26 U.S.C. s. 54D. 113

Acts of Destruction against Energy Infrastructure

The National Conference of State Legislatures (NCSL) suggests that states should be aware of and be prepared for actual physical threats perpetrated by humans to energy infrastructure. ¹¹⁴ The U.S. Department of Energy's annual summary of Electric Emergency Incident and Disturbance Reports indicates at least 25 reports were filed as actual physical attacks in electric utilities perpetrated by humans in 2022, compared to six attacks in 2021. ¹¹⁵

Cyber-attacks are also a growing threat to energy infrastructure. The growing reliance on digital technology to better utility infrastructure and business operations in general, has increased the exposure of these industries to cyber threats. The annual summary of Electric Emergency Incident and Disturbance Reports indicated six cyber-related events in 2022, compared to seven for 2021. However, according to the International Energy Agency, the publicly available information available on such cyber-attacks is limited due to under-reporting and lack of detection, and there is evidence that attacks have been growing rapidly since 2018.

Low-Income Energy Assistance Program

The Low-Income Energy Assistance Program (LIHEAP) is a federally funded program intended to assist low income families with home heating and cooling costs. In Florida, the program is administered by the Florida Department of Commerce (FDC), which allocates funding directly to a network of community action agencies, also known as local agency providers.¹¹⁹

The FDC summarizes the program as follows:

¹¹² Section 377.815, F.S.

¹¹³ Section 377.816, F.S. Qualified energy conservation bonds (QECBs) were created in the federal 2008 Energy Improvement and Extension Act. The purpose of the bonds were to federally fund states, territories, local governments, and tribal governments to issue QECBs to finance renewable energy and efficiency projects. United States Department of Energy, *Qualified Energy Conservation Bonds*, Aug. 2016 (available at:

https://www.energy.gov/sites/prod/files/2017/04/f34/qecbpaper0816.pdf) (last visited Feb. 1, 2024). 26 U.S.C. s. 54D was repealed by Pub.L. 115-97, Title I, s. 13404(a), effective Dec. 22, 2017.

¹¹⁴ The National Conference of State Legislatures, *Human-Driven Physical Threats to Energy Infrastructure*, updated May 22, 2023, available at www.ncsl.org/energy/human-driven-physical-threats-to-energy-infrastructure (last visited Feb. 1, 2024).

¹¹⁵ *Id.*; U.S. Department of Energy, *Office of Cybersecurity, Energy Security, & Emergency Response, Electric Disturbance Events (OE-417) Annual Summaries*, available at https://www.oe.netl.doe.gov/OE417_annual_summary.aspx (last visited Feb. 1, 2024).

¹¹⁶ International Energy Agency, Cybersecurity – is the power system lagging behind?,

¹¹⁷ *Id*.

¹¹⁸ *Id*.

¹¹⁹ Florida Department of Commerce, *Low-Income Home Energy Assistance Program*, https://www.floridajobs.org/community-planning-and-development/community-services/low-income-home-energy-assistance-program (last visited Feb. 1, 2024).

• Depending on the funds available in an applicant's county, an applicant may be able to apply for assistance up to three times a year, but not every month.

- LIHEAP may help pay natural gas or propane bills only in the winter, and only if such is the primary source of home heating. If gas or propane is used only for purposes other than heating, such as hot water or cooking, the LIHEAP cannot assist with the bill.
- LIHEAP cannot pay for water, sewer or telephone services.
- Local LIHEAP providers make the payments directly to utility companies on behalf of the awardee. 120

Persons may be eligible for the program if they meet the following requirements:

- Have a total income no more than 60 percent of the median income in Florida;
- Are responsible for paying home heating or cooling bills;
- Are a resident of Florida; and
- Are a U.S. Citizen, qualified alien, or permanent resident of the U.S.?

The current household income limits for LIHEAP in Florida are as follows: 121

Household Size	Maximum Monthly Income	Maximum Annual Income
Family of 1	\$2,311.25	\$27,735
Family of 2	\$3,022.41	\$36,269
Family of 3	\$3,733.58	\$44,803
Family of 4	\$4,444.75	\$53,337
Family of 5	\$5,155.83	\$61,870
Family of 6	\$5,867.00	\$70,404
Family of 7	\$6,000.33	\$72,004
Family of 8	\$6,133.75	\$73,605

Homeowners' Associations

Chapter 720, F.S., provides statutory recognition to corporations that operate residential communities in Florida as well as procedures for operating homeowners' associations. These laws protect the rights of association members without unduly impairing the ability of such associations to perform their functions. 122

A "homeowners' association" is defined as a:

Florida corporation responsible for the operation of a community or a mobile home subdivision in which the voting membership is made up of parcel owners or their agents, or a combination thereof, and in which membership is a mandatory condition of parcel ownership, and which is authorized to impose assessments that, if unpaid, may become a lien on the parcel. ¹²³

¹²¹ *Id*.

¹²⁰ Id.

¹²² See s. 720.302(1), F.S.

¹²³ Section 720.301(9), F.S.

Unless specifically stated to the contrary in the articles of incorporation, homeowners' associations are also governed by ch. 607, F.S., relating to for-profit corporations, or by ch. 617, F.S., relating to not-for-profit corporations.¹²⁴

Homeowners' associations are administered by a board of directors whose members are elected. The powers and duties of homeowners' associations include the powers and duties provided in ch. 720, F.S., and in the governing documents of the association, which include a recorded declaration of covenants, bylaws, articles of incorporation, and duly-adopted amendments to these documents. The officers and members of a homeowners' association have a fiduciary relationship to the members who are served by the association.

Unlike condominium associations, homeowners' associations are not regulated by a state agency. Section 720.302(2), F.S., expresses the legislative intent regarding the regulation of homeowners' associations:

The Legislature recognizes that it is not in the best interest of homeowners' associations or the individual association members thereof to create or impose a bureau or other agency of state government to regulate the affairs of homeowners' associations. However, in accordance with s. 720.311, [F.S.,] the Legislature finds that homeowners' associations and their individual members will benefit from an expedited alternative process for resolution of election and recall disputes and presuit mediation of other disputes involving covenant enforcement and authorizes the department to hear, administer, and determine these disputes as more fully set forth in this chapter. Further, the Legislature recognizes that certain contract rights have been created for the benefit of homeowners' associations and members thereof before the effective date of this act and that ss. 720.301-720.407[, F.S.], are not intended to impair such contract rights, including, but not limited to, the rights of the developer to complete the community as initially contemplated.

The Division of Florida Condominiums, Timeshares, and Mobile Homes (division) within the Department of Business the Professional Regulation has limited regulatory authority over homeowners' associations. The division's authority is limited to the arbitration of recall election disputes. 128

The governing document of a homeowners' association are:

- The recorded declaration of covenants for a community and all duly adopted and recorded amendments, supplements, and recorded exhibits thereto; and
- The articles of incorporation and bylaws of the homeowners' association and any duly adopted amendments thereto.¹²⁹

¹²⁴ Section 720.302(5), F.S.

¹²⁵ See ss. 720.303 and 720.307, F.S.

¹²⁶ See ss. 720.301 and 720.303, F.S.

¹²⁷ Section 720.303(1), F.S.

¹²⁸ See s. 720.306(9)(c), F.S.

¹²⁹ Section 720.301(8), F.S.

III. Effect of Proposed Changes:

Section 1 creates s. 163.3210, F.S., relating to natural gas resiliency and reliability infrastructure. The section provides that it is the intent of the Legislature to maintain, encourage, and ensure adequate and reliable fuel sources for public utilities. The section finds that resiliency and reliability of fuel sources for public utilities is critical to Florida's economy; the ability of the state to recover from natural disasters; and to the health, safety, welfare, and quality of life of Florida residents.

Under the section, a resiliency facility¹³⁰ is a permitted use in all commercial, industrial, and manufacturing land use categories in a local government comprehensive plan and all commercial, industrial, and manufacturing districts. Such facilities must comply with setback and landscape criteria that would apply to other similar uses and local governments may adopt ordinances specifying such requirements.¹³¹

The section also provides that, after July 1, 2024, local governments may not amend their comprehensive plans, land use maps, zoning districts, or land development regulations in a manner that would conflict with a resiliency facility's classification as a permitted and allowable use.

Section 2 amends s. 286.29, F.S., regarding energy guidelines for public businesses. The bill deletes a provision relating to legislative intent and the following provisions:

- The Department of Management Services' (DMS's) Florida Climate-Friendly Preferred Products List;
- A requirement that state agencies contract only with hotels or conference facilities for meetings and conferences as recognized by the Green Lodging Program;
- A requirement that, when state agencies, state universities, community colleges, and local
 governments purchase vehicles under a state purchasing plan that such vehicles are selected
 for greatest fuel efficiency available for a given use class when fuel economy data is
 available.

The section also creates a new provision requiring the DMS, in consultation with the Florida Department of Commerce (FDC) and the Department of Agriculture and Consumer Services (DACS), to develop a Florida Humane Preferred Products List. In developing this list, the DMS must assess products currently available for purchase under state term contracts that contain or consist of an energy storage device with a capacity of greater than one kilowatt or that contain or consist of an energy generation device with a capacity of greater than 500 kilowatts. The DMS must then identify the specific products that appear to be largely made free from forced labor, irrespective of the age of the worker. The section defines "forced labor" as any work performed or service rendered that is:

• Obtained by intimidation, fraud, or coercion, including by threat of serious bodily harm to, or physical restraint against, a person, by means of a scheme intended to cause the person to

¹³⁰ The section defines "resiliency facility" as "a facility owned and operated by a public utility for the purposes of assembling, creating, holding, securing, or deploying natural gas reserves for temporary use during a system outage or natural disaster."

¹³¹ Provided that such requirements are not more excessive than those applied to similar other uses.

believe that if he or she does not perform such labor or render such service, the person will suffer serious bodily harm or physical restraint, or by means of the abuse or threatened abuse of law or the legal process;

- Imposed on the basis of a characteristic that has been held by the United States Supreme Court or the Florida Supreme Court to be protected against discrimination under the Fourteenth Amendment to the United States Constitution or under s. 2, Art. I of the State Constitution, including race, color, national origin, religion, gender, or physical disability;
- Not performed or rendered voluntarily by a person; or
- In violation of the Child Labor Law¹³² or otherwise performed or rendered through oppressive child labor.

State agencies and political subdivisions in the state must, when procuring such energy products from state term contracts, first consult the Florida Humane Preferred Energy Products List and may not purchase or procure products not included in the list.

Section 3 amends s. 337.25, F.S., to prohibit the Florida Department of Transportation (FDOT) from assigning or transferring its permitting rights across any transportation right-of-way operated by the FDOT to a third party or governmental entity that does not operate the transportation right-of-way without prior approval of the Legislature.

Section 4 amends s. 337.403, F.S., regarding the obligation for utilities to bear the cost of relocating utility facilities placed upon, under, over, or within the right-of-way public road or publicly owned rail corridors. This section specifies that the authority¹³³ may not require a utility within a public road operated by the authority to be relocated on behalf of any other third-party or governmental agency project related to a separate public or private road or transportation corridor.

Section 5 amends s. 366.032, F.S., to include "development districts" in a provision that states a municipality, county, special district, or other political subdivision of the state may not enact or enforce a resolution, ordinance, rule, code, or policy or take any action that restricts or prohibits or has the effect of restricting or prohibiting the types or fuel sources of energy production which may be used, delivered, converted, or supplied by utilities, gas districts, natural gas transmission companies, and certain liquefied petroleum gas dealers, dispensers, and cylinder exchange operators.

The section also includes "development districts" in a provision that prohibits a municipality, county, special district, or other political subdivision of the state from restricting or prohibiting the use of an appliance using the fuels or energy types supplied by the energy and gas providers above.

Section 6 amends s. 366.04, F.S., regarding the jurisdiction of the Public Service Commission (PSC). This section requires the PSC to approve a targeted storm reserve amount to be effective January 1, 2025, for each public utility. This storm reserve amount must be equal to 80 percent

¹³² Part I of ch. 450, F.S., provides the Child Labor Law for Florida.

¹³³ As used in ss. 337.401-337.404, F.S., "the authority" means the FDOT and local government entities. Section 337.401(1)(a), F.S.

of the approved incremental storm costs incurred for the public utility's highest cost storm impacting its service area over the five calendar years before January 2025. The incremental storm costs must be based on the filings of the public utility with the PSC and orders issued by the PSC.

The targeted storm reserve amount established by the PSC:

- May be adjusted on an annual basis for successive rolling five-year periods;
- Must be funded by an increase in base rates ¹³⁴ effective January 1, 2025; and
- Must be designed to allow the public utility to recover the costs to fund the targeted reserve level over a four-year period.

The base rate adjustments and accompanying tariffs must be:

- Implemented by administrative approval of the PSC and employ the most recent authorized base rate structure for the public utility;
- Filed by October 15 together with the current storm reserve and supporting documentation and the highest cost storm over the prior five years as reflected by orders of the PSC; and
- Approved by each November 15 to take effect on January 1 of the following year.

The suspension of base rate increases and implementation of base rate adjustments relating to the targeted storm reserve must be based on the current status of the public utility's administratively-determined storm reserve and be consistent with the dates above. Adjustments to base rates must be designed to fund the public utility storm reserves. Cost recovery of such base rates may not consider a public utility's previous, current, or projected earnings. Revenues of such base rates are not to be considered in the calculation of a public utility's earnings in earnings surveillance reports.

Section 7 amends s. 366.075, F.S., to authorize the PSC to establish an experimental mechanism to facilitate energy infrastructure investment using the administrative proceeding structure designated in ss. 366.96, (7) and (8), F.S. In establishing this mechanism, the PSC is to consider the intent provided in s. 366.91(1), F.S., for renewable energy¹³⁵ and use the definition of the term "renewable natural gas" provided in s. 366.91(2)(f). The section provides that the PSC has the discretion to determine whether to use an annual proceeding to conduct such an experimental mechanism. The section also requires the PSC to propose a rule for adoption as soon as practicable, but not later than October 31, 2024.

¹³⁴ Base rates are tariffed charges, set by a utility regulator, calculated to recover a utility's operations and maintenance expenses plus a rate of return on the book value of its assets that are considered to be used and useful.

¹³⁵ Section 366.91, F.S., provides that "it is in the public interest to promote the development of renewable energy resources in this state. Renewable energy resources have the potential to help diversify fuel types to meet Florida's growing dependency on natural gas for electric production, minimize the volatility of fuel costs, encourage investment within the state, improve environmental conditions, and make Florida a leader in new and innovative technologies."

¹³⁶ Section s. 366.91(2)(f), F.S., states that "renewable natural gas" means "electrical energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen produced or resulting from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, and hydroelectric power. The term includes the alternative energy resource, waste heat, from sulfuric acid manufacturing operations and electrical energy produced using pipeline-quality synthetic gas produced from waste petroleum coke with carbon capture and sequestration."

Section 8 amends s. 366.94, F.S., to allow the PSC to approve voluntary public utility programs, to become effective on or after January 1, 2025, for residential, customer-specific electric vehicle charging if the PSC determines that the rates and rate structure of a proposed program would not adversely impact the public utility's general body of ratepayers. All utility revenue received under such programs must be credited to the public utility's retail ratepayers. The section also makes clear that it does not preclude cost recovery for electric vehicle charging programs approved by the PSC before January 1, 2024.

Section 9 creates s. 366.99, F.S., authorizing natural gas public utilities to petition¹³⁷ the PSC to annually recover prudently incurred natural gas facilities relocation costs¹³⁸ to accommodate requirements imposed by the FDOT and local government entities. The section allows each utility to recover such costs through a charge separate and apart from base rates, referred to in the section as the natural gas facilities relocation cost recovery clause.

The section directs the PSC to establish an annual proceeding to review these petitions. This review is limited to:

- Determining the prudence of the utility's actual incurred natural gas facilities relocation costs;
- Determining the reasonableness of the utility's projected natural gas facilities relocation costs for the next calendar year; and
- Providing for a true-up of the costs with the projections on which past factors were set.

Any refund or collection made pursuant to the true-up process must include applicable interest.

The section also requires all costs approved pursuant to this clause be allocated to customer classes pursuant to the rate design most recently approved by the PSC. If a capital expenditure is recoverable as a natural gas facilities relocation cost, the public utility may recover the annual depreciation on the cost, calculated at the public utility's current approved depreciation rates, and a return on the undepreciated balance of the costs at the public utility's weighted average cost of capital using the last approved return on equity.

The section directs the PSC to adopt rules to implement the section as soon as practicable.

Section 10 amends s. 377.601, F.S., to substantially revise the legislative intent as it pertains to part II, of ch. 377, F.S., which provides energy resource planning and development policies for Florida. It deletes the legislative intent section as described on page 20 of this analysis. As rewritten, the intent provides that the purpose of the state's energy policy is to ensure an adequate and reliable supply of energy for the state in a manner that promotes the health and welfare of the public and economic growth. The revised intent further states that governance of the state's energy policy be efficiently directed toward achieving this purpose.

 ¹³⁷ The petition should describe the utility's natural gas facilities relocation costs for the next calendar year, actual natural gas facilities relocation costs for the prior calendar year, and proposed cost-recovery factors designed to recover such costs.
 Proceeding with implementing a plan before filing this petition would not constitute imprudence on the part of the utility.
 138 Such costs would include, but not be limited to, the costs to relocate or reconstruct facilities as required by a mandate, a statute, a law, an ordinance, or an agreement between the utility and an authority, including, but not limited to, costs associated with reviewing plans provided by an authority. The costs would not include any costs recovered through base rates.

For the purposes of the above, the revised section states that the state's energy policy should be guided by all of the following goals:

- Ensuring a cost-effective and affordable energy supply.
- Ensuring adequate supply and capacity.
- Ensuring a secure, resilient, and reliable energy supply, with an emphasis on a diverse supply of domestic energy resources.
- Protecting public safety.
- Ensuring consumer choice.
- Protecting the state's natural resources, including its coastlines, tributaries, and waterways.
- Supporting economic growth.

In furtherance of the above goals, the rewritten section provides that it is state policy to:

- Promote the cost-effective development and effective use of a diverse supply of domestic energy resources in the state and discourage energy waste and deletes a provision on global climate change;
- Promote the cost-effective development and maintenance of energy infrastructure that is
 resilient to natural and manmade threats to the security and reliability of the state's energy
 supply and deletes programs aimed at promoting energy conservation, energy security, and
 the reduction of greenhouse gas emissions;
- Reduce reliance on foreign energy resources;
- Include energy considerations in all state, regional, and local planning;
- Utilize and manage effectively energy resources used within state agencies;
- Encourage local governments to include energy considerations in all planning and to support their work in promoting energy management programs;
- Include the full participation of citizens in the development and implementation of energy programs;
- Consider in its decisions the energy needs of each economic sector, including residential, industrial, commercial, agricultural, and governmental uses, and reduce those needs whenever possible;
- Promote energy education and the public dissemination of information on energy and its impacts in relation to the goals stated above;
- Encourage the research, development, demonstration, and application of domestic energy resources, including the use of renewable energy resources;
- Consider, in its decision-making, the impacts of energy-related activities on the goals above, including the whole-life-cycle impacts of any potential energy use choices, so that detrimental effects of these activities are understood and minimized; and
- Develop and maintain energy emergency preparedness plans to minimize the effects of an energy shortage within the state Florida.

Section 11 amends s. 377.6015, F.S., to revise the duties of the DACS to conform to the changes made by the bill and require that the DACS advocate for energy issues consistent with the goals in proposed s. 377.601(2), F.S., provided in Section 10 of the bill.

Section 12 amends s. 377.703, F.S., to revise the duties of the DACS to conform to the changes made by the bill. It also eliminates a requirement that the DACS, when analyzing the energy data

it collects and preparing long-range forecasts of energy supply and demand in coordination with the PSC (which is responsible for electricity and natural gas forecasts), that the forecasts contain plans for the development of renewable energy resources and reduction in dependence on depletable energy resources, particularly oil and natural gas. Instead, such forecasts must contain an analysis of the extent to which domestic energy resources, including renewable energy sources, are being utilized in the state.

The section also deletes a requirement that the forecasts contain:

- Consideration of alternative scenarios of statewide energy supply and demand for five, 10, and 20 years to identify strategies for long-range action, including identification of potential social, economic, and environmental effects. Instead, such consideration must be made for potential impacts in relation to the goals in proposed s. 377.601(2), F.S., provided in Section 10 of the bill.
- An assessment of the state's energy resources, including examination of the availability of commercially developable and imported fuels, and an analysis of anticipated effects on the state's environment and social services resulting from energy resource development activities or from energy supply constraints, or both. Instead, such assessments must contain an analysis of anticipated impacts in relation to the goals in proposed s. 377.601(2), F.S., provided in Section 10 of the bill, resulting from energy resource development activities or from energy supply constraints, or both.

Section 13 repeals the following sections:

- Sections 377.801-804, F.S., providing the Florida Energy and Climate Protection Act (Renewable Energy and Energy-Efficient Technologies Grants Program);
- Section 377.808, F.S., providing the Florida Green Governments Grant Act;
- Section 377.809, F.S., providing the Energy Economic Zone Pilot Program;
- Section 377.816, F.S., providing a program operated by Office of Energy within the DACS for allocating or reallocating the qualified energy conservation bond volume limitation provided by 26 U.S.C. s. 54D.

Section 14 provides for the programs deleted in Section 13 of the bill, there may not be:

- New or additional applications, certifications, or allocations approved.
- New letters of certification issued.
- New contracts or agreements executed.
- New awards made.

All certifications or allocations issued under such programs are rescinded except for the certifications of, or allocations to, those certified applicants or projects that continue to meet the applicable criteria in effect before July 1, 2024. Any existing contracts or agreements authorized under those programs must continue in full force and effect in accordance with the statutory requirements in effect when the contract or agreement was executed or last modified. However, further modifications, extensions, or waivers may not be made or granted relating to those contracts or agreements, except computations by the Department of Revenue of the income generated by or arising out of a qualifying project.

Section 15 amends s. 288.9606, F.S., relating to the issue of revenue bonds, to conform to changes made by the bill.

Section 16 amends s. 380.0651, F.S., relating to statewide guidelines, standards, and exemptions, to conform to changes made by the bill.

Section 17 amends s. 403.9405, F.S., to provide that the Natural Gas Transmission Pipeline Siting Act does not apply to natural gas transmission pipelines which are less than 15 miles in length or which do not cross a county line, unless the applicant has elected to apply for certification of that pipeline. The section increases the 15-mile limit for non-applicability to be 100 miles.

Section 18 amends s. 409.508, F.S., regarding the Low-Income Energy Assistance Program (LIHEAP). The bill directs the FDC to expand the eligibility for LIHEAP to Florida residents enrolled in any of the following:

- Social Security Disability Insurance program.
- Social Security Insurance program.
- United States Department of Veterans Affairs disability benefits.
- Supplemental Nutritional Assistance Program.
- Temporary Assistance for Needy Families.

The section also directs the FDC to develop a process for automatic payments on behalf of individuals to their household's home energy supplier. The process must include:

- Detailed requirements for any necessary statutory or regulatory changes, application process
 changes, or other requirements necessary to allow the FDC to identify individuals who
 qualify for automatic program payments without requiring said individuals to submit
 additional program applications.
- A data sharing process detailing steps the FDC will take to identify and share a list of categorically eligible residents with home energy suppliers. A home energy supplier that agrees to receive direct program payments must apply the benefits as prescribed and document such payments in its annual program performance measures report.

The section also makes technical changes.

Section 19 amends s. 720.3075, F.S., which relates to prohibited clauses in homeowners' association documents. The section provides that homeowners' association documents, including declarations of covenants, articles of incorporation, or bylaws, may not preclude the types or fuel sources of energy production which may be used, delivered, converted, or supplied by the following entities to customers within the homeowners' association that these entities are authorized to serve:

- Investor-owned electric utilities;
- Municipal electric utilities;
- Rural electric cooperatives;
- Entities formed by interlocal agreement to generate, sell, and transmit electrical energy;
- Investor-owned gas utilities;
- Gas districts:

- Municipal natural gas utilities;
- Natural gas transmission companies; and
- Category I liquefied petroleum gas dealers, category II liquefied petroleum gas dispensers, or category III liquefied petroleum gas cylinder exchange operators as defined in s. 527.01, F.S.

The section also prohibits association documents, including declarations of covenants, articles of incorporation, or bylaws, may not preclude the use of an appliance, including a stove or grill, which uses the types or fuel source of energy productions which may be used, delivered, converted, or supplied by the entities above.

Section 20 requires the PSC to conduct an assessment of the security and resiliency of the state's electric grid and natural gas facilities against both physical threats and cyber threats. In regards to the cyber threat assessment, the PSC is to also consult with the Florida Digital Service. The section also directs all electric utilities, natural gas utilities, and natural gas pipelines in the state to cooperate with the PSC to provide access to all information necessary to conduct the assessment. The bill requires the PSC, by July 1, 2025, to submit a report of its assessment to the Governor, the President of the Senate, and the Speaker of the House of Representatives. The report must also contain any recommendations for potential legislative or administrative actions that may enhance the physical security or cyber security of the state's electric grid or natural gas facilities.

Section 21 directs the PSC to study and evaluate the technical and economic feasibility of using advanced nuclear power technologies, including small modular reactors (SMRs), to meet the state's electrical power needs, and research means to encourage and foster the installation and use of such technologies at military installations in the state. The PSC is to submit a report of its findings, along with any recommendations for potential legislative or administrative actions, to the Governor, President of the Senate, and Speaker of the House of Representatives by January 1, 2025. The findings and recommendations must be consistent with the goals proposed in s. 377.601(2), F.S., provided in Section 10 of the bill.

Section 22 directs the FDOT, in consultation with the Office of Energy within the DACS, to study and evaluate the potential development of hydrogen fueling infrastructure, including fueling stations, to support hydrogen-powered vehicles that use the state highway system. The FDOT is to submit a report of its findings, along with any recommendations for potential legislative or administrative actions, to the Governor, President of the Senate, and Speaker of the House of Representatives by January 1, 2025. The findings and recommendations must be consistent with the goals proposed in s. 377.601(2), F.S., provided in Section 10 of the bill.

Section 23 amends s. 220.193, F.S., regarding the Florida renewable energy production credit, to conform to changes made by the bill.

Section 24 provides that the bill shall take effect July 1, 2024.

¹³⁹ As used in this section, "appliance" means a device or apparatus manufactured and designed to use energy and for which the Florida Building Code or the Florida Fire Prevention Code provides specific requirements.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

Section 9 of Article I of the State Constitution, states that "no person shall be deprived of life, liberty or property without due process of law." There is no single test as to whether the requirements of due process are met. However, the fundamental requirements of due process are whether there has been reasonable notice and reasonable opportunity to be heard. ¹⁴⁰

As noted by the Supreme Court, the "general statutory scheme for making and adjusting [public utility] rates embraces the traditional requirements of procedural due process, i. e. notice and a hearing." However, there is no single test of due process and the "legislature may determine by what process and procedure legal rights may be asserted and determined provided that the procedure adopted affords reasonable notice and a fair opportunity to be heard before rights are decided." Due process cannot be compromised on the footing convenience or expediency." Rather, due process should be appropriate to the nature of the case.

Section 6 of the bill, amending s. 366.04, F.S., creates a process for the Public Service Commission (PSC) to adjust base rates and accompanying tariffs for public utilities to provide public utilities with a targeted storm reserve. The section specifies a process where utilities must file, by October 15, with the PSC, their request under the proposed section, and the PSC must administratively approve the filing by November 15 (with

¹⁴⁰ Citizens of State v. Florida Pub. Serv. Com'n, 146 So. 3d 1143, 1154 (Fla. 2014).

¹⁴¹ Florida Power Corp. v. Hawkins, 367 So. 2d 1011, 1013 (Fla. 1979).

¹⁴² Citizens of State v. Florida Pub. Serv. Com'n, 146 So. 3d 1143, 1154 (Fla. 2014), citing Peoples Bank of Indian River Cnty. v. State, Dep't of Banking & Fin., 395 So.2d 521, 524 (Fla.1981).

¹⁴³ Citizens of State v. Florida Pub. Serv. Com'n, 146 So. 3d 1143, 1154 (Fla. 2014), citing United Tel. Co. of Fla. V. Beard, 611 So.2d 1240, 1243 (Fla.1993).

¹⁴⁴ Keys Citizens for Responsible Gov't, Inc. v. Florida Keys Aqueduct Auth., 795 So. 2d 940, 948 (Fla. 2001).

rates to take effect on January 1). This condensed time frame may raise substantial issues for the PSC, as the PSC notes in its analysis of this provision in SB 1548:

The process outlined by [the bill] does not clearly afford an entry point given ambiguity surrounding the phrase "administrative approval." In the past, the Commission [PSC] has chosen to internally delegate certain powers to Staff...to address largely non-substantive matters unlikely to infringe upon the substantial rights of a party. That process would preclude participation from interested persons. However, if the phrase "administrative approval" was a reference to the typical administrative process by which changes in base rate are approved, then SB 1548 does not provide enough time to ensure substantially interested persons can participate.

Nor would the Commission [PSC] have sufficient time to process a base rate case (for 11 different utilities)....

Ambiguity surrounding the "administrative approval" process, combined with the narrow deadlines that the various required steps will be operating under, might result in stakeholders feeling left out of the process. If so, they could potentially mount legal challenges to the storm reserve figure if they object to its rate impact.¹⁴⁵

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The following provisions of the bill may have a fiscal impact on the private sector:

- Deleting requirements relating to the Florida Climate-Friendly Preferred Products List may have a negative impact on companies that have products on that list as they may see a reduction in purchases of those products.
- The provision requiring state agencies and political subdivisions to consult a Florida Humane Preferred Products List when procuring certain energy products, may positively financially impact those companies with products on the list. Conversely, companies with products not on the list may be negatively financially impacted.
- The provisions reducing the applicability of the Natural Gas Transmission Pipeline Siting Act will likely reduce regulatory costs for pipeline projects.
- Ratepayers may see, at least initially, a utility rate increase due to the targeted storm reserve provisions of the bill. The amount of any increase is dependent on several factors including the severity of storms impacting a particular public utility and current storm reserves.

¹⁴⁵ Florida Public Service Commission, *Bill Analysis for SB 1548*, *supra* note 82.

C. Government Sector Impact:

The bill may have an indeterminate negative fiscal impact on state government expenditures because it imposes new requirements for specified state agencies, which may require the expenditure of resources. The directives of the bill likely expands the responsibilities of the following state agencies:

- Department of Management Services due to the development of a Florida Humane Preferred Energy Products List;
- The Public Service Commission (PSC) due to the assessment of the security and resiliency of the state's electric grid and natural gas facilities;
- PSC due to the study and evaluation of advanced nuclear power technologies;
- The Department of Agriculture and Consumer Services (DACS) due to revised duties of the DACS to conform to the changes made by the bill and require that the DACS advocate for energy issues consistent with the goals in proposed s. 377.601(2), F.S.;
- The Department of Commerce required to expand categorical eligibility of the Federal Low—Income Home Energy Assistance Program and develop an automatic program payments process; and
- Florida Department of Transportation due to the study and evaluation of potential development of hydrogen fueling infrastructure.

Most of the above agencies have not yet provided their analyses of this bill, so it is unknown at this time the extent to which the bill would impact those agencies' operations. Affected agencies may be able to satisfy all or some of these requirements with existing resources. For example, the DMS may incur additional workload for the development of the Florida Humane Preferred Energy Products Lists; however, according the DMS, such workload can be absorbed within the current resources of the DMS. The impact of requiring state agencies to purchase certain energy-related items from a new Florida Humane Preferred Energy Products List, as required by the bill, is indeterminate.

The PSC, in its analysis of SB 1548, stated that implementing a similar provision in that bill to Section 21 of this bill (directing the PSC to study and evaluate the technical and economic feasibility of using advanced nuclear power technologies, including small modular reactors) would likely require the PSC to secure outside experts because the "technology is in its infancy, and no such reactors have been put into operation either in Florida or elsewhere." The PSC provided an estimated cost of such services of \$190,000, based on the inflation-adjusted cost of consultants it has hired for a previous research project. Historically, traditional studies cost approximately \$200,000 to \$300,000.

VI. Technical Deficiencies:

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¹⁴⁶ *Id*.

VII. Related Issues:

Section 2 of the bill refers to an "energy storage device with a capacity of greater than one kilowatt." Kilowatt hours may be what was intended here as that is a measure of battery storage rather than output.

Section 5 of the bill uses the term "development district," but does not define this term. It is unclear if this is intended to mean a community development district or another entity. The sponsor may wish to revise this term or include a definition.

Section 6 of the bill uses the terms "base rate," "storm reserve," and "surveillance reports." While these terms are used commonly at the Public Service Commission (PSC), they are not defined for ch. 366, F.S. In addition, the term "surveillance reports" is not used anywhere in Florida Statutes. The sponsor may wish to define these terms for this section. In addition, the targeted storm reserves provisions are amended into the PSC's jurisdiction section. A new separate section following s. 366.96, F.S., would appear to be a more logical placement.

Section 7 of the bill states that the PSC "is authorized to establish an experimental mechanism to facilitate energy infrastructure investment consistent with the structure set forth in s. 366.96(7) and (8), the intent of s. 366.91(1), and the definition of the term 'renewable natural gas' in s. 398 366.91(2)(f)." Sections 366.97, F.S., specifically provide a process for storm protection costs, so it is potentially unclear what portions of the procedures identified in those sections is intended to be applicable to Section 7 of the bill. It is also unclear as how the definition of "renewable natural gas" is intended to be included in the structure that is referenced.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 286.29, 337.25, 337.403, 366.032, 366.04, 366.075, 366.94, 377.601, 377.6015, 377.703, 288.9606, 380.0651, 403.9405, 409.508, 720.3075, and 220.193.

This bill creates sections 163.3210 and 366.99 of the Florida Statutes and several undesignated sections of law.

This bill repeals the following sections of the Florida Statutes: 377.801, 377.802, 377.803, 377.804, 377.808, 377.809, and 377.816.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:

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

CS by Regulated Industries on January 30, 2024:

The committee substitute:

• Adds a provision prohibiting the Florida Department of Transportation (FDOT) from assigning or transferring its permitting rights across any transportation right-of-way operated by the FDOT to a third party or governmental entity that does not operate the transportation right-of-way without prior approval of the Legislature.

Adds a provision prohibiting the FDOT and local government entities from requiring
a utility within a public road operated by the authority to be relocated on behalf of
any other third-party or governmental agency project related to a separate public or
private road or transportation corridor.

- Deletes a provision in the bill that created an electric vehicle battery deposit program within the Department of Highway Safety and Motor Vehicles and a related report.
- Deletes a provision in the bill that required the FDOT, when it enters a contract or has entered into a contract or license to allow a vendor to sell motor fuel or charging services along the turnpike system, offer access to potential vendors of other motor vehicle fuels or repowering services along the turnpike system.
- Deletes a provision in the bill that created a requirement that, before a public utility retires an electrical power plant, it must petition the Public Service Commission (PSC) for approval.
- Adds a provision requiring the PSC to create targeted storm reserve amounts for public utilities.
- Adds a provision authorizing the PSC to establish an experimental mechanism to facilitate energy infrastructure investment.
- Regarding a provision in the bill permitting the PSC to approve voluntary public utility programs for residential, customer-specific electric vehicle charging, it revises the applicability date for previously approved programs.
- Adds a provision requiring the PSC to conduct an annual proceeding to determine prudently incurred natural gas facilities relocation costs for cost recovery by natural gas public utilities.
- Adds a provision directing the Florida Department of Commerce (FDC) to expand eligibility for the Low-Income Energy Assistance Program (LIHEAP) to persons in certain federal disability programs.
- Adds a provision directing the FDC to develop a process for automated LIHEAP payments to home energy suppliers.
- Deletes a provision that directs the PSC to ensure technologies that allow businesses and consumers to use electrical energy for their own use are used in a way that best maintains the integrity of the state electricity grid. The deleted provision also required the PSC to establish programs and rate mechanisms, and submit a report to the legislature.
- Makes technical and conforming changes.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.