

HOUSE OF REPRESENTATIVES STAFF FINAL BILL ANALYSIS

BILL #: CS/CS/HB 1645 Energy Resources

SPONSOR(S): Commerce Committee and Energy, Communications & Cybersecurity Subcommittee, Payne and others

TIED BILLS: IDEN./SIM. BILLS: CS/CS/SB 1624

FINAL HOUSE FLOOR ACTION: 81 Y's 29 N's **GOVERNOR'S ACTION:** Pending

SUMMARY ANALYSIS

CS/CS/HB 1645 passed the House on March 1, 2024, as amended. The bill was amended in the Senate on March 6, 2024, and returned to the House. The House concurred in the Senate amendment to the House bill and subsequently passed the bill as amended on March 7, 2024.

The bill updates Florida's energy policies and amends specific energy-related laws. Specifically, the bill:

- Provides an updated statement of legislative intent concerning the state's energy policy and establishes a list of specific, fundamental policy goals to guide the state's energy policy.
- Updates energy policy statements in current law and the duties of the Department of Agriculture and Consumer Services to be consistent with the state's energy policy goals.
- Requires the Public Service Commission (PSC) to determine, upon notice by a public utility, whether an off-schedule power plant retirement is prudent and consistent with the state's energy policy goals.
- Requires rural electric cooperatives and municipal electric utilities to have at least one mutual aid agreement with another electric utility for purposes of restoring power after a natural disaster.
- 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.
- Defines the term "gross capacity" for purposes of the Florida Electrical Power Plant Siting Act.
- Provides that certain "resiliency facilities" owned and operated by a public utility that deploy natural gas reserves for temporary use during a system outage or natural disaster are a permitted use in certain land use categories and districts, subject to setback and landscape criteria for other similar uses.
- Provides for the recovery of certain facility relocation costs incurred by a natural gas utility through a charge separate from the utility's base rates.
- Prohibits the construction or expansion of offshore wind energy facilities and certain wind turbines located on real property within a mile of the state's coastline or intracoastal waterways or on waters of the state.
- Requires the PSC to develop a plan 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.
- Allows the PSC to approve utility programs for electric vehicle charging under certain conditions.
- Repeals the Renewable Energy and Energy-Efficient Technologies Grant Program, Florida Green Government Grants, the Energy Economic Zone Pilot Program, and Qualified Energy Conservation Bonds provisions.
- Prohibits community development districts and homeowners' associations from prohibiting certain types or fuel sources of energy production and appliances that use such fuels.
- Requires the PSC to study and evaluate the technical and economic feasibility of using advanced nuclear power technologies and to submit a report of its findings and recommendations.
- Requires the Department of Transportation to study and evaluate the potential development of hydrogen fueling infrastructure to support hydrogen-powered vehicles on the state highway system.

The bill does not appear to have a fiscal impact on state or local government revenues but may have an indeterminate negative fiscal impact on expenditures. See Fiscal Comments.

Subject to the Governor's veto powers, the effective date of this bill is July 1, 2024.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives .

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I. SUBSTANTIVE INFORMATION

A. EFFECT OF CHANGES:

Florida Energy Profile

Florida is the third most populous state and the fourth largest energy-consuming state in the nation. However, Florida uses less energy per capita than all but six other states, in part because of its large population, moderate winter weather, and relatively low industrial sector energy use.¹ Florida's energy consumption can be broken down by end-use sector as follows:²

- Transportation – 39%
- Residential – 28%
- Commercial – 22%
- Industrial – 11%

In the electric power industry, natural gas is the dominant fuel in Florida and since 2011 has generated more electric power than all other fuels combined. Natural gas fueled approximately 70 percent of electric energy consumed in Florida in 2022. This number is anticipated to decline over the next ten years, reaching 56 percent by 2032.³ Florida has very little natural gas production and limited gas storage capacity, thus the state is reliant upon out-of-state production and storage to satisfy its demand.⁴ Supply from out-of-state is provided by five interstate natural gas pipelines, with the majority of peninsular Florida's supply provided by three interstate pipelines: Florida Gas Transmission Pipeline, Gulf Stream Natural Gas System, and Sabal Trail Transmission.⁵

In 2021, renewable energy resources were used to generate approximately 6 percent of the electric energy consumed in Florida. This number is anticipated to increase over the next ten years, reaching 28 percent by 2032, primarily from the addition of new solar generation. Solar generation in Florida is expected to exceed all non-natural gas energy sources combined (primarily nuclear and coal) by 2029.⁶

Of the current renewable generation capacity in Florida, approximately 37 percent is considered a "firm" resource that can be relied upon to serve customers and defer the need for traditional power plants. Because of the coincidence of solar generation and the peak demand for electrical energy, about 40 percent of installed solar generation is considered a firm resource. For utility-scale solar projects, that number increases to 52 percent. As the amount of solar increases in the state, the difference in how it operates compared to traditional generation will have an increasing importance to the grid. Solar generation cannot be dispatched as needed, but is produced based upon the conditions at the plant site, influenced by variations in daylight hours, cloud cover, and other environmental factors. Generally, the peak hours for production of a solar facility are closer to noon, whereas the peak in system demand tends to be in the early evening in summer and early morning in winter. Still, Florida is projected to meet its electricity demand and carry a reserve margin of between 16.4 and 30.1 percent on a statewide basis over the next 10 years.⁷

¹ U.S. Energy Information Administration (EIA), *Florida, State Profile and Energy Estimates, Analysis*, <https://www.eia.gov/state/analysis.php?sid=FL#:~:text=Renewable%20resources%20fueled%20about%206,generation%20came%20from%20solar%20energy> (last visited Jan. 12, 2024).

² EIA, *Florida, State Profile and Energy Estimates, Data*, <https://www.eia.gov/state/data.php?sid=FL> (last visited Jan. 12, 2024). These figures reflect consumption in 2021, the most recent period reported by EIA for the state.

³ Florida Public Service Commission (FPSC), *Review of the 2023 Ten-Year Site Plans of Florida's Electric Utilities*, available at <https://www.floridapsc.com/pscfiles/website-files/PDF/Utilities/Electricgas/TenYearSitePlans//2023/Review.pdf> (last visited Jan. 12, 2024).

⁴ *Id.* at 42.

⁵ FPSC, *Facts and Figures of the Florida Utility Industry, 2023*, at 17, <https://www.floridapsc.com/pscfiles/website-files/PDF/Publications/Reports/General/FactsAndFigures/April%202023.pdf> (last visited Jan. 15, 2024).

⁶ FPSC, *supra* note 3, at 3.

⁷ *Id.*

Since 2001, utility-scale electric generation from renewable resources in Florida had grown only 28 percent through 2016, but had grown over 300 percent by 2022.⁸ Customer-owned renewable generation connected to the electric grid in Florida has also grown dramatically in recent years, increasing 460 percent from 2018 to 2022. This growth appears to correlate with decreasing prices for both utility-scale and customer-owned solar generation systems.⁹

In the transportation sector, the market for electric vehicles (EV) in Florida has grown significantly in recent years and is expected to continue growing.¹⁰ Including both full battery electric vehicles and plug-in hybrid electric vehicles, only 21,700 EVs were registered in Florida in 2016; that number increased to 213,800 in 2022, second only to California.¹¹ Florida's generating electric utilities anticipate that annual EV energy consumption in their service territories will increase at a rate of almost 20% per year through 2032 and will comprise 3.9 percent of their net energy for load and 4 percent of summer peak demand in 2032.¹² This growth is accounted for in utility planning.¹³ Registrations for compressed natural gas vehicles in Florida have declined from 18,000 in 2016 to 400 in 2022, and there is no data for registration of hydrogen-fueled vehicles in Florida for 2022.¹⁴ Gasoline powered vehicles still account for the overwhelming majority of vehicle registrations in Florida, with almost 16 million registered in Florida.¹⁵

The United States Environmental Protection Agency (EPA) maintains an inventory of greenhouse gas (GHG) emissions by state, end-use sector, and type of gas, with the most recent inventory data for 2021.¹⁶ According to this inventory, Florida's net GHG emissions for all sectors peaked in 2005 and were slightly lower (0.7 percent) in 2021 as compared to 2008.¹⁷ GHGs reported to the EPA by large facilities¹⁸ in Florida have declined from 147 million metric tons in 2010 to 113 million metric tons in 2022.¹⁹ In 2021, the transportation sector accounted for 41 percent of Florida's GHG emissions, the electric power industry accounted for 35 percent, and the remaining 24 percent was associated with the industrial, commercial, agricultural, and residential sectors.²⁰

⁸ EIA, *Electricity Data Browser*,

<https://www.eia.gov/electricity/data/browser/#/topic/0?agg=2,0,1&fuel=02fh&geo=g000001&sec=g&linechart=ELEC.GEN.AOR-US-99.A~ELEC.GEN.AOR-FL-99.A&columnchart=ELEC.GEN.AOR-US-99.A&map=ELEC.GEN.AOR-US-99.A&freq=A&start=2001&end=2022&chartindexed=1&ctype=linechart<ype=pin&rtype=s&matype=0&rse=0&pin=> (last visited Jan. 12, 2024).

⁹ See, e.g., NREL, *Documenting a Decade of Cost Declines for PV Systems*, Feb. 10, 2021,

<https://www.nrel.gov/news/program/2021/documenting-a-decade-of-cost-declines-for-pv-systems.html> (last visited Jan. 12, 2024) (stating that, from 2010 to 2020, there had been a 64%, 69%, and 82% reduction in the cost of residential, commercial-rooftop, and utility-scale PV systems, respectively and that a significant portion of the cost declines over that decade can be attributed to an 85% cost decline in module price).

¹⁰ Florida Department of Transportation (FDOT), *Florida's Electric Vehicle Infrastructure Deployment Plan, August 2023*, at 17, https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/emergingtechnologies/evprogram/2023_florida's-evidp_update_092923.pdf?sfvrsn=1e4aee0_1 (last visited Jan. 15, 2024).

¹¹ U.S. Department of Energy (DOE), *Alternative Fuels Data Center*,

https://afdc.energy.gov/transatlas/#/?state=FL&view=vehicle_count (last visited Jan. 15, 2024).

¹² FPSC, *supra* note 3, at 5-6, 19.

¹³ *Id.* at 17-20/.

¹⁴ DOE, *supra* note 11.

¹⁵ *Id.*

¹⁶ For purposes of the EPA's inventory, GHGs include carbon dioxide, methane, fluorinated gases, and nitrous oxide. The inventory also accounts for changes associated with land use and forestry that affect the land's ability to serve as a sink for GHG emissions. EPA, *Greenhouse Gas Inventory Data Explorer*,

<https://cfpub.epa.gov/ghgdata/inventoryexplorer/#allsectors/allsectors/allgas/gas/all> (last visited Jan. 15, 2024).

¹⁷ *Id.*

¹⁸ Facilities that emit 25,000 metric tons or more per year of GHGs are required to annually report their GHG emissions to the EPA. Roughly half of total U.S. GHG emissions are reported by direct emitters. EPA, *Facility Level Information on Greenhouse Gases Tool*, https://ghgdata.epa.gov/ghgp/main.do?site_preference=normal (last visited Jan. 12, 2024).

¹⁹ *Id.*

²⁰ EPA, *supra* note 16.

State Energy Policy and Governance

Present Situation

In 1974, in response to the 1973-1974 oil embargo,²¹ the Legislature, upon finding that a lack of accurate and relevant information was hampering its ability to develop energy policy to address the energy resource shortages facing the state, created an “energy data center” to collect data on production, refinement, transportation, storage, and sale of energy resources in Florida, including all types of fossil fuels, nuclear energy, and renewables.²² Three years later, the Legislature developed an energy policy statement with a focus on energy conservation, alternative energy resources, and public education about energy use.²³ This energy policy statement is still mostly intact in Florida law.²⁴

In 1978, the Legislature transferred the duties of the energy data center to the former Department of Administration and expanded those duties to include additional data analysis and forecasting, public education, promoting conservation, and coordinating state energy-related programs.²⁵ This list of duties is now reflected in the duties established in current law for the Department of Agriculture and Consumer Services (DACS).²⁶

Florida’s current energy policies are largely established through various provisions of law related to specific aspects of energy production, distribution, sales, and use. The Legislature last addressed energy policy at a holistic level in 2008,²⁷ when it adopted the following statement of intent with regard to energy resource planning and development, which is unchanged in current law:²⁸

The Legislature finds that the 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.

In 2008, the Legislature also adopted the following energy policy statements, which are unchanged in current law:²⁹

It is the policy of the State of Florida to:

- Develop and promote the effective use of energy in the state, discourage all forms of energy waste, and recognize and address the potential of global climate change wherever possible.

²¹ See, generally, U.S Department of State, Office of the Historian, *Oil Embargo, 1973-1974*, <https://history.state.gov/milestones/1969-1976/oil-embargo> (last visited Jan. 12, 2024).

²² Ch. 74-186, L.O.F.

²³ Ch. 77-334, L.O.F.

²⁴ See s. 377.601(2), F.S.

²⁵ Ch. 78-25, L.O.F.

²⁶ See ss. 377.603 and 377.703, F.S.

²⁷ Ch. 2008-227, L.O.F.

²⁸ S. 377.601(1), F.S.

²⁹ S. 377.601(2), F.S.

- 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.
- 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.
- Develop and maintain energy emergency preparedness plans to minimize the effects of an energy shortage within Florida.

Under current law,³⁰ DACS is required to perform the following functions, consistent with the development of a state energy policy:

- Perform or coordinate the functions of any federal energy programs delegated to the state, including energy supply, demand, conservation, or allocation.
- Analyze present and proposed federal energy programs and make recommendations regarding those programs to the Governor and the Legislature.
- Coordinate efforts to seek federal support or other support for state energy activities, including energy conservation, research, or development, and is responsible for the coordination of multiagency energy conservation programs and plans.
- Analyze energy data collected and prepare long-range forecasts of energy supply and demand in coordination with the Public Service Commission (PSC), which is responsible for electricity and natural gas forecasts, which must contain:
 - An analysis of the relationship of state economic growth and development to energy supply and demand.
 - Plans for the development of renewable energy resources and reduction in dependence on depletable energy resources, particularly oil and natural gas, and an analysis of the extent to which renewable energy sources are being utilized in the state.
 - Consideration of alternative scenarios of statewide energy supply and demand for 5, 10, and 20 years to identify strategies for long-range action, including identification of potential social, economic, and environmental effects.
 - 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.
- Submit an annual report to the Governor and the Legislature reflecting its activities and making recommendations for policies for improvement of the state's response to energy supply and demand and its effect on the health, safety, and welfare of the residents of this state, including a report from the PSC on electricity and natural gas and information on energy conservation programs, with recommendations for energy efficiency and conservation programs for the state.

³⁰ S. 377.703, F.S.

- Promote the development and use of renewable energy resources, consistent with the state comprehensive plan and the policy statements made in 2008.
- Promote energy efficiency and conservation in all energy use sectors in the state, including consultation with the Department of Management Services to coordinate energy conservation programs of state agencies.
- Serve as the state clearinghouse for indexing and gathering all information related to energy programs in state universities, in private universities, in federal, state, and local government agencies, and in private industry and prepare and distribute this information in any manner necessary to inform and advise the public.
- Coordinate energy-related programs of state government.
- Promote a comprehensive research plan for state programs, which must be consistent with state energy policy and be updated on a biennial basis.
- Prepare an assessment of the state's renewable energy production credit.

Under its authority to promote the development and use of renewable energy resources, DACS adopted rules in 2022 that establish renewable energy goals for electric utilities in the state, culminating in a goal of 100 percent renewable energy use by 2050.³¹

DACS is also responsible for administering the Florida Renewable Energy Technologies and Energy Efficiency Act,³² which consists of the Renewable Energy and Energy-Efficient Technologies Grant Program, and the Florida Green Government Grants Act.³³ Both programs are discussed in further detail in this analysis under *Energy Grant Programs*, below.

Effect of the Bill

The bill replaces the current statement of legislative intent concerning the state's energy policy with a more streamlined statement of intent that expresses the purpose of the state's energy policy. The new statement of intent provides:

The purpose of the state's energy policy is to ensure an adequate, reliable, and cost-effective supply of energy for the state in a manner that promotes the health and welfare of the public and economic growth. The Legislature intends that governance of the state's energy policy be efficiently directed toward achieving this purpose.

For purposes of achieving this new statement of intent, the bill provides a list of specific, fundamental policy goals to guide the state's energy policy. These goals are:

- 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;
- Protecting the state's natural resources, including its coastlines, tributaries, and waterways; and
- Supporting economic growth.

The bill's revised statement of intent removes current legislative findings related to global climate change, and the bill's list of energy policy goals does not specifically address global climate change.

Consistent with the bill's revised statement of legislative intent and its list of energy policy goals, the bill revises the energy policy statements in current law. These changes:

³¹ R. 50-5.003, F.A.C.

³² Ss. 377.801-377.804, F.S.

³³ S. 377.808, F.S.

- Specify that it is the state’s policy to promote the “cost-effective development and use of a diverse supply of domestic energy resources in the state,” rather than the “effective use of energy in the state.”
- Remove a provision that provides for recognizing and addressing “the potential of global climate change” as a state energy policy.
- Add that promotion of “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” is a state energy policy.
- Remove a provision that provides for the state to “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.”
- Add that reduction of “reliance on foreign energy resources” is a state energy policy.
- Provide that it is the state’s policy to promote energy education and dissemination of public information on energy and its impacts in relation to the list of energy policy goals established by the bill.
- Provide that it is the state’s energy policy to consider, in its decision-making, the impacts of energy-related activities on the energy policy goals established in the bill.
- Provide that it is the state’s energy policy to encourage the research, development, demonstration, and application of domestic energy resources, including the use of renewable resources.

The bill also revises DACS’ energy-related duties to be consistent with these changes. First, the bill requires that DACS advocate for energy issues consistent with the bill’s list of energy policy goals. Next, the bill provides that DACS’ energy data analyses must address potential impacts in relation to the bill’s list of energy policy goals. The bill removes a provision that requires these analyses to include plans for development of renewable energy resources and reduction in dependence on depletable energy resources. Finally, the bill removes the provision that authorizes DACS to establish goals and strategies for increasing the use of renewable energy in the state.

Reliability and Resilience of Energy Infrastructure and Supply

Present Situation

Florida’s Electrical Power Grid

- State Oversight of Electrical Grid Development

The electric power grid primarily consists of a network of transmission lines, substations, distribution lines, transformers, and meters that deliver electricity from electrical power plants to homes and businesses. Since 1974, the PSC has had jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy for operational and emergency purposes and to avoid uneconomic duplication of facilities.³⁴ The PSC exercises this jurisdiction, in part, through its review of electric utilities’ ten-year plans regarding power generating needs and proposed electrical power plant sites³⁵ and through its review of applications for certain electrical power plant additions and expansions under the Florida Electrical Power Plant Siting Act (PPSA)³⁶ and certain intrastate transmission line additions and expansions under the Florida Electric Transmission Line Siting Act (TLSA).³⁷

Florida’s Department of Environmental Protection (DEP), through its Division of Air Resource Management, is charged with protecting and managing Florida’s air resource, including monitoring air

³⁴ Ch. 74-196, L.O.F., codified at s. 366.04(5), F.S.

³⁵ S. 186.801, F.S.

³⁶ Ss. 403.501-403.508, F.S.

³⁷ Ss. 403.52-403.5365, F.S.

quality, issuing permits for construction and operation of certain sources of emissions, and enforcing compliance by those sources with applicable federal and state regulations.³⁸

The PPSA and TLSA establish centrally coordinated permitting processes for the siting of certain electrical power plants and transmission lines. These processes are administered by DEP and allow for input from state agencies and local governments whose jurisdictions are impacted by a proposed plant or transmission line. Both laws are intended “to effect a reasonable balance” between the need for a facility and the environmental impact resulting from construction and operation of the facility, including air and water quality, fish and wildlife, and water resources and other natural resources of the state.³⁹

The PSC is the sole forum for determining the need for an electrical power plant subject to the PPSA or a transmission line subject to the TLSA.⁴⁰ The PSC’s affirmative determination of need is required before DEP will conduct a project analysis and certification hearing for an electrical power plant or transmission line.⁴¹

For purposes of certification under the PPSA, an electrical power plant includes any steam or solar electrical generating facility using any process or fuel (excluding facilities of less than 75 megawatts (MW) in gross capacity), plus the site, associated facilities physically or indirectly connected to the site, and associated power lines that connect the proposed plant to the electric grid.⁴² Thus, most of the state’s large, baseload and intermediate load power plants,⁴³ including natural gas combined cycle power plants, coal power plants, and nuclear power plants, require certification under the PPSA. Most utility-scale solar facilities in Florida have been configured to fall just below the 75 MW threshold and have not required certification under the PPSA.

In determining the need for an electrical power plant, the PSC must take into account:

- The need for electric system reliability and integrity;
- The need for adequate electricity at a reasonable cost;
- The need for fuel diversity and supply reliability;
- Whether the proposed plant is the most cost-effective alternative available;
- Whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available;
- The conservation measures taken by or reasonably available to the applicant or its members which might mitigate the need for the proposed plant; and
- Other matters within its jurisdiction which it deems relevant.⁴⁴

The PSC’s determination of need for an electrical power plant creates a presumption of public need and necessity for the plant.⁴⁵

In determining the need for a transmission line, the PSC must take into account:

- The need for electric system reliability and integrity;
- The need for abundant, low-cost electrical energy to assure the economic well-being of the residents of this state;

³⁸ Florida Department of Environmental Protection (DEP), *Division of Air Resource Management*, <https://floridadep.gov/air> (last visited January 19, 2024); DEP, *Florida’s Air Quality*,

<https://floridadep.gov/sites/default/files/Air%20Quality%20in%20Florida%200816-web.pdf> (last visited January 19, 2024).

³⁹ Ss. 403.502 and 403.521, F.S.

⁴⁰ Ss. 403.519 and 403.537, F.S.

⁴¹ Ss. 403.507(4) and 403.537(1)(d), F.S.

⁴² Ss. 403.503(14) and 403.506(1), F.S.

⁴³ As the name implies, baseload power plants operate without much interruption throughout the year. Intermediate load, or load-following power plants, adjust their electricity output as demand for electricity fluctuates throughout the day. See, e.g., EPA, *Electric Power Sector Basics*, <https://www.epa.gov/power-sector/electric-power-sector-basics> (last visited Feb. 15, 2024).

⁴⁴ S. 403.519(3), F.S.

⁴⁵ *Id.*

- The appropriate starting and ending point of the line; and
- Other matters within its jurisdiction which it deems relevant.⁴⁶

Ultimately, the Governor and Cabinet, who sit as the siting board, must consider the PSC's determination of need along with land use and environmental issues when determining whether a proposed electrical power plant or transmission line should be approved, approved with modifications or conditions, or denied.⁴⁷

- Proposed EPA Rules on Greenhouse Gas Emissions

In May 2023, the U.S. Environmental Protection Agency (EPA) proposed new rules to limit GHG emissions from new and existing fossil fuel-fired electrical power plants and invited comments on its proposed rules. Under these proposed rules, the specific standards vary by the type of power plant, e.g., new or existing, coal-fired or natural-gas fired), how frequently it is used (base load, intermediate load, or peak load⁴⁸), and its operating horizon.⁴⁹

For existing fossil fuel-fired stationary combustion turbines (primarily natural gas-fired units), these proposed standards require the use of either:

- Carbon capture and sequestration (CCS) technologies that achieve a 90% capture of GHG emissions by 2035; or
- The use of 30% (by volume) hydrogen produced from low-GHG emitting fuels to help fuel (“co-fire”) the plant by 2032, increasing to 96% by 2038.⁵⁰

For existing fossil fuel-fired steam generating units (primarily coal-fired units), the proposed standards vary based on the operating horizon of the unit. Units committed either to cease operations by January 1, 2032, or to cease operations by January 1, 2035, and operate at a capacity factor limit of 20 percent, face no requirements beyond routine maintenance. Units committed to cease operations by January 1, 2040, must co-fire with 40% (by volume) natural gas and achieve a 16 percent emissions rate reduction by 2030.⁵¹

The proposed rules would require states, within 24 months of the effective date of the emissions guidelines, to submit plans to the EPA that provide for the establishment, implementation, and enforcement of standards of performance for existing sources. These state plans must generally establish standards that are at least as stringent as EPA's emission guidelines.⁵²

⁴⁶ S. 403.537(1)(c), F.S.

⁴⁷ Ss. 403.509(3) and 403.529, F.S.

⁴⁸ Though these terms may have more specific meanings in the EPA's proposed rule, in general:

- “Base load” power plants normally supply all or part of the minimum, or base, demand (load) on the electric power grid; a base load generating unit runs continuously, producing electricity at a nearly constant rate throughout most of the day.
- “Peak load,” or “peaking,” power plants help to meet electricity demand when demand is at its highest, or peak, such as in the late afternoon when electricity use for air conditioning increases during hot weather.
- “Intermediate load” power plants provide load responsive operation between base load and peaking service; the demand profile varies over time and intermediate sources are in general technically and economically suited for following the changes in demand.

See, e.g., EIA, *Electricity explained*, <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generation-capacity-and-sales.php> (last visited Jan. 22, 2024).

⁴⁹ EPA, *Fact Sheet – Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants, Proposed Rule (Fact Sheet)*, <https://www.epa.gov/system/files/documents/2023-05/FS-OVERVIEW-GHG-for%20Power%20Plants%20FINAL%20CLEAN.pdf> (last visited Jan. 22, 2024).

⁵⁰ *Id.* New base load units of the same type must satisfy these same standards and must use the most efficient available turbines. New intermediate load units of the same type must be co-fired with 30% (by volume) hydrogen produced from low-GHG emitting fuels by 2032 and must use the most efficient available turbines.

⁵¹ *Id.*

⁵² *Id.*

Both the PSC and DEP submitted comments in opposition to the proposed rules. In its response, the PSC noted that:

As of 2021, nearly 70% of Florida's electricity generation came from natural gas and nearly 10% from coal. In 2031, the combined share of natural gas- and coal-fired electricity is currently estimated to be close to 70%. Therefore, a significant percentage of the generation in Florida could be impacted by the Proposed Rule. The FPSC has concerns that the Proposed Rule will adversely affect the reliability and cost of electricity service in Florida.⁵³ (footnotes omitted)

Further, both the PSC and DEP noted that CCS and hydrogen co-firing have not been adequately demonstrated and that the proposed performance standards are not achievable by Florida's power plant operators.⁵⁴ DEP further commented:

By prioritizing the use of unfounded technologies to force a reduction in readily available generation assets, the [EPA] places the reliability, affordability, and capacity of the nation's energy supply at risk. This risk is especially concerning given Florida's geographic position and natural susceptibility to hurricanes and natural disasters.⁵⁵

In its comments, the PSC asked that the EPA address these concerns by providing electric generating units (EGUs) with adequate timeframes and flexibility. The PSC stated that:

[A] longer glide path for implementation would provide EGUs with adequate time to plan, invest, and optimize compliance measures, and it would facilitate a smoother integration of new technologies while enabling necessary infrastructure upgrades and a phased retirement or retrofitting of existing assets if required. This approach also avoids premature retirements that could result in stranded investments and potential reliability concerns. Moreover, a longer transition period would allow for additional development and deployment of advanced technologies, avoiding potential grid instability and ensuring the viability, scalability, and cost-effectiveness of emerging technologies before widespread implementation.⁵⁶

- Electrical Power Plant Retirements

Current law does not require approval of a decision to retire an electrical power plant. Retirements generally occur when an electric utility is unable to economically operate or maintain the plant due to environmental, economic, or technical concerns.⁵⁷ Planned retirements are reflected in annual, long-term plans submitted by electric utilities to the PSC for preliminary study.⁵⁸

Restoration of Electrical Power after Natural Disasters

As noted above, the PSC has jurisdiction over the planning, development, and maintenance of a coordinated electric power grid throughout Florida to assure an adequate and reliable source of energy

⁵³ Comments of the Florida Public Service Commission, Aug. 3, 2023, U.S. EPA Docket No. EPA-HQ-OAR-2023-0072: New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule.

⁵⁴ *Id.* See also Comments by the Florida Department of Environmental Protection (DEP Comments), Aug. 8, 2023, U.S. EPA Docket No. EPA-HQ-OAR-2023-0072: New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule.

⁵⁵ *Id.*

⁵⁶ FPSC Comments, *supra* note 53.

⁵⁷ FPSC, *supra* note 3, at 37.

⁵⁸ See, generally, s. 186.801, F.S., requiring electric utilities to submit "10-year site plans" to the PSC for a preliminary study and specifying the topics to be addressed in the PSC's preliminary study.

for operational and emergency purposes. Florida law requires that all electric utilities take steps to minimize major outage events through the hardening of the electric power grid against damage from natural disasters, particularly the tropical cyclones to which the state is vulnerable, subject to PSC oversight. For example, each public electric utility (i.e., investor-owned electric utility, or IOU) is required to submit to the PSC a storm protection plan at least every three years to explain the systematic approach that the utility will follow to achieve the objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability.⁵⁹ Similarly, each electric cooperative and municipal electric utility is required to submit to the PSC a report every three years of its construction standards, facility inspection practices, and vegetation management (e.g., tree trimming) practices aimed at mitigating power outages.⁶⁰ In addition, immediately before the start of each tropical cyclone season, the PSC conducts a storm preparedness workshop to hear utility preparedness plans, including efforts by utilities to coordinate responses to potential storms with state and local authorities.

Despite these efforts, tropical cyclones inevitably cause damage to Florida's electric power grid, resulting in power outages. Accordingly, Florida's electric utilities generally participate in mutual aid arrangements that provide for utilities to share resources to assist in restoring power after major outage events. Florida law does not explicitly require utilities to participate in mutual aid agreements.

Many mutual aid agreements among IOUs, including Florida's IOUs, are managed by Regional Mutual Assistance Groups (RMAGs). RMAGs facilitate the process of identifying available restoration workers and help coordinate the logistics to help with restoration efforts.⁶¹ IOUs that are in RMAGs follow guidelines established by the Edison Electric Institute (EEI) and establish additional guidelines that aid in communications and rapid mobilization and response.⁶²

The American Public Power Association (APPA), together with state and regional utilities and organizations, coordinate a mutual aid network for the nation's public power utilities (i.e., municipal electric utilities). These utilities have local, state, and regional contracts and agreements for mutual aid, and there is a national mutual aid agreement with over 2,000 municipal electric utilities and electric cooperatives. Florida's electric cooperatives sign mutual aid agreements through the National Rural Electric Cooperatives Association (NRECA). These mutual aid agreements include more than 800 cooperatives in Florida, the Southeast, and across the U.S.⁶³

Natural Gas Infrastructure

Natural gas is transported to Florida consumers via three major interstate pipelines: Florida Gas Transmission Company (3.2 billion cubic feet, or bcf, per day), Gulfstream Natural Gas System (1.4 bcf per day), and Sabal Trail Interstate Pipeline (1.1 bcf per day). Florida also receive natural gas from two minor interstate pipelines: Gulf South Pipeline Company reaches into northwest Florida, and Southern Natural Gas reaches into north Florida.⁶⁴ Companies seeking to build interstate natural gas pipelines must obtain certificates of public convenience and necessity issued by the Federal Energy Regulatory Commission (FERC). FERC considers both economic and environmental factors in its review.⁶⁵

⁵⁹ S. 366.96, F.S.

⁶⁰ R. 25-6.0343, F.A.C.

⁶¹ See FPSC, *Review of Florida's Electric Utility Hurricane Preparedness and Restoration Actions 2018*, at 24-25, available at <https://www.floridapsc.com/pscfiles/website-files/PDF/Publications/Reports/ElectricGas//UtilityHurricanePreparednessRestorationActions2018.pdf> (last visited Feb. 15, 2024)

⁶² *Id.*

⁶³ *Id.*

⁶⁴ FPSC, *supra* note 5, at 13 and 17.

⁶⁵ See Congressional Research Service, *Interstate Natural Gas Pipeline Siting: FERC Policy and Issues for Congress*, Jun. 9, 2024, available at <https://crsreports.congress.gov/product/pdf/R/R45239> (last visited Jan. 23, 2024).

Construction and operation of intrastate natural gas pipelines generally require approval through a process similar to the PPSA and TLSA processes. The Natural Gas Transmission Pipeline Siting Act (NGTPSA)⁶⁶ is the state's process for licensing the construction and operation of such pipelines within Florida.⁶⁷ The NGTPSA provides a centralized and coordinated permitting process for the location of natural gas transmission pipeline corridors and the construction and maintenance of natural gas transmission pipelines in Florida.⁶⁸

An intrastate natural gas pipeline does not require certification if the pipeline:

- Is less than 15 miles long or does not cross a county line;⁶⁹
- Has been issued a certificate of public convenience and necessity by FERC under s. 7 of the Natural Gas Act;⁷⁰
- Has been certified as an associated facility to an electrical power plant pursuant to the Florida Electrical Power Plant Siting Act;⁷¹ or
- Is owned or operated by a municipality or an 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.⁷²

These exceptions do not preclude an applicant from applying for certification under the NGTPSA.⁷³

The U.S. Department of Transportation/Pipeline and Hazardous Materials Safety Administration (PHMSA) implements federal pipeline safety standards for interstate and intrastate gas pipelines, hazardous liquid pipelines, and underground natural gas storage under the Pipeline Safety Act.⁷⁴ The Pipeline Safety Act authorizes state assumption of the intrastate regulatory, inspection, and enforcement responsibilities subject to an annual certification with PHMSA.⁷⁵ State agencies must adopt standards that comply with the Pipeline Safety Act to qualify for certification.

In Florida, The Gas Safety Law of 1967 authorizes the PSC to regulate the safe transmission and distribution of natural gas in Florida.⁷⁶ The Gas Safety Law grants the PSC exclusive jurisdiction over "all persons, corporations, partnerships, associations, public agencies, municipalities, or other legal entities engaged in the operation of gas transmission or distribution facilities with respect to their compliance with the rules and regulations governing safety standards."⁷⁷ Under this authority, the PSC promulgates rules covering the design, improvement, fabrication, installation, inspection, repair, reporting, testing, and safety standards of gas transmission and gas distribution systems.⁷⁸ The PSC is currently the state agency certified by PHMSA to inspect and enforce intrastate gas pipelines.⁷⁹

Land Development Regulations and Comprehensive Plans

Under the Community Planning Act, local governments manage local growth through comprehensive plans enforced by local land use ordinances.⁸⁰ The Act prescribes certain principles, guidelines,

⁶⁶ Ss. 403.9401-403.9425, F.S.

⁶⁷ Florida Department of Environmental Protection, *Natural Gas Pipeline Siting Act* (July 27, 2022), <https://floridadep.gov/water/siting-coordination-office/content/natural-gas-pipeline-siting-act> (last visited Jan. 18, 2024).

⁶⁸ S. 403.9402, F.S.

⁶⁹ S. 403.9405(2)(a), F.S.

⁷⁰ S. 403.9405(2)(b), F.S.

⁷¹ S. 403.9405(2)(b), F.S.

⁷² S. 403.9405(2)(c), F.S.

⁷³ S. 403.9405(2)(a)-(c), F.S.

⁷⁴ See 49 U.S.C. §§ 60102-60143.

⁷⁵ 49 U.S.C. §§ 60105(e), 60106(d).

⁷⁶ S. 368.01-061, F.S.

⁷⁷ S. 368.05(1), F.S.; see also S. 368.021, F.S. (providing more entities subject to PSC jurisdiction).

⁷⁸ See ch. 25-12, F.A.C.

⁷⁹ Florida Public Service Commission, Agency Analysis of 2023 House Bill 81, p. 2 (October 26, 2023).

⁸⁰ S. 163.3167(1)(b), F.S.

standards, and strategies to allow for an orderly and balanced future land development⁸¹ and outlines the required and optional elements of a comprehensive plan.⁸² Local governments are directed to create and adopt comprehensive plans which are sensitive to private property rights, have no undue restrictions, and leave property owners free from government action that would harm their property or constitute an inordinate burden on their property rights.⁸³

Effect of the Bill

Electrical Power Plant Siting

The bill defines the term “gross capacity” for purposes of determining applicability of the PPSA to steam and solar electrical generating facilities.

For a steam facility, the bill provides that gross capacity means “the maximum generating capacity based on the nameplate generator rating,” which is consistent with long-standing practice.

For a solar facility, the bill provides that gross capacity means “the capacity measured as alternating current which is independently metered prior to the point of interconnection to the transmission grid.”⁸⁴ This may allow the development of solar electrical generating facilities with a capacity of 75 MW or greater (when measured in alternating current) without review under the PPSA, as those facilities may be electrically divided such that the capacity of each individually metered portion is less than 75 MW. Such facilities would remain subject to otherwise required local permitting.

Electrical Power Plant Retirements

The bill requires the PSC review to certain electrical power plant retirements that occur before the otherwise expected retirement date. Specifically, the bill requires a public utility⁸⁵ to notify the PSC at least 90 days before the full retirement of an electrical power plant if the retirement date does not coincide with the retirement date specified in the utility’s most recently approved depreciation study.⁸⁶ Under the bill, the PSC may schedule a hearing no later than 90 days after receiving such notice to determine whether retirement of the plant is prudent and consistent with the energy policy goals established in the bill. At the hearing, the public utility must present the following:

- The proposed retirement date for the plant;
- Remaining depreciation expense on the plant;
- Any other costs to be recovered in relation to the plant; and
- Any planned replacement capacity.

Restoration of Electrical Power after Natural Disasters

The bill requires all electric cooperative and municipal electric utilities to maintain at least one mutual aid agreement with a municipal, cooperative, or investor-owned utility, or a pre-event agreement with a private contractor, for purposes of restoring power following a natural disaster subject to a state of emergency declared by the Governor. The bill requires each electric cooperative and municipal electric

⁸¹ S. 163.3167(2), F.S.

⁸² S. 163.3177, F.S.

⁸³ S. 163.3161(10), F.S. Specifically, such plans

⁸⁴ Electricity produced from solar facilities must be converted from direct current (DC), which is what a solar panel generates, to alternating current (AC), which is what the electric grid uses. U.S. DOE, Office of Energy Efficiency & Renewable Energy, *Solar Integration: Inverters and Grid Services Basics*, <https://www.energy.gov/eere/solar/solar-integration-inverters-and-grid-services-basics> (last visited Mar. 8, 2024). This conversion results in some power losses; thus, the AC capacity of a solar facility is lower than its DC capacity.

⁸⁵ For purposes of this provision, a public utility is an investor-owned electric utility regulated by the PSC. See s. 366.02(8), F.S. (excluding cooperatives and municipal utilities from the definition of “public utility”).

⁸⁶ By rule, each public utility must file for PSC review a depreciation study for each category of depreciable property at least once every four years or as otherwise required by order of the PSC. R. 25-6.0436, F.A.C.

utility to submit, by May 15 each year, an attestation to the PSC that it has complied with this requirement. The attestation must conform to s. 92.525, F.S., which establishes the manner in which a document may be verified for evidentiary purposes. The bill requires the PSC to compile these attestations and submit copies to the Department of Emergency Management by May 30 each year.

The bill provides that an electric cooperative or municipal electric utility that submits the required attestation is eligible to receive available state financial assistance for power restoration efforts. Failure to submit the required attestation precludes eligibility for such financial assistance until attestation is submitted. The bill specifies that it may not be construed to prohibit, limit, or disqualify any electric cooperative or municipal electric utility from receiving funding under The Stafford Act⁸⁷ or any other federal program, including programs administered by the state.

The bill specifies that it may not be construed to give the PSC jurisdiction over the terms and conditions of mutual aid agreements or pre-event agreements. Further, the bill specifies that it does not expand or alter the jurisdiction of the PSC over electric utilities.

Intrastate Natural Gas Pipeline Permitting

The bill increases the minimum length of an intrastate natural gas pipeline that requires certification under the NGTPSA from 15 miles to 100 miles. A natural gas transmission pipeline company may still obtain certification under the NGTPSA if it chooses to do so.

Land Development Regulations and Comprehensive Plans for Certain Natural Gas Facilities

The bill defines the term “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. Under the bill, “natural gas reserve” means a facility that is capable of storing and transporting and, when operational, actively stores and transports a supply of natural gas.

The bills states that a resiliency facility is a permitted use in all commercial, industrial, and manufacturing land use categories in a local government comprehensive plan and in all commercial, industrial, and manufacturing districts.

Under the bill, a resiliency facility must comply with the setback and landscape criteria for other similar uses. As long as buffer and landscaping requirements do not exceed the requirements for similar uses in commercial, industrial, and manufacturing land use categories and zoning districts, a local government may adopt an ordinance specifying such requirements for resiliency facilities.

The bill provides that after July 1, 2024, a local government may not amend its comprehensive plan, land use map, zoning districts, or land development regulations in a way that would conflict with a resiliency facility’s classification as a permitted and allowable use, including, but not limited to, a nonconforming use, structure, or development.

Security and Resiliency of Electric and Natural Gas Infrastructure

The bill requires the PSC to coordinate, develop, and recommend a plan under which an assessment of the security and resiliency of the state’s electric grid and natural gas facilities against both physical threats and cyber threats may be conducted. The bill requires the PSC to consult with the Division of Emergency Management and the Florida Digital Service. The bill provides that all electric utilities, natural gas utilities, and natural gas pipelines operating in this state must cooperate with the PSC in

⁸⁷ The Robert T. Stafford Disaster Relief and Emergency Assistance Act (The Stafford Act) is codified at 42 U.S.C. 5121 et seq. and constitutes the statutory authority for most federal disaster response activities especially as they pertain to programs of the Federal Emergency Management Agency (FEMA).

developing the plan. The bill requires that the plan must address the manner in which information needed to conduct a security and resiliency assessment may be communicated, collected, shared, stored, and adequately protected from disclosure to avoid adverse impacts on the safe and reliable operation of the state's electric grid and natural gas facilities.

The bill requires the PSC, by July 1, 2025, to submit its recommended plan to the Governor, the President of the Senate, and the Speaker of the House of Representatives. The plan must include any recommendations for legislation and may include other recommendations as determined by the PSC.

Provision of EV Charging Programs by Public Utilities

Present Situation

Florida law does not specifically address the provision of electric vehicle (EV) charging programs by public electric utilities. However, with the growing adoption of EVs, public electric utilities in the state have begun to offer EV charging services through their own public charging equipment, charging equipment at customer premises, or both under programs approved by the PSC. The PSC summarizes these programs as follows:⁸⁸

In 2017, as part of Duke Energy Florida's (DEF) rate case settlement agreement, the Commission approved a five-year EV Charging Pilot Program that allowed DEF to invest \$8 million to install and own a minimum of 530 charging ports. In 2021, the Commission approved a new settlement agreement that requested approval of a permanent EV charging station program. DEF forecasted the cost to be \$62.9 million over the four-year period 2022-2025. Reasonable costs of the programs will be recovered in rate base.

In 2019, Florida Power & Light (FPL) began a three year pilot program, known as EVolution, which targeted the installation of 1,000 charging ports. In 2020, the Commission approved a new tariff for FPL with specific EV charging rates for both utility-owned and non-utility owned charging stations. During its 2021 rate case, FPL filed a settlement agreement with parties that contained provisions expanding FPL's current EV charging pilot program. The Commission approved FPL's expanded EV pilot programs as a component of the rate case settlement agreement. The total investment is forecast to be \$175 million over the four-year period 2022-2025. Under the terms of the settlement agreement, FPL is authorized to recover the costs associated with the EV programs in rate base.

In April 2021, the Commission approved Tampa Electric Company's (TECO) EV charging pilot program, under which TECO will spend up to \$2 million to purchase, install, own, and maintain 200 EV charging stations. The pilot program will run for four years after the deployment of charging stations is complete. TECO was authorized to begin recovery of pilot program costs in rate base.

Effect of the Bill

The bill authorizes the PSC, upon petition of a public electric utility, to approve voluntary EV charging programs to become effective on or after January 1, 2025. Such programs may include, but are not limited to, residential, fleet, and public EV charging. The PSC may approve such a program if it determines that the utility's general body of ratepayers, as a whole, will not pay to support recovery of the utility's EV charging investment by the end of the useful life of the assets dedicated to the EV charging service. The bill provides that it does not preclude cost recovery for EV charging programs approved by the PSC before January 1, 2024.

⁸⁸ Florida Public Service Commission, Agency Analysis of 2024 Committee Substitute for House Bill 1645, p. 2 (Feb. 12, 2024).

Relocation of Utility Facilities

Present Situation

Under current law, utilities 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 authority⁸⁹ 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.⁹⁰ These requirements 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.⁹¹ These costs are recovered by public utilities through base rates approved by the PSC.

Effect of the Bill

The bill authorizes natural gas public utilities to petition the PSC to annually recover prudently incurred costs to relocate natural gas facilities⁹² to accommodate requirements imposed by DOT and local government entities.⁹³ The bill allows each utility to recover such costs through a charge separate and apart from base rates, referred to in the bill as the natural gas facilities relocation cost recovery clause. Such costs may not include any costs that the utility recovers through its base rates.

The bill requires 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 cost recovery charges were set.

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

The bill requires that 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 bill requires the PSC to adopt implementing rules as soon as practicable.

Energy Guidelines for Public Business

Present Situation

⁸⁹ As used in ss. 337.401-337.404, F.S., "the authority" means DOT and local government entities. S. 337.401(1)(a), F.S.

⁹⁰ S. 337.403(1)(a)-(j), F.S., provides exceptions.

⁹¹ *Lee County Electric Coop., Inc. v. City of Cape Coral*, 159 So. 3d 126, 130 (Fla. 2d DCA 2014).

⁹² The bill defines natural gas facilities as gas mains, laterals, and service lines used to distribute natural gas to customers. The term also includes all ancillary equipment needed for safe operations, including, but not limited to, regulating stations, meters, other measuring devices, regulators, and pressure monitoring equipment.

⁹³ The bill defines these costs as 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.

Current law requires state agencies to follow specified guidelines to promote energy efficiency and other environmental benefits when conducting public business.⁹⁴ Such guidelines require state agencies to:

- Consult the Florida Climate-Friendly Preferred Products List^{95,96} when procuring products from state term contracts⁹⁷ and procuring such products if the price is comparable;⁹⁸
- Contract for meeting and conference space only with facilities that have received the “Green Lodging” designation from DEP for best practices in water, energy, and wastewater efficiency standards, absent a determination from the agency head that no other viable alternative exists;⁹⁹
- Ensure all maintained vehicles meet minimum maintenance schedules shown to reduce fuel consumption and reporting compliance to the Department of Management Services (DMS);¹⁰⁰ and
- Use ethanol and biodiesel blended fuels when available. State agencies administering central fueling operations for state-owned vehicles must procure biofuels for fleet needs to the greatest extent practicable.¹⁰¹

Additionally, when procuring new vehicles, state agencies, state universities, community colleges, and local governments that purchase vehicles under a state purchasing plan must first define the intended purpose for the vehicle and determine which statutorily listed use class¹⁰² the vehicle is being procured for. These vehicles must be selected based on the greatest fuel efficiency available for the appropriate use class when fuel economy data is available. Exceptions may be made for emergency response vehicles in certain circumstances.¹⁰³

Effect of the Bill

Under the bill, DMS is no longer required to maintain the Florida Climate-Friendly Preferred Products List, and state agencies are no longer required to consult the list when procuring products from state term contracts.

The bill repeals the requirement that state agencies contract for meeting and conference space only with hotels or conference facilities that have received the “Green Lodging” designation.

Under the bill, state agencies, local governments, state universities, and community colleges procuring a new vehicle no longer have to select each vehicle based on the greatest fuel efficiency available for the use class.

⁹⁴ S. 286.29, F.S.

⁹⁵ The Florida Climate-Friendly Preferred Products List is developed by the Department of Management Services (DMS), which works with the Department of Environmental Protection to continually assess the list. The list identifies specific products and vendors that offer energy efficiency or other environmental benefits over competing products. See s. 286.29(1), F.S.

⁹⁶ The Florida Climate-Friendly Preferred Products List was last updated in January of 2021 and contains 12 recommended products, which all are categorized as either hand sanitizer or cleaning supplies. See Florida Climate-Friendly Preferred Products List, Department of Management Services (Jan. 2021), https://www.dms.myflorida.com/business_operations/state_purchasing/state_contracts_and_agreements/florida_climate-friendly_preferred_products_list (last visited Jan. 12, 2024).

⁹⁷ A state term contract is a contract for commodities or contractual services that is competitively procured by DMS and is used by agencies and other eligible users. See ss. 287.012(28), F.S. and 287.042(2)(a), F.S.

⁹⁸ S. 286.29(1), F.S.

⁹⁹ S. 286.29(2), F.S.

¹⁰⁰ S. 286.29(3), F.S.

¹⁰¹ S. 286.29(5), F.S.

¹⁰² Vehicle use classes include: state business travel, designated operator; state business travel, pool operators; construction, agricultural, or maintenance work; conveyance of passengers; conveyance of building or maintenance materials and supplies; off-road vehicle, motorcycle, or all-terrain vehicle; emergency response; or other. S. 286.29(4), F.S.

¹⁰³ S. 286.29(4), F.S.

Energy Grant Programs

Present Situation

Renewable Energy and Energy-Efficient Technologies Grant Program

The Renewable Energy and Energy-Efficient Technologies (REET) Grant Program is established within DACS to provide 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.¹⁰⁴ The REET program is no longer active.¹⁰⁵

Florida Green Government Grants Act

DACS also administers the Florida Green Government Grants Act.¹⁰⁶ DACS is directed to adopt rules and come up with green government standards that provide for cost-efficient solutions, reducing greenhouse gas emissions, improving quality of life, and strengthening the state's economy.¹⁰⁷ DACS must administer the program to assist local governments, including municipalities, counties, and school districts in the development and implementation of programs that achieve green standards.¹⁰⁸ The Florida Green Government Grants program is no longer active.¹⁰⁹

Energy Economic Zone Pilot Program

In 2009, the Legislature authorized the creation of the Energy Economic Zone Pilot Program for the purpose of developing a model area that incorporates energy-efficient land-use patterns, cultivates green economic development, encourages the generation of renewable electric energy, and promotes the manufacturing of "green" products and jobs.¹¹⁰ Florida law directs the Department of Commerce,¹¹¹ in consultation with the Department of Transportation to implement the program.¹¹² The local governing body over each designated pilot energy economic zone is responsible for allocating state credits, refunds, and exemptions up to a maximum of \$300,000 per a fiscal year.¹¹³ The last of the program's credits were given to a taxpayer in 2015, and there are no outstanding taxpayer carryovers of unused credits.¹¹⁴

Qualified Energy Conservation Bond Allocation

Qualified Energy Conservation Bonds (QECBs) are taxable bonds that are issued by state or local governments to finance one or more qualified energy conservation purpose. QCEBs are federally funded, with Congress first authorizing the program in 2008. Examples of qualified projects include energy efficiency capital expenditures in public buildings, green communities, renewable energy

¹⁰⁴ S. 377.804, F.S.

¹⁰⁵ Email from Isabelle Garbarino, Director of Legislative Affairs, Florida Department of Agriculture and Consumer Services, RE: [External]RE: Question about grants programs (Jan. 22, 2024).

¹⁰⁶ S. 377.808, F.S.

¹⁰⁷ S. 377.808(2), F.S.

¹⁰⁸ *Id.*

¹⁰⁹ Email from Isabelle Garbarino, Director of Legislative Affairs, Florida Department of Agriculture and Consumer Services, RE: [External]RE: Question about grants programs (Jan. 22, 2024).

¹¹⁰ S. 377.809(1), F.S.

¹¹¹ In 2023, the Department of Economic Opportunity was renamed as the Department of Commerce. See Chapter 2023-173, Laws of Fla.

¹¹² S. 377.809(1), F.S.

¹¹³ Department of Revenue, Agency Analysis of 2024 House Bill 1645, p. 2 (Jan. 31, 2024).

¹¹⁴ *Id.*

production, and energy efficiency education campaigns.¹¹⁵ Current law authorizes DACS to establish an allocation program for Florida's QCEB allocation in accordance with federal law.¹¹⁶

Effect of the Bill

The bill repeals the REET Grant Program, the Florida Green Government Grants Act, the Energy Economic Zone Pilot Program, and all provisions related to Qualified Energy Conservation Bonds.

Under the bill, no new applications, certifications, or allocations may be approved; no new letters of certification may be issued; no new contracts or agreements may be executed; and no new awards may be made for the repealed programs. 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 contract or agreement authorized under any of these programs shall 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 such contracts or agreements, except computations by the Department of Revenue of the income generated by or arising out of the qualifying project.

Consumer Choice of Energy Resources

Present Situation

Community Development Districts

Community development districts (CDDs) are a type of independent special district intended to provide urban community services in a cost-effective manner by managing and financing the delivery of basic services and capital infrastructure to developing communities without overburdening other governments and their taxpayers.¹¹⁷ As of January 18, 2024, there were 961 active CDDs in Florida.¹¹⁸

Each CDD is governed by a five-member board elected by the landowners of the district on a one-acre, one-vote basis.¹¹⁹ Board members serve four-year terms, except some initial board members serve a two-year term for the purpose of creating staggered terms.¹²⁰ After the sixth year (for districts of up to 5,000 acres) or the 10th year (for districts exceeding 5,000 acres or for a compact, urban, mixed-use district¹²¹) following the CDD's creation, each member of the board is subject to election by the electors of the district at the conclusion of their term. However, this transition does not occur if the district has fewer than 250 qualified electors (for districts of up to 5,000 acres) or 500 qualified electors (for districts exceeding 5,000 acres or for a compact, urban, mixed-use district).¹²²

Homeowners' Associations

¹¹⁵ Kelly Smith Burk, Florida Department of Agriculture and Consumer Services, *Qualified Energy Efficiency Conservation Bonds (QCEB) Formula Allocations to Large Local Jurisdiction* (Apr. 23, 2015), https://ccmedia.fdacs.gov/content/download/60128/file/FDACS%27_Memorandum_regarding_Qualified_Energy_Conservation_Bond_Formula_Allocations_to_Large_Local_Governments.pdf (last visited Jan. 25, 2024).

¹¹⁶ S. 377.816, F.S.

¹¹⁷ S. 190.002(1)(a), F.S.

¹¹⁸ Dept. of Commerce, Special District Accountability Program, *Official List of Special Districts*, available at <https://specialdistrictreports.floridajobs.org/OfficialList/CustomList> (last visited Jan. 26, 2024).

¹¹⁹ S. 190.006(2), F.S.

¹²⁰ S. 190.006(1), F.S.

¹²¹ S. 190.006(3)(a)2.a., F.S. A "compact, urban, mixed-use district" is a district located within a municipality and a CRA that consists of a maximum of 75 acres, and has development entitlements of at least 400,000 square feet of retail development and 500 residential units. S. 190.003(7), F.S.

¹²² S. 190.006(3)(a)2.b., F.S.

A homeowners' association (HOA) is an association of residential property owners in which voting membership is made up of parcel owners and membership is a mandatory condition of parcel ownership. HOAs are authorized to impose assessments that, if unpaid, may become a lien on the parcel.¹²³

Only HOAs whose covenants and restrictions include mandatory assessments are regulated under chapter 720, F.S., the Homeowners' Association Act (HOA Act). An HOA is administered by an elected board of directors (board). The powers and duties of an HOA include the powers and duties provided in the HOA Act and in the association's governing documents, which include the recorded covenants and restrictions, together with the bylaws, articles of incorporation, and duly adopted amendments to those documents.¹²⁴

An HOA must be a Florida corporation, and the initial governing documents must be recorded in the official records of the county in which the community is located. The powers and duties of an association include those set forth in the HOA Act and in the governing documents, except as expressly limited or restricted in the HOA Act.

HOA governing documents may not:

- Prohibit a homeowner from displaying up to two portable, removable flags in a respectful manner, consistent with the requirements for the United States flag.¹²⁵
- Prohibit any property owner from implementing Florida-friendly landscaping¹²⁶ on his or her land or create any requirement or limitation in conflict with any provision of part II of Chapter 373, F.S., regarding consumptive uses of water or a water shortages order.¹²⁷
- Prohibit solar collectors, clotheslines, or other energy devices based on renewable resources from being installed on buildings erected on the lots or parcels covered by the deed restriction, covenant, declaration, or binding agreement.¹²⁸

Additionally, HOAs may not restrict the installation, display, and storage of any items on a parcel that are not visible from the parcel's frontage or an adjacent parcel, unless the item is prohibited by general law or local ordinance. Such items include, but are not limited to:¹²⁹

- Artificial turf.
- Boats.
- Flags.
- Recreational vehicles.

Effect of the Bill

Prohibition of CDD Energy Use Restrictions

The bill provides that development district resolutions, ordinances, rules, codes, or policies, may not take any action that restricts or prohibits, or has the effect of restricting or prohibiting, certain types or fuel sources of energy production which may be used, delivered, converted, or supplied by the following entities to serve customers that these entities are authorized to serve:

¹²³ S. 720.301(9), F.S.

¹²⁴ See generally ch. 720, F.S.

¹²⁵ S. 720.3075(3), F.S.

¹²⁶ Section 373.185, F.S., defines "Florida-friendly landscaping" as quality landscapes that conserve water, protect the environment, are adaptable to local conditions, and are drought tolerant. The principles of such landscaping include planting the right plant in the right place, efficient watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste, reduction of stormwater runoff, and waterfront protection. Additional components include practices such as landscape planning and design, soil analysis, the appropriate use of solid waste compost, minimizing the use of irrigation, and proper maintenance.

¹²⁷ S. 720.3075(4), F.S.

¹²⁸ S. 163.04(2), F.S.

¹²⁹ S. 720.3045, F.S.

- 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
- Certain propane dealers, dispensers, and gas cylinder exchange operators.

The bill also provides that development district resolutions, ordinances, rules, codes, or policies, may not take any action that restricts or prohibits, or have the effect of restricting or prohibiting, the use of any appliance,¹³⁰ including a stove or grill, which uses the types or fuel source of energy production which may be used, delivered, converted, or supplied by the entities listed above.

Prohibition of HOA Energy Use Restrictions

The bill provides that HOA 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 customer within the HOA 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
- Certain propane dealers, dispensers, and gas cylinder exchange operators.

The bill also provides that HOA declarations of covenants, articles of incorporation, or bylaws may not preclude, the use of any appliance,¹³¹ including a stove or grill, which uses the types or fuel source of energy production which may be used, delivered, converted, or supplied by the entities listed above.

Wind Energy

Present Situation

Wind energy is a renewable form of power generated through the use of wind turbines, which convert the turning motion of blades, pushed by moving air, into electricity.¹³² The turning blades of a wind turbine spin a generator just downwind from the blades to produce the electric energy.¹³³ Wind turbines can be installed both on land and offshore, taking advantage of the wind currents across the United States and along its coasts.¹³⁴

¹³⁰ The bill defines the term “appliance” as 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.

¹³¹ The bill defines the term “appliance” as 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.

¹³² U.S. Department of Energy, *What is Wind Power?*, <https://windexchange.energy.gov/what-is-wind> (last visited Feb. 15, 2024).

¹³³ *Id.*

¹³⁴ *Id.*

Wind turbines are growing taller because, generally, more energy can be produced from larger wind turbines.¹³⁵ The average hub height¹³⁶ for offshore wind turbines in the United States is projected to increase from 100 meters in 2016 to about 150 meters by 2035.¹³⁷

Areas with annual average wind speeds of at least 6.5 meters per second at a height of 80 meters generally have suitable winds to support wind energy development.¹³⁸ States in the southeastern United States, including Florida, comprise a low-wind zone.¹³⁹ In the majority of the state, the average annual wind speed at 80-meters does not exceed 5.5 meters per second.¹⁴⁰ Florida does not have any significant wind energy resources, onshore or offshore, and the state has no utility-scale wind-powered generating capacity.¹⁴¹ As of December 31, 2022, the PSC reported that 14 customer-owned wind turbines, with a total gross power rating of 187 kilowatts, were interconnected to the electric power grid through net metering programs.¹⁴² Potential off-grid uses of small-scale wind turbines in the state, including uses for remote properties, private boats, and agriculture, are not fully reported.¹⁴³

Effect of the Bill

The bill provides the following definitions in relation to wind energy:

- "Coastline" means the established line of mean high water.
- "Offshore wind energy facility" means any wind energy facility located on waters of this state, including other buildings, structures, vessels, or electrical transmission cabling to be sited on waters of this state, or connected to corresponding onshore substations that are used to support the operation of one or more wind turbines sited or constructed on waters of this state and any submerged lands or territorial waters that are not under the jurisdiction of the state.
- "Real property" means land, buildings, fixtures, and all other improvements to land. The terms "land," "real estate," "realty," and "real property" may be used interchangeably.
- "Vessel" is synonymous with boat, as referenced in article VII, section 1 of the Florida Constitution, and includes every description of watercraft, barge, and airboat, other than a seaplane on the water, used or capable of being used as a means of transportation on water.
- "Waters of this state" means any navigable waters of the United States within the territorial limits of this state, the marginal sea adjacent to this state and the high seas when navigated as a part of a journey or ride to or from the shore of this state, and all the inland lakes, rivers, canals and submerged lands under the jurisdiction of this state.

¹³⁵ *Id.*

¹³⁶ The hub height is the distance from the ground to the middle of the turbine's rotor. U.S. Department of Energy, *Wind Turbines: The Bigger, the Better*, <https://www.energy.gov/eere/articles/wind-turbines-bigger-better> (last visited Feb. 15, 2024).

¹³⁷ *Id.*

¹³⁸ U.S. Department of Energy, *U.S. Average Annual Wind Speed at 80 Meters*, <https://windexchange.energy.gov/maps-data/319> (last visited Feb. 15, 2024).

¹³⁹ Gary White, *Polk couple betting on the breeze builds wind turbine — 1st known residential use in Florida*, *The Ledger* (Jul. 2, 2019), <https://www.theledger.com/story/news/local/2019/07/02/polk-couple-betting-on-breeze-builds-wind-turbine-1st-known-residential-use-in-florida/4775623007/> (last visited Feb. 15, 2024).

¹⁴⁰ U.S. Department of Energy, *Florida 80-Meter Wind Resource Map*, <https://windexchange.energy.gov/maps-data/24> (last visited Feb. 15, 2024).

¹⁴¹ U.S. Energy Information Administration, *Florida State Profile and Energy Estimates*, <https://www.eia.gov/state/analysis.php?sid=FL#:~:text=Solar%20energy%20and%20biomass%20provide,generation%20came%20from%20solar%20energy> (last visited Feb. 16, 2024).

¹⁴² Florida Public Service Commission, *Customer Owned Energy Renewable Energy System, 2022 Net Metering Summary Spreadsheet*, <https://www.floridapsc.com/pscfiles/website-files/PDF/Utilities/Electricgas/CustomerRenewable/2022/2022%20Net%20Metering%20Summary%20Spreadsheet/2022%20Net%20Metering%20Report.pdf> (last visited Feb. 16, 2024).

¹⁴³ For a general overview of non-utility scale wind energy uses, see U.S. Department of Energy (USDOE), Wind Energy Technologies Office, *Who Uses Distributed Wind?* (Aug. 12, 2019), <https://www.energy.gov/eere/wind/articles/who-uses-distributed-wind> (last visited Feb. 16, 2024).

- "Wind energy facility" means an electrical wind generation facility or expansion thereof comprised of one or more wind turbines and including substations; meteorological data towers; aboveground, underground, and electrical transmission lines; and transformers, control systems, and other buildings or structures under common ownership or operating control used to support the operation of the facility the primary purpose of which is to offer electricity supply for sale.
- "Wind turbine" means a device or apparatus that has the capability to convert kinetic wind energy into rotational energy that drives an electrical generator consisting of a tower body and rotator with two or more blades and capable of producing more than 10 kilowatts of electrical power. The term includes both horizontal and vertical axis turbines. The term does not include devices used to measure wind speed and direction, such as an anemometer.

The bill prohibits the construction or expansion of an offshore wind energy facility in Florida. The bill also prohibits the construction or expansion of a wind turbine on real property within 1 mile of coastline, within 1 mile of the Atlantic or Gulf Intracoastal Waterway, on waters of the state, and on any submerged lands. The bill authorizes DEP to bring an action for injunctive relief against any person who constructs or expands an offshore wind energy facility or a wind turbine in violation of the provisions of the bill. The bill specifically exempts wind turbines installed before July 1, 2024, and wind turbines affixed directly to a vessel for the purpose of providing power to onboard electronic equipment.

Under the bill, DEP must review all applications for federal wind energy leases in the territorial waters of the United States adjacent to waters of Florida, and shall signify its approval or objection to each application.

Developing Energy Technologies

Present Situation

Nuclear Technologies

Historically, nuclear power generation in the United States has relied on large light water reactors (LWRs) which were first commercialized in the 1950s.¹⁴⁴ Following the passage of the 2005 Energy Policy Act, federal loan guarantees along with state financing mechanisms began to spur activity in nuclear reactor development throughout states.¹⁴⁵ This activity slowed after public sentiment turned against nuclear power due to safety concerns related to the 2011 disaster at the Fukushima Daiichi nuclear plant in Japan and after the economics of power generation changed due to falling natural gas prices.¹⁴⁶ However, there has been increasing interest in "advanced nuclear reactors"¹⁴⁷ and "small modular reactors"¹⁴⁸ recently.¹⁴⁹ Advanced nuclear reactors are believed to improve upon earlier generations of reactors in areas of: cost, safety, security, waste management, and versatility.¹⁵⁰

¹⁴⁴ MARK HOLT, CONG. RSCH. SERV., R45706, *ADVANCED NUCLEAR REACTORS: TECHNOLOGY OVERVIEW AND CURRENT ISSUES* (2023) [hereinafter CRS Report, *Advanced Nuclear Reactors*].

¹⁴⁵ Daniel Shea, *Nuclear Policy in the States: A National Review*, *Journal of Critical Infrastructure Policy*, Fall/Winter 2023, at 14-15 [hereinafter Shea, *Nuclear Policy in the States*].

¹⁴⁶ *Id.* at 15.

¹⁴⁷ An advanced nuclear reactor is a fission reactor "with significant improvements compared to reactors operating on the date of enactment" or a reactor using nuclear fusion. 42 U.S.C § 16271(b)(1).

¹⁴⁸ Small modular reactors are a form of advanced nuclear reactor with an electric generating capacity of 300 MW. Advanced nuclear reactors can be configured into small modular reactors. CRS Report, *Advanced Nuclear Reactors*, *supra* note 144, at 3-4.

¹⁴⁹ *Id.* at *Introduction*.

¹⁵⁰ CRS Report, *Advanced Nuclear Reactors*, *supra* note 144, at 3.

Nuclear energy is “carbon-free” as it does not directly produce carbon dioxide or other greenhouse gases.¹⁵¹ Nuclear power provides more than half of the carbon-free electricity produced in the U.S.¹⁵² Nuclear energy currently constitutes 8% of electric generating capacity in the United States, yet generates 18% of the total electricity in the country.¹⁵³ Nuclear energy generates about 13% of total electricity generation in Florida.¹⁵⁴ This is because most nuclear plants operate around the clock and generate at maximum capacity around 93% of the time – nearly twice the capacity factor of resources like coal and natural gas, and triple that of wind and solar.¹⁵⁵

State legislation related to nuclear energy has increased over the past decades.¹⁵⁶ These policies address different vantage points; some states have enacted policies to insulate their existing fleet of reactors from premature closure, while others have enacted policies to develop new nuclear capacity.¹⁵⁷ Many states have directed the conduct of studies on advanced nuclear reactors.¹⁵⁸

Hydrogen for Transportation

Hydrogen powered vehicles use hydrogen as a fuel source and produce no harmful tailpipe emissions as they only emit water vapor and warm air.¹⁵⁹ Currently, hydrogen powered vehicles are only available in select markets like southern and northern California.¹⁶⁰ This is because California is the only state which has a hydrogen fueling infrastructure, with over 60 public stations.¹⁶¹

California implemented its hydrogen fueling infrastructure with its “Hydrogen Highway Network” (Network) in 2004, which was later implemented by the legislature in 2005. The Network was designed with the desire to expand zero-emission hydrogen fuel cell electric cars by expanding California’s network of hydrogen refueling stations.¹⁶² While hydrogen powered vehicles are environmentally beneficial, issues arise from the fueling infrastructure. Such issues, made apparent by the Network, include¹⁶³:

- Vehicles becoming stranded because of lack of fueling stations;
- Frequent station malfunctions/shortages; and
- High state subsidies per fueling station.

In October 2023, the U.S. Department of Energy announced \$7 billion in federal funding under the Bipartisan Infrastructure Law to fund seven Regional Clean Hydrogen Hubs. The purpose of these investments is to “accelerate the commercial-scale deployment of clean hydrogen helping to generate

¹⁵¹ Anne White & Aaron Krol, *Nuclear Energy*, Climate Portal (Oct. 14, 2020), <https://climate.mit.edu/explainers/nuclear-energy> (last visited Jan. 13, 2024).

¹⁵² *Id.*

¹⁵³ U.S. Energy Information Administration, *U.S. energy facts explained*, <https://www.eia.gov/energyexplained/us-energy-facts/data-and-statistics.php> (last visited Jan. 12, 2024).

¹⁵⁴ U.S. Energy Information Administration, *Florida’s electricity generation mix is changing*, (Aug. 24, 2023), <https://www.eia.gov/todayinenergy/detail.php?id=60221> (last visited Jan. 19, 2024).

¹⁵⁵ Shea, *Nuclear Policy in the States*, *supra* note 145, at 16.

¹⁵⁶ Daniel Shea, *Nuclear Power and the Clean Energy Transition* (Apr. 6, 2023), <https://www.ncsl.org/energy/nuclear-power-and-the-clean-energy-transition> (last visited Jan. 13, 2024) (noting an increase from 74 bills considered in 2016 to more than 160 bills considered in 2022 in relation to nuclear energy).

¹⁵⁷ *Id.*

¹⁵⁸ See e.g., MICH. COMP. LAWS § 460.10hh (2022); Montana Senate Joint Resolution 3 (2021); Penn. HR 238 (2022).

¹⁵⁹ United States Department of Energy, *Fuel Cell Electric Vehicles*, https://afdc.energy.gov/vehicles/fuel_cell.html (last visited Jan. 13, 2024).

¹⁶⁰ United States Department of Energy, *Hydrogen Fuel Cell Electric Vehicle Availability*, https://afdc.energy.gov/vehicles/fuel_cell_availability.html (last visited Jan. 13, 2024).

¹⁶¹ United States Department of Energy, *Hydrogen Fueling Station Locations by State*, <https://afdc.energy.gov/data/10370> (last visited Jan. 13, 2024).

¹⁶² California Energy Commission, *Hydrogen Vehicles & Refueling Infrastructure*, <https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/clean-transportation-funding-areas-1> (last visited Jan. 13, 2014).

¹⁶³ Evan Halper, *Is California’s ‘Hydrogen Highway’ a road to nowhere?*, L.A. Times, Aug. 10, 2021.

clean, dispatchable power, create a new form of energy storage, and decarbonize heavy industry and transportation.”¹⁶⁴

Effect of the Bill

Evaluation of Advanced Nuclear Technologies

The bill requires the PSC to study and evaluate the technical and economic feasibility of using advanced nuclear power technologies, including SMRs, to meet the electrical power needs of the state. The bill also requires the PSC to research means to encourage installation and use of nuclear technologies at military installations in the state in partnership with public utilities. In conducting this study, the PSC must consult with the Department of Environmental Protection and the Division of Emergency Management.

By April 1, 2025, the PSC must prepare and submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives containing its findings and recommendations for potential legislative or administrative actions that may enhance the use of advanced nuclear technologies in a manner consistent with the state energy policy goals established by the bill.

Evaluation of Hydrogen Fueling Infrastructure

The bill requires DOT, in consultation with 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.

By April 1, 2025, DOT must prepare and submit a report to the Governor, the President of the Senate, and the Speaker of the House of Representatives containing its findings and any recommendations for potential legislative or administrative actions concerning the development of hydrogen fueling infrastructure in manner consistent with the state energy policy goals established by the bill.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill may have a negative impact on state government expenditures because it imposes the following new requirements for specified state agencies, which may require the expenditure of resources:

- PSC development of a plan to assess the security and resiliency of the state's electric grid and natural gas facilities;
- PSC study and evaluation of advanced nuclear power technologies; and
- DOT study and evaluation of the potential development of hydrogen fueling infrastructure.

Affected agencies may be able to satisfy all or some of these requirements with existing resources. Further, affected agencies may see expenditures offset to some degree by potential savings, and other agencies may see reduced expenditures, related to:

¹⁶⁴ U.S. DOE, Office of Clean Energy Demonstrations, *Regional Clean Hydrogen Hubs Selections for Award Negotiations*, <https://www.energy.gov/oced/regional-clean-hydrogen-hubs-selections-award-negotiations> (last visited Jan. 26, 2024).

- Elimination of certain state purchasing requirements; and
- Expansion of the types of intrastate natural gas pipelines that are exempt from siting under the Natural Gas Transmission Pipeline Siting Act.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill refocuses state energy policy on promoting and ensuring a cost-effective, reliable, resilient, safe, diverse, and U.S. sourced energy supply and makes specific changes in law to meet these policy goals. The bill also attempts to streamline certain regulatory requirements to strengthen energy infrastructure, prepare Florida to respond to changing market forces, and increase market-based policies within Florida's various energy sectors. To the extent these changes succeed, there will be direct positive impacts on the economic well-being of Florida's businesses and consumers.

D. FISCAL COMMENTS:

None.