


# Energy, Communications & Cybersecurity Subcommittee

**Wednesday, March 29, 2023**
**11:30 am – 2:00 pm**
**Reed Hall (102 HOB)**

**Meeting Packet**

**Paul Renner**
**Speaker**

**Mike Giallombardo**
**Chair**

# The Florida House of Representatives

**Commerce Committee**

**Energy, Communications & Cybersecurity Subcommittee**

**Paul Renner**
**Speaker**

**Mike Giallombardo**
**Chair**

## Meeting Agenda

Wednesday, March 29, 2023
11:30 am – 2:30 pm
Reed Hall (102 HOB)

I. Call to Order

II. Roll Call

III. Welcome and Opening Remarks

IV. Consideration of the following bill(s):

- HM 1137 New Nuclear Energy by Overdorf
- HB 1591 Electric Vehicle Regulation by Maggard

V. Closing Remarks

VI. Adjournment

HB 1137

# HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** HM 1137 New Nuclear Energy
**SPONSOR(S):** Overdorf
**TIED BILLS:** **IDEN./SIM. BILLS:**

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR or BUDGET/POLICY CHIEF |
|---|---|---|---|
| 1) Energy, Communications & Cybersecurity Subcommittee | | Mortellaro | Keating |
| 2) Commerce Committee | | | |

## SUMMARY ANALYSIS

Under Federal Law, the United States Nuclear Regulatory Commission (NRC) is responsible for licensing and regulating the operation of commercial nuclear power plants in the United States. NRC approval is necessary before a nuclear power plant can be built and operated, and the NRC holds continued oversight to ensure the nuclear power plants comply with their regulations to protect public health and safety, defense and security, and the environment.

Reprocessing turns used and unusable uranium and plutonium into usable energy resources, reclaiming and repurposing nuclear waste. Many countries have been implementing policies to reprocess nuclear fuel.

This memorial urges the President and Congress to take action to adjust regulatory policy as necessary to allow states the ability to conduct feasibility studies on reclamation and repurposing of spent nuclear fuel for new nuclear energy generation.

Legislative memorials are not subject to the Governor's veto powers and are not presented to the Governor for review. Memorials have no force of law, as they are mechanisms for formally petitioning the federal government to act on a particular subject.

This memorial does not have a fiscal impact on the state or local governments.

The Memorial is not subject to the Governor's veto powers.

## FULL ANALYSIS

## I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

**Current Situation**

**Reprocessing**

Reprocessing generally refers to "the processes used to separate spent nuclear reactor fuel into nuclear materials that may be recycled for use in new fuel and material that would be discarded as waste."[1] While there are no commercial reprocessing facilities currently operating in the U.S., there are many in other countries.[2] The process of reprocessing turns used and unusable uranium and plutonium into usable energy resources, reclaiming and repurposing nuclear waste. The nuclear power formed from this process is a low-carbon source of energy, since it doesn't produce CO2 during operations.[3] Many European countries, Russia, China, and Japan have been implementing policies to reprocess nuclear fuel.[4]

The U.S. currently has 86,000 metric tons of spent nuclear fuel from commercial reactors which are stored at 75 sites.[5] The spent nuclear fuel is held in repositories.[6] While the U.S. has had three commercial reprocessing plants in the past, they are all currently decommissioned due to nuclear weapons proliferation concerns and level of radioactivity in the waste.[7]

**Regulatory Policy for Licensing**

For Nuclear Fuel Facilities

Under Federal Law, the United States Nuclear Regulatory Commission (NRC) is responsible for licensing and regulating the operation of commercial nuclear power plants in the United States.[8] Currently, all operating nuclear power plants have been licensed under a two-step process described in Title 10 of the Code of Federal Regulations (10 CFR) under Part 50.[9] This process requires a construction permit and an operating license.[10] In 1989, to improve regulatory efficiency and add more predictability to the licensing process, 10 CFR Part 52[11] was created, which includes a combined license that provides the construction permit and an operating license.[12] There are other licensing options under Part 52, such as Early Site Permits and certified standard plant designs.[13] NRC holds final authority of approval, and their approval is necessary before a nuclear power plant can be built and operated.[14] The NRC holds continued oversight of these plants to make sure they comply with NRC regulations to protect public health and safety, defense and security, and the environment.[15]

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[1] United States Nuclear Regulatory Commission, *Reprocessing*, https://www.nrc.gov/materials/reprocessing.html (last visited Mar. 27, 2023).
[2] *Id*.
[3] World Nuclear Association, *Processing of Used Nuclear Fuel* (Dec. 2020), https://world-nuclear.org/information-library/nuclear-fuel-cycle/fuel-recycling/processing-of-used-nuclear-fuel.aspx (last visited Mar. 23, 2023).
[4] *Id*.
[5] U.S. Government Accountability Office, *Commercial Spent Nuclear Fuel: Congressional Action Needed to Break Impasse and Develop a Permanent Disposal Solution*, https://www.gao.gov/products/gao-21-603 (last visited Mar. 27, 2023).
[6] *Id*.
[7] World Nuclear Association, *Processing of Used Nuclear Fuel*, https://world-nuclear.org/information-library/nuclear-fuel-cycle/fuel-recycling/processing-of-used-nuclear-fuel.aspx (last visited Mar. 27, 2023).
[8] United States Nuclear Regulatory Commission, *Backgrounder on Nuclear Power Plant Licensing Process*, https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/licensing-process-fs.html (last visited Mar. 23, 2023).
[9] 10 CFR 50.
[10] Backgrounder on Nuclear Power Plant Licensing Process, *supra* note 7.
[11] 10 CFR 52.
[12] Backgrounder on Nuclear Power Plant Licensing Process, *supra* note 7.
[13] *Id*.
[14] *Id*.
[15] *Id*.

For Reprocessing Facilities

The Global Nuclear Energy Partnership (GNEP) was an initiative with a comprehensive strategy to increase U.S. and global energy security, reduce the risk of nuclear proliferation,[16] and improve the environment.[17] The primary goal of implementing this initiative was to establish domestic reprocessing. In 2008, the U.S. Congress reduced funding of GNEP and this goal dissipated. Between 2008 and 2013, the NRC received four letters from companies supporting an updated reprocessing regulatory framework. As a result of these letters, the NRC focused its efforts on creating a more broadly applicable framework for commercial reprocessing facilities.[18] In 2013, the NRC provided resource cost estimates that would be required to update the NRC regulatory framework for licensing a reprocessing facility.

In 2020, stakeholders including the Nuclear Energy Institute (NEI), the U.S. Department of Energy (DOE), the Union of Concerned Scientists (UCS), industry representatives, environmental groups, and private citizens got involved. In March of 2020, NEI and industry representatives voiced support for continuing rulemaking for a clear regulatory framework of reprocessing, but none of these industry stakeholders planned to apply for a reprocessing facility. UCS indicated that they do not support rulemaking because of proliferation concerns. The NRC reached out to organizations who create reactors. The NRC determined that in addition to using fresh fuel obtained from enrichment and fabrication, other advanced reactor designs would eventually be able to source fuel from spent fuel of other reactors; however, there was limited interest in pursuing reprocessing activities in the near future. DOE has some reprocessing initiatives, but none of their initiatives require NRC licensing.[19] Eventually, in 2021, the NRC staff determined that reprocessing licensing rulemaking is not currently justified due to the limited interest from potential applicants for reprocessing facilities and the expansive costs.[20]

**Nuclear Power Plants in Florida**

The NRC Regional Officer in Atlanta holds jurisdiction over Florida's nuclear power reactors. Currently, there are two operating nuclear power reactors,[21] no fuel cycle facilities,[22] and no uranium recovery facilities located in Florida. The four operating nuclear power reactor units, are located in two locations in Florida, St. Lucie[23] and Turkey Point.[24] These power plants generate 12% of the state's electricity.[25]

**Feasibility Studies**

[16] World 101, *What is Nuclear Proliferation*, https://world101.cfr.org/global-era-issues/nuclear-proliferation/what-nuclear-proliferation (last visited Mar. 27, 2023).
[17] *The Global Nuclear Energy Partnership: Greater Energy Security in a Cleaner, Safer World*, https://www.energy.gov/articles/global-nuclear-energy-partnership-0 (last visited Mar. 27, 2023).
[18] Reprocessing, *supra* note 1.
[19] While DOE reprocessing is not required to obtain licensing under the NRC, the NRC must be consulted and is required to monitor DOE waste disposal actions. U.S. Department of Energy, DOE M 435.1-1, *Radioactive Waste Management Manual*, https://www.directives.doe.gov/directives-documents/400-series/0435.1-DManual-1 (last visited Mar. 27, 2023); Office of Environmental Management, *How DOE Makes Reprocessing Waste Determinations*, https://www.energy.gov/em/how-doe-makes-reprocessing-waste-determinations (last visited Mar. 27, 2023).
[20] United States Nuclear Regulatory Commission, *DISCONTINUATION OF RULEMAKING – SPENT FUEL REPROCESSING*, https://www.nrc.gov/docs/ML2030/ML20301A388.pdf.
[21] A "nuclear power reactor" uses heat energy released from splitting atoms of certain elements to generate electricity. Uranium is the basic fuel; World Nuclear Association, *Nuclear Power Reactors*, https://world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-power-reactors/nuclear-power-reactors.aspx#:~:text=Nuclear%20Power%20Reactors%201%20Nuclear%20reactors%20work%20by,most%20of%20those%20operating%20are%20second-generation.%20More%20items (last visited Mar. 23, 2023).
[22] According to the NRC, "fuel cycle facilities" make nuclear fuel for commercial nuclear reactors or manufacture specialty materials for the U.S. Navy's nuclear fleet. There are three types: uranium conversion, uranium enrichment, and fuel fabrication. United States Nuclear Regulatory Commission, *Fuel Cycle Facilities*, https://www.nrc.gov/materials/fuel-cycle-fac.html (last visited Mar. 27, 2023).
[23] United States Nuclear Regulatory Commission, *St. Lucie Plant, Unit 1*, https://www.nrc.gov/info-finder/reactors/stl1.html (last visited Mar. 23, 2023); USNRC, *St. Lucie Plant, Unit 2*, https://www.nrc.gov/info-finder/reactors/stl2.html (last visited Mar. 23, 2023).
[24] United States Nuclear Regulatory Commission, *Turkey Point Nuclear Generating Unit 3*, https://www.nrc.gov/info-finder/reactors/tp3.html (last visited Mar. 23, 2023); United States Nuclear Regulatory Commission, *Turkey Point Nuclear Generating Unit 4*, https://www.nrc.gov/info-finder/reactors/tp4.html (last visited Mar. 23, 2023).
[25] Florida Energy Systems Consortium, *Florida Energy Facts*, http://floridaenergy.ufl.edu/florida-energy-facts/#:~:text=Florida%20was%20second%20only%20to%20Texas%20in%202014,including%20renewable%20energy%2C%20supplied%20the%20remaining%20electricity%20generation (last visited Mar. 23, 2023).

A feasibility study is an important step in developing new nuclear projects.[26] As an overview, a feasibility study will assess all aspects of energy demand, each energy option, cost and technical aspects, any the varying degrees of social and environmental implications to determine if it is possible, practical, and viable.[27]

**Effect of the Memorial**

The memorial urges the President and Congress to take action to adjust regulatory policy as necessary to allow states the ability to conduct feasibility studies[28] on reclamation and repurposing of spent nuclear fuel for new nuclear energy generation.

Legislative memorials are not subject to the Governor's veto power and are not presented to the Governor for review.[29] Memorials have no force of law, as they are mechanisms for formally petitioning the federal government to act on a particular subject. Upon adoption by both chambers, copies of the memorial will be sent to the President of the United States, the President of the United States Senate, the Speaker of the United States House of Representatives, and each member of the Florida delegation to the United States Congress.

B. SECTION DIRECTORY:

None.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

None.

D. FISCAL COMMENTS:

None.

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[26] International Atomic Energy Agency, *Preparation of a Feasibility Study for New Nuclear Power Projects*, IAEA NUCLEAR ENERGY SERIES NO. NG-T-3.3 (2014), https://www-pub.iaea.org/MTCD/Publications/PDF/Pub1633Web-39794849.pdf.
[27] *Id*.
[28] *Id*.
[29] A "memorial" is a measure addressed to an executive agency or another legislative body, usually Congress, which expresses the consensus of the Florida Legislature or urges that certain action be taken on a matter within the jurisdiction of the agency or body to which it is addressed. When both houses adopt the measure, the memorial is signed by the legislative officers and transmitted to the Secretary of State for presentation to the addressee. A memorial is not subject to the approval or veto powers of the Governor, is not subject to constitutional title requirements, and does not have the effect of law. The Florida Senate, *Glossary*, https://www.flsenate.gov/Reference/Glossary (last visited Mar. 23, 2023).

## III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to affect county or municipal governments.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

## IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

House Memorial

A memorial to the President and Congress of the United States, urging the President and Congress to take action to adjust regulatory policy as necessary to allow states the ability to conduct feasibility studies on reclamation and repurposing of spent nuclear fuel for new nuclear energy generation.

WHEREAS, nuclear reprocessing technology has been used extensively throughout Europe, Russia, and Japan, and

WHEREAS, existing reprocessing technology has resulted in a gain of approximately 30 percent more energy than the initial uranium source, and

WHEREAS, the United States has conducted more than 250 plant-years of reprocessing technology operations, and

WHEREAS, reprocessing technology results in more rapid decay and reduces the volume of high-level nuclear waste to nearly one-fifth, and

WHEREAS, fourth generation fast neutron reactors will significantly expand the opportunity for reprocessing technology to include previously underused stockpiles of depleted uranium, and

WHEREAS, the use of depleted uranium in reprocessing technology potentially amounts to over 1.2 million tons of



CODING: Words ~~stricken~~ are deletions; words underlined are additions.

underused uranium stockpiles, which significantly reduces the prevalence of uranium mining, and

WHEREAS, nuclear fuel is a green energy that supports the carbon-free power demand, and

WHEREAS, four nuclear reactors located at two power plants in the state generate more than 3,000 megawatts, powering nearly 1.9 million homes with clean energy, and

WHEREAS, federal government regulation and policy changes have resulted in the closure of all three civil reprocessing plants in the United States, NOW, THEREFORE,

Be It Resolved by the Legislature of the State of Florida:

That the President and Congress of the United States are urged to take action to adjust regulatory policy as necessary to allow states the ability to conduct feasibility studies on reclamation and repurposing of spent nuclear fuel for new nuclear energy generation.

BE IT FURTHER RESOLVED that the Secretary of State dispatch copies of this memorial to the President of the United States, the President of the United States Senate, the Speaker of the United States House of Representatives, and each member of the Florida delegation to the United States Congress.



CODING: Words ~~stricken~~ are deletions; words underlined are additions.

# HB 1591

# HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** HB 1591 Electric Vehicle Regulation
**SPONSOR(S):** Maggard
**TIED BILLS:** **IDEN./SIM. BILLS:** SB 1176

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR or BUDGET/POLICY CHIEF |
|---|---|---|---|
| 1) Energy, Communications & Cybersecurity Subcommittee | | Walsh | Keating |
| 2) State Administration & Technology Appropriations Subcommittee | | | |
| 3) Commerce Committee | | | |

## SUMMARY ANALYSIS

Consumers and fleets considering electric vehicles (EVs), including all-electric vehicles and plug-in hybrid electric vehicles (PHEVs), need access to charging equipment. For most drivers, this starts with charging at home or at fleet facilities. Charging stations at workplaces, public destinations, and along highways offer more flexible charging opportunities at commonly visited locations.

There are several companies in the U.S that offer EV charging stations for public use under a variety of business models. In addition, public (investor-owned) electric utilities in Florida provide public EV charging stations partially funded through rates set by the Public Service Commission (PSC).

The federal government has set a goal to make half of all new vehicles sold in the U.S. in 2030 zero-emissions vehicles and to build a network of 500,000 chargers to help make EVs accessible to all Americans for both local and long-distance trips. Signed in November 2021, the Bipartisan Infrastructure Law, also referred to as the Infrastructure Investment and Jobs Act, contains $7.5 billion in funding for EV charging stations.

The bill:

- Prohibits public utilities from using rate-based investments in EV charging stations;
- Requires the PSC to adopt rules for the orderly transition of existing public utility investments in public EV charging stations to structurally separate subsidiaries, without adversely impacting the public utility's ratepayers;
- May limit public utility cost recovery to distribution-level system infrastructure that does not include EV charging stations;
- Eliminates a requirement that the Department of Agriculture and Consumer Services adopt rules to provide labeling and price-posting for EV charging stations.
- Requires the PSC to adopt rules that will facilitate the widespread deployment of EV charging stations and infrastructure through consumer choice and competition and the use of reasonable and affordable cost-based electric rates for non-utility providers of public EV charging service; and
- Requires the PSC to propose such rules by January 1, 2024, and to adopt final rules by January 1, 2025.

The bill does not appear to impact state or local government revenues or expenditures.

The bill provides an effective date of July 1, 2023.

## FULL ANALYSIS

## I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

**Current Situation**

Electric Vehicle Charging

Consumers and fleets considering electric vehicles (EVs), including all-electric vehicles and plug-in hybrid electric vehicles (PHEVs), need access to charging equipment. For most drivers, this starts with charging at home or at fleet facilities. Charging stations at workplaces, public destinations, and along highways offer more flexible charging opportunities at commonly visited locations.[1]

EV charging equipment is classified based on the rate of charge.[2]

- Alternating Current (AC) Level 1 equipment provides charging through a common 120 volt AC outlet. Most, if not all, EVs come with a portable Level 1 cord, so no additional charging equipment is required. Level 1 chargers can take 40-50 hours to charge an all-electric vehicle from empty and 5-6 hours to charge a PHEV from empty.[3]
- AC Level 2 equipment offers charging through 240 volt (in residential applications) or 208 volt (in commercial applications) electrical service, and is common for home, workplace, and public charging. As of 2021, 80% of public EV charging ports in the country were Level 2.[4] Level 2 chargers can charge an all-electric vehicle from empty in 4-10 hours and a PHEV from empty in 1-2 hours.[5]
- Direct-current (DC) fast charging equipment enables rapid charging along heavy traffic corridors at installed stations. As of 2021, over 15% of public EV charging ports in the country were DC fast chargers.[6] DC fast charging equipment can charge an all-electric vehicle to 80 percent in 20 minutes to 1 hour.[7]

Charging times vary depending on the depletion level of the battery, how much energy the battery holds, the type of battery, temperature, and the type of supply equipment.[8]

Public EV Charging in the U.S.

Currently in the U.S., there are almost 52,000 EV public charging stations offering a total of 133,603 charging ports. AC Level 2 charging ports comprise 103,133 of these ports, and DC fast charging ports comprise just less than 30,000 of these ports.[9] There are several companies in the U.S that offer EV charging stations for public use under a variety of business models. These market participants must raise and expend private capital and compete with other providers for high-usage locations.[10]

- ChargePoint is the country's largest EV charging network, with over 27,000 stations (i.e., locations) offering nearly 50,000 individual charging points, 1,700 of which are DC fast

[1] U.S. Dept. of Energy (DOE), Alternative Fuels Data Center, *Developing Infrastructure to Charge Electric Vehicles*, https://afdc.energy.gov/fuels/electricity_infrastructure.html (last visited Mar. 24, 2023).
[2] U.S. Environmental Protection Agency (EPA), *Plug-in Electric Vehicle Charging*, https://www.epa.gov/greenvehicles/plug-electric-vehicle-charging (last visited Mar. 24, 2023).
[3] U.S. Dept. of Transportation (USDOT), *Electric Vehicle Charging Speeds*, https://www.transportation.gov/rural/ev/toolkit/ev-basics/charging-speeds (last visited Mar. 27, 2023).
[4] EPA, *supra* note 2.
[5] USDOT, *supra* note 3.
[6] EPA, *supra* note 2.
[7] USDOT, *supra* note 3.
[8] EPA, *supra* note 2.
[9] U.S. Dept. of Energy, Alternative Fuels Data Center (AFDC), *Alternative Fueling Station Counts by State,* https://afdc.energy.gov/stations/states (last visited Mar. 26, 2023).
[10] Florida Department of Transportation (FDOT), *Electric Vehicle Infrastructure Master Plan* (July 2021), at p. 18, https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/fto/fdotevmp.pdf (last visited Mar. 27, 2023).

chargers. Under ChargePoint's model, the owner of the property on which a charging station is located may set its own pricing; many of its stations are free to use, with the property owner absorbing the cost of electricity.[11]

- Tesla is the only EV manufacturer that owns and operates its own proprietary charging network. Tesla provides 6,000 stations offering about 28,000 charging points, most of which are DC fast chargers.[12] Tesla has agreed to open a portion of its charging network in the United States to all EVs, pledging to make 7,500 of its EV charging stations available by the end of 2024.[13]
- Electrify America is the most comprehensive DC fast charging network for non-Tesla EVs. At 800 charging stations, Electrify America offers just less than 3,500 DC fast chargers and 116 Level 2 chargers.[14] It was built by Volkswagen Group of America (VW) as part of a settlement agreement with the federal government related to VW's violation of U.S. emissions laws.[15] The network does not require a membership but offers a discount to people who sign up for a plan. Ford has partnered with Electrify America to offer network access to its EV buyers.[16]
- EVgo operates over 850 fast charging stations in more than 30 states, offering more than 1,900 DC fast chargers and 29,000 Level 2 chargers through EVgo and its partners.[17] EVgo's network does not require a membership but offers a discount on DC fast charging to people who sign up for a subscription. In 2022, GM announced that it was collaborating with Pilot Company to launch over 2,700 DC fast charging stations to be installed, operated, and maintained by EVgo and open to all EVs at up to 500 Pilot and Flying J travel centers.[18]
- Shell Recharge Solutions, formerly Greenlots provides about 3,000 total charging points, including 550 DC fast chargers, in the U.S., some of which are deployed at Shell gas stations. Shell may convert some U.S. gas stations to EV charging stations.[19]
- Francis Energy owns and operates over 125 charging stations in the U.S. offering over 625 individual charging points, including 530 DC fast charging ports nationwide. Started with a statewide fast-charging network in Oklahoma, it is currently working on other fast-charging projects in 24 U.S. states. The company plans to expand across America's heartland to help reduce range anxiety and increase EV adoption in areas where EV charging infrastructure is lacking.[20]
- Blink provides over 1,600 charging stations in the U.S., offering about 5,000 public chargers,[21] with less than 250 DC fast charging points nationwide.[22]
- EV Connect and EVCS each provide less than 250 DC fast charging ports nationwide, and aside from non-networked DC fast charging stations, all other charging companies each offer less than 100 DC fast charging stations across the U.S.[23]

Public EV Charging in Florida

Currently in Florida, there are almost 2,800 EV public charging stations offering a total of 7,200 charging ports. AC Level 2 charging ports comprise 5,421 of these ports, and DC fast charging ports

[11] U.S. News & World Report (U.S. News), *A Comprehensive Guide to U.S EV Charging Networks*, https://cars.usnews.com/cars-trucks/advice/ev-charging-stations, (last visited Mar. 26, 2023).
[12] *Id.*
[13] ArsTechnica, *Tesla finally agrees to open its charging network to all EVs in US*, https://arstechnica.com/tech-policy/2023/02/tesla-finally-agrees-to-open-its-charging-network-to-all-evs-in-us/ (last visited Mar. 26, 2023).
[14] Electrify America, https://www.electrifyamerica.com/ (last visited Mar. 27, 2023).
[15] For additional information on the settlement, *see* U.S. Environmental Protection Agency (EPA), *Volkswagen Light Duty Diesel Vehicle Violations for Model Years 2009-2016*, https://www.epa.gov/vw (last visited Mar. 26, 2023).
[16] U.S. News, *supra* note 11.
[17] EVgo Fast Charging, *EVgo Fast Charges the Nation*, https://www.evgo.com/cities/ (last visited Mar. 27, 2023).
[18] EVgo Fast Charging, *EVgo eXtend Expands Fast Charging in Collaboration with GM and Pilot Company*, https://www.evgo.com/videos/evgo-extend-expands-fast-charging-in-collaboration-with-gm-and-pilot-company/ (last visited Mar. 26, 2023).
[19] U.S. News, *supra* note 11.
[20] U.S. News & World Report, *Your Guide to the Francis Energy EV Charging Network*, https://cars.usnews.com/cars-trucks/advice/francis-energy-charging-network#:~:text=Francis%20Energy's%20DC%20fast%20charging,EV%20Charging%20app%20or%20Plugshare. (last visited Mar. 26, 2023).
[21] U.S. News & World Report, *Your Guide to the Blink EV Charging Network*, https://cars.usnews.com/cars-trucks/advice/blink-charging-network (last visited Mar. 27, 2023).
[22] U.S. News, *supra* note 11.
[23] U.S. News, *supra* note 11.

comprise 1,755 of these ports.[24] Florida law requires the Department of Agriculture and Consumer Protection to adopt rules to provide definitions, methods of sale, labeling requirements, and price-posting requirements for EV charging stations to provide consistency for consumers and the industry.[25]

In 2020,[26] the Legislature required the Florida Department of Transportation (FDOT) to develop a "Master Plan" for the development of public EV charging equipment along the State Highway System. DOT, in consultation with the Florida Department of Environmental Protection, the Public Service Commission (PSC), and other state agencies, developed the EV Infrastructure Master Plan (EV Master Plan or Plan) with extensive public engagement.[27] The stated goals of the EV Master Plan were to:

- Support both short-range and long-range EV travel;
- Encourage the expansion of EV use in the state; and
- Adequately serve evacuation routes in the state.

As noted in the EV Master Plan, which was published in July 2021,[28] a key aspect of providing a reliable EV charging network involves participation from electric utilities and involves the regulations set forth by the PSC. The Plan highlighted two main areas where these factors come into play: electric utility interaction with EV charging service providers, and electric utility-owned EV charging services.[29]

*Considerations for Non-Utility EV Charging Providers*

Make-Ready Costs

Florida law provides that the rates, terms, and conditions of EV charging services provided to the public by a non-utility are not subject to regulation by the PSC.[30] However, non-utility EV charging providers must interact with electric utilities for purposes of ensuring the installation or upgrade of distribution facilities needed to supply EV charging equipment with electricity. As noted in the EV Master Plan, under traditional utility regulatory principles, the non-utility EV charging provider, rather than the utility's general body of ratepayers, generally would be required to pay for these "make ready" costs. The Plan also notes that the Legislature has encouraged utility investment in certain projects in the past by allowing cost recovery through rates.[31]

Demand Charges

Further, non-utility EV charging providers must pay electric utilities for the electricity they consume and dispense to customers. Under traditional commercial rates, these providers pay both an energy charge (based on the amount of energy consumed by the EV charging facility during the applicable billing period) and a demand charge (based on the highest usage from the EV charging facility at any given point during the applicable billing period). This challenges the economics of public DC fast charging stations that are used infrequently. At low levels of usage, the bill incurred by an EV charging facility results in demand charges being spread over a low volume of energy sales, whereas charging facilities with higher usage can spread the demand charge over more energy sales and are more likely to generate enough revenues to recover their electricity costs.[32]

*Electric Utility Participation in the EV Charging Market*

In Florida, electric utilities serve exclusive territories. The PSC regulates all electric utilities with respect to bulk power grid planning, safety, and grid reliability. The PSC regulates the rates and service of public (investor-owned) utilities only; the rates and service of municipal electric utilities and rural electric cooperatives are exempt from PSC regulation.

[24] AFDC, *supra* note 7.
[25] S. 366.94(2), F.S.
[26] Ch. 2020-21, Laws of Fla.
[27] *Id.*
[28] FDOT, *supra* note 10, at p. 17.
[29] *Id.*, at pp. 15-18.
[30] S. 366.94(1), F.S.
[31] FDOT, *supra* note 10, at p. 17.
[32] *Id.*

Under its regulatory authority, the PSC has approved pilot programs and permanent programs under which public utilities may install, own, operate, and maintain EV charging equipment.[33]

- In April 2021, the PSC 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. The PSC authorized TECO to begin recovery of pilot program costs through its rate base.[34]
- In 2019, Florida Power & Light Company (FPL) began a three-year pilot program, known as EVolution, which targeted the installation of 1,000 EV charging ports. In 2020, the PSC 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 for expanding FPL's current EV charging pilot program. The PSC approved FPL's expanded EV pilot program 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, the PSC authorized FPL to recover the costs associated with these programs through its rate base.[35]
- In 2017, as part of Duke Energy Florida's (DEF) rate case settlement agreement, the PSC 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 PSC approved a new settlement agreement which included a permanent EV charging station program. DEF forecasted the cost at $62.9 million over the four-year period 2022-2025. The PSC authorized DEF to recover reasonable costs of the programs through its rate base.[36]

The EV Master Plan notes that electric utilities, with the lower capital risk provided by rate base regulation, could have an advantage in the EV charging market over non-utility market participants that must raise and expend private capital and compete with other providers for high-usage locations. The Plan also suggests that the ability of utilities to serve high-cost, low-usage locations and provide rapid deployment may be desirable from a public policy perspective.[37]

The EV Master Plan also points out that the rates charged by public utilities for use of their public EV charging equipment must be approved by the PSC based upon the cost of service. The Plan notes, however, that current conditions of the EV charging market may not offer sufficient data to determine a cost-based rate for charging services. The Plan states that reliance on some form of market-based rate derived by comparing rates charged by similarly situated EV charging stations may run the risk of setting rates that do not recover the public utility's cost of installation, thus creating subsidization by utility customers, or, on the other hand, the risk of setting rates that recover more than the cost of providing service.[38]

Absent direction from the Legislature, the PSC will address utility involvement in the EV charging market on a case-by-case basis as utilities propose programs for approval.[39]

*Federal Initiatives to Promote EV Charging Equipment*

The federal government has set goals to make half of all new vehicles sold in the U.S. in 2030 zero-emissions vehicles and to build a network of 500,000 chargers to help make EVs accessible to all for both local and long-distance trips.[40] Recent federal laws provide grant funding and other incentives to help reach this goal.

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[33] Florida Public Service Commission (FPSC), Agency Analysis of 2023 House Bill 1591 (Mar. 15, 2023), at p.1.
[34] *Id.*
[35] *Id.*
[36] *Id.*
[37] FDOT, *supra* note 10, at p. 18.
[38] *Id.*
[39] *Id.*
[40] U.S. Dept. of Transportation, *Electric Vehicles & Rural Transportation*, https://www.transportation.gov/rural/ev (last visited Mar. 24, 2023).

The 2021 Bipartisan Infrastructure Law, also referred to as the Infrastructure Investment and Jobs Act, provides $7.5 billion in new funding for EV charging stations.[41]

The first $5 billion of this funding is distributed to states by formula over the next 5 years. Under this "formula program," Florida, through FDOT, will receive approximately $198 million. FDOT intends to open a competitive grant process to distribute these funds for the installation and maintenance of EV charging equipment, with an initial phase to begin later this year to fund EV charging equipment gaps along the Interstate highway system and a second phase to cover additional designated transportation corridors.[42] FDOT will not own or operate EV charging equipment.

The U.S. Department of Transportation will administer the remaining $2.5 billion as competitive grants for alternative vehicle fuel infrastructure, including EV charging, hydrogen, propane, and natural gas. Under this competitive grant program, half of the funds are targeted at providing infrastructure along alternative fuel corridors, and the other half is targeted at providing infrastructure for community charging and fueling with a priority on rural areas, low- and moderate-income neighborhoods, and communities with low ratios of private parking or high ratios of multi-unit dwellings. Only states, their political subdivisions, Indian Tribes, and U.S territories may apply for this funding.[43]

Further, the 2022 Inflation Reduction Act extends and expands federal tax credits for EV charging equipment installed at homes and businesses. For residential uses, the tax credit remains at 30% of the costs of the EV charging equipment, up to a maximum of $1,000. For commercial uses, the tax credit is 6% of the costs of the EV charging equipment, with a maximum credit of $100,000 per unit.[44]

**Effect of the Bill**

The bill prohibits public (investor-owned) utilities from using rate-based investments in EV charging stations. It further requires the PSC to adopt rules for the orderly transition of existing public utility investments in public EV charging stations to structurally separate subsidiaries, without adversely impacting the public utility's ratepayers.

The bill provides that "a public utility may not … limit public utility cost recovery to distribution level system infrastructure that does not include electric vehicle charging stations." Though unclear, this provision, when read in the context of the remainder of the bill, appears to be intended to limit public utility cost recovery to distribution-level system infrastructure that does not include EV charging stations.[45] If this is the correct reading of the bill, this provision may authorize the PSC to consider allowing a public utility to recover, from its general body of ratepayers, make-ready costs for the expansion or upgrade of distribution facilities needed to serve non-utility EV charging stations.

The bill eliminates the requirement that that the Department of Agriculture and Consumer Services adopt rules to provide definitions, methods of sale, labeling requirements, and price-posting requirements for EV charging stations.

The bill requires the PSC to adopt rules that will facilitate the widespread deployment of EV charging stations and infrastructure through consumer choice and competition and the use of reasonable and affordable cost-based electric rates for non-utility providers of public EV charging service. The bill provides that such rules must be competitively neutral and apply to public utilities offering EV charging services to the public.

[41] *Id.* This funding program is commonly referred to as the National Electric Vehicle Infrastructure (NEVI) program.
[42] Florida Department of Transportation, *Electric Vehicle Infrastructure Funding*, https://www.fdot.gov/planning/policy/ev/electric-vehicle-infrastructure-funding (last visited Mar. 27, 2023).
[43] *Id.*
[44] Electrification Coalition, *Inflation Reduction Act Impact on Electric Vehicles*, https://electrificationcoalition.org/work/federal-ev-policy/inflation-reduction-act/ (last visited Mar. 27, 2023).
[45] *See* Drafting Issues or Other Comments.

The bill requires the PSC to propose implementing rules by January 1, 2024, and to adopt final rules by January 1, 2025.

B. SECTION DIRECTORY:

**Section 1.** Amends s. 366.94, F.S., relating to electric vehicle charging.

**Section 2.** Provides an effective date.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None.

2. Expenditures:

   The bill requires agency rulemaking that can be conducted and implemented with existing agency staff.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   None.

2. Expenditures:

   None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

By requiring divestiture of existing public utility-owned EV charging stations to structurally separate subsidiaries without adversely impacting public utility ratepayers, the bill will require public utilities to expend funds that will likely not be recoverable through rates.

Though unclear, the bill appears to authorize the PSC to consider allowing a public utility to recover, from its ratepayers, make-ready costs for the expansion or upgrade of distribution facilities needed to serve non-utility EV charging stations. If such costs are approved by the PSC, this provision may reduce make-ready costs to new non-utility EV charging stations but shift those costs to utility customers.

D. FISCAL COMMENTS:

None.

## III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

   Not applicable. This bill does not appear to impact county or municipal governments.

2. Other:

   None.

B. RULE-MAKING AUTHORITY:

The bill requires the PSC to propose rules by January 1, 2024, and to adopt final rules by January 1, 2025.

C. DRAFTING ISSUES OR OTHER COMMENTS:

The bill provides that "a public utility may not … limit public utility cost recovery to distribution level system infrastructure that does not include electric vehicle charging stations." As drafted, this provision is unclear and could be interpreted in a manner that is inconsistent with the remainder of the bill by not limiting public utility cost recovery to distribution-level system infrastructure. This provision may need to be clarified.

The PSC notes that, given its existing jurisdictional limits, it does not have clear authority through rulemaking to ensure consumer choice and competition regarding EV charging stations, as required by the bill.

## IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

A bill to be entitled

An act relating to electric vehicle regulation; amending s. 366.94, F.S.; requiring the Florida Public Service Commission to adopt rules relating to electric vehicle charging; requiring such rules to be competitively neutral and apply to certain public utilities; requiring the commission to adopt rules for the orderly transition of certain existing investments in specified infrastructure used for such stations; requiring the commission to propose and adopt such rules by specified dates; prohibiting a public utility from certain actions relating to electric vehicle charging stations; providing an effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Subsection (3) of section 366.94, Florida Statutes, is renumbered as subsection (4), present subsection (2) is amended, and new subsection (3) is added to that section, to read:

366.94 Electric vehicle charging; regulation; rate structure ~~stations~~.—

(2)(a) The commission shall adopt rules for electric vehicle charging that will facilitate the widespread deployment of electric vehicle charging stations and infrastructure through



CODING: Words ~~stricken~~ are deletions; words underlined are additions.

consumer choice and competition and the use of reasonable and affordable cost-based electric rates for public utility ratepayers that offer electric vehicle charging services to the public. Such rules must be competitively neutral and apply to public utilities offering such services to the public.

(b) The commission shall adopt rules for the orderly transition of existing public utility investments in public utility infrastructure used for electric vehicle charging stations offered to the public to a structurally separate subsidiary without adverse impacts to public utility ratepayers.

(c) The commission shall propose such rules by January 1, 2024, with final rule adoption by January 1, 2025 ~~The Department of Agriculture and Consumer Services shall adopt rules to provide definitions, methods of sale, labeling requirements, and price-posting requirements for electric vehicle charging stations to allow for consistency for consumers and the industry~~.

(3) A public utility may not:

(a) Use rate-based investments in the ownership and operation of electric vehicle charging stations.

(b) Limit public utility cost recovery to distribution-level system infrastructure that does not include electric vehicle charging stations.

Section 2. This act shall take effect July 1, 2023.

# Energy, Communications & Cybersecurity Subcommittee
# HB 1591 by Rep. Maggard
# Electric Vehicle Regulation

## AMENDMENT SUMMARY
## March 29, 2023

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**Amendment 1 by Rep. Maggard (lines 43-48):**

- Clarifies that a public utility is limited to recovering costs of distribution-level system infrastructure up to, but not including, an electric vehicle charging station.

Amendment No. 1

COMMITTEE/SUBCOMMITTEE ACTION

| | | |
|---|---|---|
| ADOPTED | ___ | (Y/N) |
| ADOPTED AS AMENDED | ___ | (Y/N) |
| ADOPTED W/O OBJECTION | ___ | (Y/N) |
| FAILED TO ADOPT | ___ | (Y/N) |
| WITHDRAWN | ___ | (Y/N) |
| OTHER | _____ | |

Committee/Subcommittee hearing bill: Energy, Communications & Cybersecurity Subcommittee

Representative Maggard offered the following:

**Amendment**

Remove lines 43-48 and insert:

(3)(a) A public utility may not use rate-based investments in the ownership and operation of electric vehicle charging stations.

(b) A public utility is limited to recovering costs of distribution-level system infrastructure up to, but not including, an electric vehicle charging station.