HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 741 Net Metering
SPONSOR(S): Tourism, Infrastructure & Energy Subcommittee, McClure and others
TIED BILLS: **IDEN./SIM. BILLS:** CS/CS/SB 1024

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Tourism, Infrastructure & Energy Subcommittee	13 Y, 3 N, As CS	Walsh	Keating
2) State Administration & Technology Appropriations Subcommittee	9 Y, 6 N	Lee	Topp
3) Commerce Committee			

SUMMARY ANALYSIS

The role of the Florida Public Service Commission (PSC) is to ensure that Florida's consumers receive some of their most essential services in a safe, affordable, and reliable manner. Current law requires the PSC to allow investor-owned electric utilities (IOUs) to recover honestly and prudently invested costs of providing service, including investments in infrastructure and operating expenses used to provide electric service.

Florida law states that a utility's full avoided cost is the incremental cost of electric energy or capacity, which, but for the purchase from a non-utility generator, the utility would have to generate itself or purchase from another source.

Net energy metering, commonly referred to as net metering, is a billing arrangement designed to compensate customers who own on-site renewable energy generation systems and export electricity generated on-site to an electric utility's system. Net metering is most commonly referenced in relation to customer-owned solar panels. Net metering requires customers who own on-site renewable energy generation systems to interconnect with the electric grid.

In 2008, the Legislature required all electric utilities to develop standardized interconnection agreements and a net metering program for customer-owned renewable generation systems. Under Florida's current net metering framework for IOUs, the credit the customer receives on their monthly bill equates the value of the excess energy to the utility's retail rate. As of year-end 2020, less than one percent (90,552) of Florida's 10.5 million electric utility customers had installed renewable generation equipment.

Under the bill, the PSC must propose a revised net metering rule for IOUs by January 1, 2023. The proposed rule must ensure that: net metering customers pay the full cost of electric service and are not subsidized by the general body of ratepayers; all energy delivered by the IOU is purchased at the applicable retail rate; all energy delivered by the customer-owned or leased renewable generation to the IOU's system is credited to the customer at the IOU's full avoided cost; and the net metering may include fixed charges, including base facilities charges, electric grid access fees, or monthly minimum bills.

The bill allows any IOU customer who owns or leases renewable generation that is in service before January 1, 2023, to continue to use the current net metering rate design for 20 years.

The bill has no fiscal impact on state or local government revenues or expenditures. There is an indeterminate fiscal impact on the private sector. *See* Fiscal Analysis & Economic Impact Statement.

The bill provides an effective date of July 1, 2022.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Present Situation

Florida Public Service Commission

The Florida Public Service Commission (PSC) is an arm of the legislative branch of government.[1] The role of the PSC is to ensure that Florida's consumers receive some of their most essential services – electric, natural gas, telephone, water, and wastewater – in a safe, affordable, and reliable manner. In doing so, the PSC exercises regulatory authority over utilities in one or more of three key areas: rate base/economic regulation; competitive market oversight; and monitoring of safety, reliability, and service issues.[2]

Investor-Owned Electric Utilities

The PSC regulates the rates and services of investor-owned electric utilities (IOUs).[3] There are four IOUs in Florida: Florida Power & Light Company (FPL),[4] Duke Energy Florida (Duke), Tampa Electric Company (TECO), and Florida Public Utilities Corporation.[5] Together, these four IOUs serve over 8.1 million customers in Florida.[6] IOU rates and revenues are regulated by the PSC.[7] The IOUs must file periodic earnings reports, which allow the PSC to monitor earnings levels on an ongoing basis and adjust customer rates quickly if a company appears to be overearning.[8]

IOUs must provide sufficient and adequate service to customers.[9] To fulfill that obligation, utilities monitor customer usage patterns in order to plan for future energy needs. Utilities use billing data to predict the future energy needs of customers and make investments in their infrastructure based on these predictions.[10] Current law requires the PSC to allow IOUs to recover honestly and prudently invested costs of providing service, including investments in infrastructure and operating expenses used to provide electric service.[11]

Full Avoided Costs

An IOU's full avoided cost is the incremental cost of electric energy or capacity,[12] which, but for a purchase from a non-utility generator, the IOU would have to generate itself or purchase from another source.[13] Full avoided cost is based upon either the utility's cost to construct and operate its next

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[1] S. 350.001, F.S.
[2] Florida Public Service Commission, http://www.psc.state.fl.us/ (last visited Jan. 17, 2022).
[3] The PSC does not regulate the rates of municipal electric utilities or rural electric cooperatives.
[4] FPL acquired Gulf Power Company in 2019 and merged as of January 3, 2022.
[5] Florida Department of Agriculture and Consumer Services, *Electric Utilities*, https://www.fdacs.gov/Energy/Florida-Energy-Clearinghouse/Electric-Utilities (last visited Jan. 19, 2022).
[6] Florida Public Service Commission, *Facts & Figures of the Florida Utility Industry* (2021), p, 4, available at http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Factsandfigures/April%202021.pdf (last visited Jan. 19, 2022).
[7] Florida Department of Agriculture and Consumer Services, *Electric Utilities*, *supra* note 5.
[8] Florida Public Service Commission, *Florida PSC 2020 Annual Report*, p. 6, available at http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Annualreports/2020.pdf (last visited Jan. 19, 2022).
[9] S. 366.03, F.S.
[10] Florida Public Service Commission (PSC), Agency Analysis of 2022 House Bill 741, p. 2 (Jan. 3, 2022).
[11] S. 366.06, F.S.
[12] Capacity is the maximum electric output, in megawatts, that an electricity generator can produce under ideal conditions. *See* U.S. Energy Information Administration, *What is the difference between electricity generation capacity and electricity generation?*, https://www.eia.gov/tools/faqs/faq.php?id=101&t=3 (last visited Jan. 22, 2022).
[13] S. 366.051, F.S.

planned generating unit or the cost of purchasing capacity and energy from generating units owned by other utilities in the wholesale market.[14]

An IOU's full avoided costs is not the same as the rate it pays for energy provided on an as-available basis. Full avoided costs can include avoided capacity and energy costs, while an as-available energy rate only includes avoided energy costs, which are largely comprised of fuel costs.[15] In 2021, as-available energy rates ranged for Florida IOUs from $0.025 to $0.037 per kilowatt hour (kWh).[16]

Net Metering

Net energy metering, commonly referred to as net metering, is a billing arrangement designed to compensate customers who own on-site, renewable energy[17] generation systems and export electricity generated on-site to the utility grid.[18] Net metering essentially allows customers to sell excess electricity to an electric utility, and the utility credits the customer's energy bill on a per kWh basis.[19] The compensation structure for utility customers who engage in net metering varies by location depending on state and local policies.[20]

Common customer-owned renewable energy generation sources around the country include solar panels, natural gas micro-turbines, methane digesters, and small wind power generators;[21] however, net metering is most commonly referenced in relation to customer-owned solar panels.

Net metering requires customers who own on-site renewable energy generation systems to interconnect with the electric grid, which allows customers to reliably power their homes even when their systems are not generating enough power to meet their energy needs.[22] The U.S. Department of Energy defines the term "interconnection" as "the technical procedures and legal requirements surrounding energy customers' ability to connect their small-scale renewable energy projects to the electricity grid."[23] Utility customers primarily benefit from interconnected renewable generation systems through personal use and reducing the amount of electricity they purchase from the utility.[24]

As of August 2021, 37 states, including Florida, have state-developed mandatory net metering rules for certain utilities, eight states have statewide compensation rules other than net metering, two states have some utilities that allow net metering, and three states offer no form of net metering or compensation.[25]

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[14] Florida Public Service Commission, *States' Electric Restructuring Activities Update: Wholesale Sales*, http://www.psc.state.fl.us/Publications/ElectricRestructuringDetails#4 (last visited Jan. 22, 2022).
[15] PSC, *supra* note 10.
[16] Email from Kaley Slattery, Legislative Director, Florida Public Service Commission, Request for information (Feb. 1, 2022).
[17] "Renewable energy" means electrical energy produced from a method that uses one or more of the following fuels or energy sources: hydrogen produced from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, and hydroelectric power. The term includes the alternative energy resource, waste heat, from sulfuric acid manufacturing operations and electrical energy produced using pipeline-quality synthetic gas produced from waste petroleum coke with carbon capture and sequestration. S. 366.91(2)(d), F.S.
[18] National Renewable Energy Laboratory, *Net Metering*, https://www.nrel.gov/state-local-tribal/basics-net-metering.html (last visited Jan. 20, 2022).
[19] *Id.*
[20] *Id.*
[21] National Conference of State Legislatures, *State Net Metering Policies* (Nov. 20, 2017), https://www.ncsl.org/research/energy/net-metering-policy-overview-and-state-legislative-updates.aspx (last visited Jan. 20, 2022).
[22] U.S. Department of Energy, *Grid-Connected Renewable Energy Systems*, https://www.energy.gov/energysaver/grid-connected-renewable-energy-systems (last visited Jan. 22, 2022).
[23] U.S. Department of Energy, *Renewable Energy: Distributed Generation Policies and Programs*, https://www.energy.gov/eere/slsc/renewable-energy-distributed-generation-policies-and-programs (last visited Jan. 22, 2022)
[24] PSC, *supra* note 10, at 1.
[25] DSIRE, *Net Metering*, NC Clean Energy Technology Center (August 2021), https://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2021/08/DSIRE_Net_Metering_August2021.pdf (last visited Jan. 20, 2022).

Net Metering in Florida

In 2008, the Legislature required all electric utilities to develop standardized interconnection agreements[26] and a net metering[27] program for customer-owned renewable generation[28] systems.[29] Under this section, the PSC is tasked with establishing requirements relating to expedited interconnection and net metering of customer-owned renewable generation by IOUs and may adopt rules to accomplish this task.[30, 31]

In response to the net metering requirements passed by the Legislature in 2008, the PSC amended r. 25-6.065, F.A.C.,[32] to expand the applicability of the rule to all renewable energy types up to two megawatts (MW) in capacity.[33] The rule creates a billing mechanism by which net metering customers can offset their usage through self-generated energy, with any excess energy delivered to the IOU's system. The amount of any excess energy delivered to the IOU is applied to the customer's next monthly bill as a kWh credit. At the end of the calendar year, the IOU pays for any remaining unused energy credits at a rate based on the utility's avoided cost of generating electricity.[34]

Under Florida's current net metering framework, the credit the customer receives on their monthly bill equates the value of the excess energy to the utility's retail rate. The retail rates for each of the IOUs range from roughly $0.12 to $0.15 per kWh.[35] A utility's retail rate accounts for its cost to provide power to customers, which includes, but is not limited to, the cost of generation, transmission, distribution, fuel, and operating and maintenance expenses.[36]

IOUs must charge net metering customers the applicable rates and charges for the electricity provided by the utility.[37] The applicable rates and charges are dependent on the rate class the customer falls under, and these rates and charges can include a fixed monthly customer charge or base facility charge, volumetric rates based on consumption, demand rates based on the maximum electric demand in a monthly billing cycle, or a combination of the above.[38] Additionally, FPL and Duke were recently authorized to charge customers a monthly minimum bill of $25 and $30 respectively.[39]

In 2020, Florida electric utilities reported 90,552 customer-owned renewable generation

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[26] An interconnection agreement is a contract between a customer and a utility to interconnect the customer's renewable generation system to the utility's electric grid. *See e.g.* Florida Public Utilities Company, *Interconnection of Customer-Owned Renewable Generation Systems Application*, p. 1, available at https://fpuc.com/wp-content/uploads/FPU17-123_Interconnection-Form.pdf (last visited Jan. 20, 2022).

[27] S. 366.091(2)(d), F.S., defines the term "net metering" as a metering and billing methodology where customer-owned renewable generation is allowed to offset the customer's electricity consumption.

[28] S. 366.091(2)(c), F.S., defines the term "customer-owned renewable generation" as an electric generating system located on a customer's premises that is primarily intended to offset part or all of the customer's electricity requirements with renewable energy.

[29] S. 366.091(5) and (6), F.S.

[30] S. 366.091(5), F.S.

[31] Municipal electric utilities and rural cooperatives are required to develop their own standardized interconnection agreements and net metering programs, but each year they must file a report detailing customer participation in such programs with the PSC. S. 366.91(6), F.S.

[32] This rule was initially promulgated by the PSC in 2002 for the purpose of standardizing and expediting the interconnection of small solar photovoltaic (PV) systems for customers of IOUs. PSC, *supra* note 10, at 1.

[33] *Id.* at 2.

[34] *Id.*

[35] Florida Public Service Commission, *Florida Investor-Owned Electric Utilities Total Cost for 1,000 Kilowatt Hours – Residential Service*, available at http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/BillingAdjustments/ba_total-2022.pdf (last visited Feb. 1, 2022).

[36] *Id.*

[37] R. 25-6.065, F.A.C.

[38] PSC, *supra* note 10, at 2.

[39] Florida Power & Light Company, *Building a more resilient and sustainable energy future*, EnergyNews (January 2022), available at https://www.fpl.com/#home (last visited Feb. 1, 2022); Sam Sachs, *Duke Energy Florida customers to have minimum $30 bills*, News Channel 8 (Jan. 28, 2022), https://www.wfla.com/news/florida/duke-energy-florida-customers-to-have-minimum-30-bills/ (last visited Feb. 1, 2022).

interconnections, reflecting more than 30,000 new interconnections since the 59,508 interconnections reported in 2019.[40] Of the 90,552 customer-owned renewable generation interconnections reported in 2020, Florida's four IOUs accounted for 71,567 of those interconnections.[41] Almost all customer-owned renewable generation installations in Florida are solar.[42] As of year-end 2020, less than 1 percent of Florida's 10,504,960 electric utility customers had installed renewable generation equipment.[43]

Cross-Subsidization

Concerns of cross-subsidization of customers who partake in net metering by non-net metering customers have been raised before the PSC.[44] There is debate as to the components of the utility's cost of service that are offset by energy generated by net metering customers and, accordingly, the appropriate credit to provide for such energy.[45]

Effect of the Bill

The bill requires the PSC to adopt a revised net metering rule that credits excess energy delivered to an IOU's system by customer-owned renewable generation at the full avoided cost rate.

The bill provides legislative findings that:

- It is in the public interest to promote the development of renewable energy resources in the state in a manner that is fair to all public utility customers;
- The development of the solar industry, the decline in the cost of solar panels, and the increase in customer-owned renewable generation support the redesign of net metering by the PSC;
- Customer-owned and leased renewable generation is not available to public utility customers who lack the financial resources or who reside in multitenant buildings; and
- The growth of customer-owned renewable generation has resulted in increased cross-subsidization of the full cost of service onto the general body of ratepayers.

The bill requires the PSC to propose a redesigned net metering rate structure that ensures IOU customers who own or lease renewable generation pay their full cost of electric service and are not cross-subsidized by the general body of ratepayers.

PSC must propose a revised net metering rule by January 1, 2023, that complies with the following criteria:

- The net metering rate structures and billing must ensure that an IOU's net metering customers pay their full cost of electric service and are not subsidized by the IOU's general body of ratepayers;
- All energy delivered by the IOU is purchased at its applicable retail rate;
- All energy delivered by the customer-owned or leased renewable generation to the IOU is credited to the customer at the IOU's full avoided costs; and
- The net metering may include fixed charges, including base facilities charges, electric grid access fees, or monthly minimum bills.

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[40] Florida Public Service Commission, *Review of the 2021 Ten-Year Site Plans of Florida's Electric Utilities* (Oct. 2021), p. 29, available at http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2021/Review.pdf (last visited Jan. 20, 2022).

[41] Florida Public Service Commission, *Interconnection and Net Metering of Customer-Owned Renewable Generation* (2020), available at https://www.floridapsc.com/Files/PDF/Utilities/Electricgas/CustomerRenewable/2020/2020%20Net%20Metering%20Summary%20Spreadsheet/2020%20Net%20Metering%20Report.pdf (last visited Jan. 20, 2022).

[42] Florida Public Service Commission, *supra* note 40.

[43] PSC, *supra* note 10, at 3.

[44] *Id.* at 4.

[45] *See Id.* ("For example, questions have been raised as to whether the excess energy offsets the utility's cost of power plants, given that power plants must be available to meet a renewable energy customer's electric needs when their systems are not operating or when their demand exceeds the capability of their renewable energy system.").

The bill allows any IOU customer who owns or leases renewable generation that is in service before January 1, 2023, pursuant to a standard interconnection agreement offered by an IOU, to continue to use the current net metering rate design and rates for 20 years.

Thus, the effect of the bill on IOU customers is that:

- Customers that currently use net metering or begin to use net metering by the end of this year may continue to be credited at the IOU's retail rate for excess energy delivered to an IOU's system, and
- Beginning in 2023, customers that install renewable generation and wish to use net metering will be credited for the excess energy they deliver to an IOU's system at the IOU's full avoided cost rate as determined by the PSC.[46]

The bill directs the PSC to require an IOU requesting a change in base rates to report to the PSC the impact of net metering on the IOU's revenues and cost of service.

B. SECTION DIRECTORY:

Section 1: Amends s. 366.91, F.S., relating to renewable energy.

Section 2: Provides an effective date of July 1, 2022.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   None.

2. Expenditures:

   The bill requires the PSC to propose new rules establishing a new rate structure for net metering public utility customers. However, PSC can absorb the costs within existing resources.[47]

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

   None.

2. Expenditures:

   None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may have an indeterminate negative impact on the revenues of private businesses that install customer-owned renewable generation systems, since customers may not purchase these systems if they cannot recoup as much of the costs through the new net metering rate design.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

[46] Avoided cost rates vary by utility.
[47] PSC, *supra* note 10, at 3.

1. Applicability of Municipality/County Mandates Provision:

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

2. Other:

   None.

B. RULE-MAKING AUTHORITY:

   The bill requires the PSC to propose a revised rule for net metering customer rate and billing design by January 1, 2023. Section 366.91(5), F.S., provides PSC sufficient rulemaking authority.

C. DRAFTING ISSUES OR OTHER COMMENTS:

   None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

On February 3, 2022, the Tourism, Infrastructure & Energy Subcommittee adopted an amendment to the bill and reported the bill favorably as a committee substitute. The amendment changes the period in which customers who own or lease renewable generation prior to January 1, 2023, can utilize the existing net metering rate design from 10 years to 20 years.

This analysis is drafted to the committee substitute as approved by the Tourism, Infrastructure & Energy Subcommittee.