SENATE BILL 275 OF THE 135TH OHIO GENERAL ASSEMBLY TESTIMONY OF ROCCO D'ASCENZO, DEPUTY GENERAL COUNSEL FOR DUKE ENERGY CORPORATION BEFORE THE OHIO SENATE ENERGY & PUBLIC UTILITIES COMMITTEE

December 9, 2024

Chair Reineke, Vice Chair McColley, Ranking Member Smith, and members of the Ohio Senate Energy & Public Utilities Committee:

My name is Rocco D'Ascenzo, and I am Deputy General Counsel for Duke Energy Corporation. On behalf of Duke Energy Ohio, I submitted testimony on November 19, 2024, regarding Senate Bill 275 ("S.B. 275"). A copy is attached for reference.

Fair, just, and reasonable are hallmarks of utility regulation. S.B. 275 runs afoul of each of these premises by conferring upon virtual (*i.e.*, not real) net metered customers, and by extension the developers of virtual net metering systems, an inflated financial benefit at the expense of all other electric utility customers. Duke Energy Ohio thus affirms and reiterates the arguments in my earlier testimony delivered in opposition to the bill.

I present to you now Duke Energy Ohio's response to two amendments (AM_135_2882 and AM_135_2700-6) that were recently offered for consideration. Neither amendment resolves the company's original concerns, and one significantly increases the negative impacts on electric customers created by subsidies and cost-shifting policies. As such, Duke Energy Ohio opposes adoption of the amendments.

I. AM_135_2882 prohibits residential customers from participating in virtual net metering (VNM) systems but forces these same customers to pay subsidies to VNM system developers and VNM customers.

Duke Energy Ohio understands that S.B. 275 is partially intended to promote the repurposing of brownfields, which is a worthy goal. And perhaps a narrow view of this goal might support excluding residential customers from the definition of VNM customers. But as drafted, the bill will unfairly force the very same residential customers it excludes from VNM participation to pay the costs caused by VNM systems and VNM customers without receiving a commensurate benefit. Under the bill, VNM customers would receive credits in such a way as to avoid certain volumetric charges that they cause through their usage of the distribution grid. Residential customers would be forced to make up at least a portion of the difference and so they would be doubly disadvantaged by this policy.

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II. AM_135_2700-6 (-6 version) exacerbates the problems first presented in the As Introduced version by allowing VNM customers to avoid not only generation charges but also energy delivery (transmission and distribution) charges.

On its face, it may seem that the addition of a VNM system to a utility's distribution grid would not cause additional energy delivery costs to be incurred; however, this is not the case. The only real change is that customers who do not connect to or contract with a VNM system will be forced to pay for VNM customers' transmission and distribution obligations. The key to understanding why this is the case is recognition of: 1) the physics that dictate how electricity flows, and 2) the fact that the electricity produced by a VNM system is not actually used by the customers who are contracted with the VNM system but not physically attached behind the same distribution meter.

Consider for explanation that, whether under traditional net metering or the VNM system proposed in this legislation, a "co-located" customer, is physically connected behind a single meter to a generation resource. And a VNM customer whose meter is located elsewhere on a utility's distribution system is a truly "virtual" net metering customer. A co-located customer uses the electrons produced by the generation resource to which it is connected, thereby reducing demand on that specific circuit. But this is not the end of the story. Electric utilities must construct their energy delivery grids to withstand the demands that may be placed upon them at any given time and under any given circumstance, including whenever a net metering system (traditional or virtual) is not producing power. So, even co-located customers impose obligations upon their incumbent utilities to maintain both transmission and distribution grids that will reliably serve them when their systems produce less than 100 percent of their demand.

Now consider that the electrons generated by a VNM system are merely incremental additions to the electricity already flowing on the grid. Each virtual VNM customer takes power, as needed, at its location or multiple locations around the utility's service territory. These virtual VNM customers are using both the transmission and distribution grids to *physically obtain the power that they consume – 100 percent of the time*. Physics dictates that the load of each virtual VNM customer draws power regardless of whether that customer is contracting with a VNM system. It is critically important to the centuries-old regulatory paradigm that customers who cause a utility to incur transmission and distribution costs bear those costs. S.B. 275 would sever that connection and unfairly burden many customers for the benefit of only a few.

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III. The -6 version proposes that the credit provided to a VNM customer would offset not only the volumetric charges for energy delivery, but also demand charges for transmission and distribution. This is illogical and inappropriate.

Utility rates are determined through complex rate proceedings where the Public Utilities Commission of Ohio (PUCO) determines a utility's annual revenue requirement, representing the total cost to maintain its energy delivery grid. The PUCO then decides how those costs should be recovered through fixed, volumetric, or demand-based charges. Volumetric charges are based on the number of kilowatts consumed by each customer. Under the crediting system in S.B. 275, in the case of a virtual VNM customer (not connected to generation behind the meter), the VNM customer is able to see a reduction in consumption – but for billing-purposes only, as the amount of power being used remains the same. This phantom reduction of the number of kilowatts being consumed by a VNM customer means that the cost per kilowatt for all other customers must increase.

On the other hand, demand charges are based on the maximum amount of electricity that a given customer might require at a given point in time. These charges are paid by certain commercial and industrial customers based upon the demands those customers place on the energy delivery grids. These charges are designed and implemented in this manner because the grids must be engineered, constructed, maintained, and operated to meet the maximum demand every customer may impose from any and all locations where they have an account, at any given time. To do less would risk system reliability.

It is undeniable that customers subjected to demand charges cause the utility to incur costs that cannot be avoided due to the addition of a generating facility *somewhere on the grid*. And the amount of electricity generated by a VNM system cannot and should not be netted against demand charges that are based on a VNM customer's reliance (demand placed) on the utility's transmission and distribution grids. Forcing this type of financial calculation is illogical as these concepts simply do not relate to each other. And forcing non-VNM customers or utilities to make up the difference is unfair and inappropriate.

IV. S.B. 275 is unnecessary as existing tariffs already permit customers to generate their own electricity and to receive fair, market-based compensation for producing more electrons than they use.

Duke Energy Ohio has a tariff under which customers may self-generate electricity to offset their needs. This is known as co-generation and a copy is attached for reference. In the

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event a co-generation customer produces more electricity than it needs in a billing period, that customer receives compensation for the excess. The price per kilowatt-hour for the surplus is set at the locational marginal price (LMP) as determined by PJM Interconnect L.L.C. (PJM), the same organization responsible for managing the competitive market that serves Ohio's electric customers. PJM takes into consideration where the electrons are supplied to the system and adjusts the LMP accordingly. Whereas S.B. 275 produces subsidies through cost avoidance and shifting, the market-based pricing and crediting under the co-generation tariff falls well-within the principles guiding Ohio's reliance on competition for electric generation.

V. Conclusion

The issues attempting to be addressed in S.B. 275 are incredibly complex, and major policy changes such as those the bill contains can have unintended consequences. Duke Energy Ohio believes that such matters should be carefully vetted and only solutions with broad support by both utilities and customers should be pursued. For the reasons stated above and included in prior testimony, Duke Energy Ohio reiterates its opposition to S.B. 275 and respectfully requests that the Senate Energy & Public Utilities Committee not favorably report the bill.

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ADDENDUMS TO COMMITTEE TESTIMONY

SENATE BILL 275 OF THE 135TH OHIO GENERAL ASSEMBLY TESTIMONY OF ROCCO D'ASCENZO DEPUTY GENERAL COUNSEL FOR DUKE ENERGY CORPORATION BEFORE THE OHIO SENATE ENERGY & PUBLIC UTILITIES COMMITTEE

November 19, 2024

Chair Reineke, Vice Chair McColley, Ranking Member Smith, and members of the Ohio Senate Energy & Public Utilities Committee:

My name is Rocco D'Ascenzo, and I am Deputy General Counsel for Duke Energy Corporation. In my current role, I lead the team of attorneys who provide legal advice on the legislative and regulatory issues faced by Duke Energy Ohio and Duke Energy Kentucky. These companies provide safe and reliable utility services and solutions for approximately 750,000 electric and 450,000 natural gas customers in Southwest Ohio and Northern Kentucky, just as these utilities and their predecessors have been doing for over 185 years.

I appreciate the opportunity to submit Duke Energy Ohio's views on the policy contained within Senate Bill 275 (S.B. 275), as it appears now before your committee. Although S.B. 275 addresses Ohio's important interest in repurposing former coal mines, brownfields, and landfills, Duke Energy Ohio is concerned with several elements of the underlying policy. Currently, S.B. 275 includes unreasonable cost shifting, a violation of decades old ratemaking principles, and undue administrative and cost burdens to utilities and customers, thereby undermining the perceived benefits. For these reasons, Duke Energy Ohio is opposed to the bill.

 S.B. 275 would unfairly burden non-virtual net metering customers with costs caused by virtual net metering (VNM) customers served by the same electric distribution utility.

Unlike what occurs with ordinary net metering, which directly offsets a customer's actual electricity usage at the source, a VNM customer relies upon the utility's transmission and distribution systems to deliver 100% of their electric consumption needs. An ordinary net metering customer, with generation located behind the meter, will first consume the electricity their resource is generating in real time. While a portion of the customer's consumption may still come from the grid, the self-generated electricity is at least partially

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reducing reliance on the utility's transmission and distribution systems. Under S.B. 275, the VNM customer's "virtual" self-generation occurs at another location and therefore never actually offsets any of the VNM customer's own consumption. Moreover, VNM does not mitigate any stresses the customer's electric consuming facilities places on the electric distribution system at the location of that demand. Although monthly kilowatt-hour netting—as currently provided for with ordinary net metering and proposed for VNM—shifts costs in both cases, the shift is even larger in the case of VNM. This is because VNM customers rely on the transmission and distribution systems to deliver 100% of the electricity they consume to their site, but S.B. 275 would allow them to potentially avoid paying any of the volumetric transmission or distribution costs they cause on the system.

II. The crediting system proposed in S.B. 275 creates an unfair subsidy and is out of alignment with the ongoing debate over the valuation of dispatchable (base load) versus intermittent resource types.

As proposed, S.B. 275 allows VNM customers to use the distribution system at any time of any day during a given month to satisfy their demand, regardless of whether the VNM system, located somewhere else, is producing electricity at that time. Under the bill, the netting of production versus usage occurs once per month and is disassociated from when the customer's actual peak demand occurs. Thus, the bill treats as equivalent the electricity from the VNM system and the electricity that the utility purchases through the wholesale market under terms set through its standard service offer competitive auction. This equivalency is inappropriate because one form of electricity may be intermittently available while the obligation of the utility to serve is constant. The cost and value of constantly available power is higher than intermittently available power, meaning that the system proposed in the bill provides VNM customers with a credit that is greater than warranted by the value of any net surplus of generated electricity. Non-VNM customers will bear the cost of that differential and thus be unfairly subsidizing VNM customers.

PJM Interconnection, LLC, (PJM), the Regional Transmission Operator that manages the bulk transmission system and wholesale power markets serving Ohio, is currently grappling with questions of valuation of generation resources with varying attributes and dispatchability. The standard service offer prices established in competitive auctions conducted by the utility and paid by non-shopping customers of Ohio's electric utilities contain elements of generation supply from both dispatchable (base load) and intermittent resources. Providing VNM customers with a credit based on a utility's standard service offer price, regardless of the type of resource being employed by the VNM customer, could

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skirt recognition of the need to value resources differently based on reliability attributes, which is at the heart of ongoing discussions at PJM and the Federal Energy Regulatory Commission.

III. The crediting system contained with S.B. 275 violates the cost causation principle, which is central to the regulated ratemaking paradigm.

S.B. 275 would create a fundamental shift in how utilities recover their costs from customers who have accounts located on multiple sites. When VNM customers aggregate (for billing purposes) their demand and usage across multiple metered locations that are spread across the utility service territory, these large and sophisticated customers avoid paying for the demands they are placing on the electric distribution system. This approach undermines the well-established and fundamental ratemaking principle of cost causation. At its core, this principle dictates that each class of customers should be responsible for the costs of using the distribution system in proportion to the costs they actually and physically impose on that system. As previously explained, S.B. 275 would cause cost shifting, which is anathema to this key ratemaking principle.

IV. S.B. 275 could negatively affect Ohio's competitive market supply paradigm.

S.B. 275 could create risks that translate into additional costs in the wholesale market procurement process for generation services in Ohio. The integrity of the wholesale market is critical to the functioning of Ohio's marketplace for electricity, as this is where Ohio's electric distribution utilities obtain electricity to serve customers who do not take generation supply from a competitive retail electric supplier. Wholesale generation providers bid for the opportunity to serve a portion of the utility's load based on forecasted amounts of load they would serve. S.B. 275 would permit an unpredictable amount of electricity to be supplied to the utility's system outside of the standard service offer process, causing wholesale producers offering supply into the utility's competitive auction to bear the risk that load they win the right to serve would suddenly disappear. That risk could translate into higher premiums in prices offered by wholesale power producers in competitive auctions and ultimately force higher prices to be paid by customers who either cannot or will not choose to switch to a competitive supplier.

V. S.B. 275 would increase the complexity of utility bills, leading to additional confusion and cost issues for customers.

The requirements placed on utilities to comply with S.B. 275 would necessitate changes to the companies' billing systems. For example, VNM usage and credits would need to be

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tracked and verified and issues such as payment application (for multiple metered customers) and partial payments will need to be addressed. These issues are complex and not insignificant for Duke Energy Ohio, which is a combination electric and natural gas utility with many customers who take both services and receive a single bill. Arguably, compliance with S.B. 275 would necessitate changes to our data systems, the cost of doing so being incremental to the current state. As these types of costs are paid by all customers, many customers would bear the cost for matters that do not benefit them, but rather only those who have the means and ability to access a VNM resource.

VI. Conclusion

Duke Energy Ohio appreciates the opportunity to share its informed perspective with this committee. For the reasons described above, however, the company opposes passage of the bill in its current form. Since the relevant policy affects the customers that we serve, our leadership, legal, and government affairs team members stand ready

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COGENERATION AND SMALL POWER PRODUCTION SALE AND PURCHASE TARIFF

APPLICABILITY

The provisions of this tariff are applicable to qualifying cogeneration and small power production facilities with capacity of 100 kW or less as adopted by the Federal Energy Regulatory Commission (FERC), Title 18 CFR Part 292.201 through 292.207.

DEFINITIONS

Definitions of the following terms are as adopted by the FERC, Title 18 CFR Part 292.101:

- (1) Qualifying Facility
- (2) Cogeneration Facility
- (3) Small Power Production Facility
- (4) Purchase
- (5) Sale

- (6) Interconnection Cost
- (7) Supplementary Power
- (8) Back-up Power
- (9) Interruptible Power
- (10) Maintenance Power
- (11) System

OBLIGATIONS

(1) Purchases

The Company shall purchase from qualifying facilities in accordance with Part 292.304.

(2) Sales

The Company shall sell to qualifying facilities in accordance with Part 292.305.

(3) Interconnections

The Company shall make interconnections with qualifying facilities as may be necessary to accomplish purchases or sales and the qualifying facility will pay for the interconnection costs in accordance with Part 292.306. Interconnection costs will be paid over a period not to exceed thirty-six (36) months as mutually agreed upon by the qualifying facility and the Company.

(4) System Emergencies

During system emergencies the Company may discontinue purchases and sales or the qualifying facilities may be required to provide energy or capacity in accordance with Part 292.304(f) and 292.307.

(5) Service Agreement

The qualifying facility shall enter into a written Service Agreement with the Company.

STANDARDS FOR OPERATING RELIABILITY

The technical requirements necessary for operating reliability are set forth in the Company's procedure entitled "Guideline Technical Requirements for Parallel Operation of Customer Generation on the Secondary Distribution System."

Filed pursuant to Order dated December 14, 2022 in Case No. 21-887-EL-AIR before the Public Utilities Commission of Ohio.

Issued: December 16, 2022 Effective: January 3, 2023

Duke Energy Ohio 139 East Fourth Streets Cincinnati, Ohio 45202 P.U.C.O. Electric No. 19 Sheet No. 93.3 Cancels and Supersedes Sheet No. 93.2 Page 2 of 2

RATE SCHEDULES

Rates for Purchases from qualifying facilities:

The Purchase Rate for all kilowatt-hours delivered shall be the PJM Balancing Market (Real-Time) Locational Marginal Price (LMP) at the DEOK Zone, inclusive of the energy, congestion and losses charges, for each hour of the billing month.

<u>Rates for Sales</u> of supplemental power, back-up power, interruptible power, or maintenance power to qualifying facilities will be accomplished through applicable tariff schedules as filed with the Public Utilities Commission of Ohio.

TERMS AND CONDITIONS

The supplying and billing for service and all conditions applying thereto, are subject to the jurisdiction of the Public Utilities Commission of Ohio, and to the Company's Service Regulations currently in effect, as filed with the Public Utilities Commission of Ohio.

Filed pursuant to Order dated December 14, 2022 in Case No. 21-887-EL-AIR before the Public Utilities Commission of Ohio.

Issued: December 16, 2022 Effective: January 3, 2023