



An AEP Company

BOUNDLESS ENERGY™

Legal Department

American Electric Power
1 Riverside Plaza
Columbus, OH 43215-2373
AEP.com

November 19, 2024

The Honorable Bill Reineke, Chairman
Senate Energy and Public Utilities Committee
1 Capitol Square
Columbus, Ohio 43215

Chairman Reineke and committee members:

Steven T. Nourse
Vice President - Legal
(614) 716-1608 (P)
(614) 716-2014 (F)
stnourse@aep.com

I am Steve Nourse, Vice President-Legal for AEP Ohio and I write to provide opponent testimony on Senate Bill 275 (SB 275). While AEP Ohio has long supported policies that encourage a strong grid, protect customers, and support economic development, SB 275 frustrates this goal and creates more problems than solutions.

SB 275 would not only perpetuate but would significantly expand the financial cost shift associated with net metering. While net metering originally sought to encourage adoption of emerging technologies “behind the meter” on customer premises, SB 275 would eliminate important restrictions that currently exist for net metering systems and significantly expand the scope and scale of the subsidy program even though virtual net metering is more problematic and less justified. Although more generation resources are needed overall, encouraging distributed generation without rational size or fuel limits and in a way that bypasses the normal process for new generation in PJM is not a reasonable approach.

Importantly, this expansion of financial subsidies would do nothing to address the serious resource adequacy concerns of policy makers because the bill allows for the placement of facilities anywhere in the service territory of an electric distribution utility if they meet the bill’s site-type requirements. Although the committee heard previous testimony that there are no shifted costs under the bill, AEP Ohio strongly disagrees with those unsupported claims. In fact, I am including a bill comparison example as an attachment to my testimony to illustrate the types of cost shifting that are embedded into SB 275.

Traditional net metering causes cost-shifting to non-participants by offsetting demand and energy charges even though a net metering customer uses the grid more than a normal customer (by sending power back over the grid in addition to having power delivered to the customer over the grid at different times). Under SB 275, any virtual net metering customer can also aggregate their electric bills from multiple delivery locations/metering points. By itself, this bill aggregation

component of the bill will create a significant additional cost to non-participating customers and could well serve as a pretext for AEP Ohio's many mercantile customers to engage in virtual net metering solely in order to manipulate the existing utility rate structure to their own financial advantage. The meter aggregation provision fails to recognize the windfall to be received by a virtual net metering customer by avoiding custom charges, demand charges and rider charges such as the Universal Service Rider and the Kilowatt Hour Tax Rider (which have block rate structures) – which ultimately will be underwritten by non-participating customers. In short, existing utility rates are not designed for metering aggregation and doing so for select customers will create a significant, additional layer of cost-shifting to the detriment of most AEP Ohio customers.

As drafted, a customer could receive significant financial subsidies towards their electric bill for a distribution-level project located a significant distance away from the customer's meters. This leaves other customers to pick up the tab to support the transmission and distribution infrastructure that will continue to serve the subsidized customer.

Finally, there is nothing in the bill to provide opportunities for an electric distribution utility (EDU) to deploy these solutions in a way that maximizes benefits to the grid while minimizing costs to customers. This, along with harmful meter aggregation provisions, raises numerous issues that would make administering SB 275's mandates burdensome and counterproductive. Indeed, having customers add generation resources "to the grid" –without having the utility who otherwise designs and operates the grid – is very unlikely to produce benefits while certain to produce extra costs for the customer base to cover.

We continue to see adoption of leading technologies across our service territory and our customers increasingly demand innovative solutions. Unfortunately, SB 275 would interfere with the distribution grid investments needed to meet these demands by raising rates and significantly expanding outdated policies in a manner that will cause non-participating customers to pay higher rates and AEP Ohio opposes the legislation.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read "Steve Van", is written below the text "Respectfully Submitted,".

One 10 MW Customer

10 MW Customer With No Virtual Net Metering (VNM)

Customer Usage

kW	10,000
Load Factor Assumption	75%
kWh/month	5,475,000

Virtual Net Metering System

Nameplate kW	-
Capacity Factor Assumption	-
kW Output	-
kWh/month Output	-

Net Customer Usage

kW	10,000
kWh/month	5,475,000

Charges (GS Primary Wires Only)

Customer Charge	\$ 139
Demand Charge	\$ 61,700
Universal Service Fund	\$ 5,748
kWh Tax	\$ 19,884
Legacy Generation Resource Rider	\$ 1,500
Basic Transmission Cost Rider	\$ 70,779
Economic Development Cost Recovery	\$ 3,056
Enhanced Service Reliability	\$ 4,142
gridSMART Phase 2 Rider	\$ 17
Distribution Investment Rider	\$ 13,059
Storm Damage Recovery Rider	\$ 5
Tax Savings Credit Rider	\$ (3,395)
Solar Generation Fund Rider	\$ 242

Total \$ 176,875.49

10 MW Customer with Solar VNM Sized to 120% of Energy Use

Customer Usage

kW	10,000
Load Factor	75%
kWh/month	5,475,000

Virtual Net Metering System

Nameplate kW	45,000
Capacity Factor Assumption*	20%
kW Output**	9,000
kWh/month Output	6,570,000

Net Customer Usage

kW**	1,000
kWh/month	(1,095,000)

Charges (GS Primary Wires Only)

Customer Charge	\$ 139	\$ -
Demand Charge	\$ 6,170	\$ 55,530
Universal Service Fund	\$ -	\$ 5,748
kWh Tax	\$ -	\$ 19,884 ***
Legacy Generation Resource Rider	\$ -	\$ 1,500
Basic Transmission Cost Rider	\$ 6,760	\$ 64,019
Economic Development Cost Recovery	\$ 312	\$ 2,744
Enhanced Service Reliability	\$ 423	\$ 3,720
gridSMART Phase 2 Rider	\$ 17	\$ -
Distribution Investment Rider	\$ 1,332	\$ 11,727
Storm Damage Recovery Rider	\$ 5	\$ -
Tax Savings Credit Rider	\$ -	\$ (3,395)
Solar Generation Fund Rider	\$ -	\$ 242
Virtual Net Metering Credit	\$ (74,296)	\$ 74,296

Total \$ (59,139) \$ 236,014

*Typical solar capacity factors are approximately 10%-25%.

**Assumes:

- (1) that net demand is customer demand minus VNM system output,
- (2) that the VNM system operates at least 20% capacity factor during times of peak customer demand, and
- (3) no minimum demand.

***Represents lost revenue for the State of Ohio.

Four Aggregated 2.5 MW Customers

Four Separate 2.5 MW Customers with No VNM

Customer Usage

kW	2,500
Load Factor Assumption	75%
kWh/month	1,368,750

Virtual Net Metering System

Nameplate kW	-
Capacity Factor Assumption	-
kW Output	-
kWh/month Output	-

Net Customer Usage

kW	2,500
kWh/month	1,368,750

Charges (GS Primary Wires Only)

Customer Charge	\$ 139	x4	\$ 554
Demand Charge	\$ 15,425	x4	\$ 61,700
Universal Service Fund	\$ 5,027	x4	\$ 20,107
kWh Tax	\$ 4,978	x4	\$ 19,912
Legacy Generation Resource Rider	\$ 1,500	x4	\$ 6,000
Basic Transmission Cost Rider	\$ 17,695	x4	\$ 70,779
Economic Development Cost Recovery	\$ 769	x4	\$ 3,077
Enhanced Service Reliability	\$ 1,043	x4	\$ 4,170
gridSMART Phase 2 Rider	\$ 17	x4	\$ 68
Distribution Investment Rider	\$ 3,287	x4	\$ 13,147
Storm Damage Recovery Rider	\$ 5	x4	\$ 19
Tax Savings Credit Rider	\$ (849)	x4	\$ (3,395)
Solar Generation Fund Rider	\$ 242	x4	\$ 968

Total \$ 49,277 x4 \$ 197,106

Four Aggregated 2.5 MW Customers with Solar VNM Sized to 120%

Customer Usage

kW	10,000
Load Factor	75%
kWh/month	5,475,000

Virtual Net Metering System

Nameplate kW	45,000
Capacity Factor Assumption*	20%
kW Output**	9,000
kWh/month Output	6,570,000

Net Customer Usage

kW**	1,000
kWh/month	(1,095,000)

Charges (GS Primary Wires Only)

Customer Charge	\$ 139	\$ 416
Demand Charge	\$ 6,170	\$ 55,530
Universal Service Fund	\$ -	\$ 20,107
kWh Tax	\$ -	\$ 19,912 ***
Legacy Generation Resource Rider	\$ -	\$ 6,000
Basic Transmission Cost Rider	\$ 6,760	\$ 64,019
Economic Development Cost Recovery	\$ 312	\$ 2,765
Enhanced Service Reliability	\$ 423	\$ 3,748
gridSMART Phase 2 Rider	\$ 17	\$ 51
Distribution Investment Rider	\$ 1,332	\$ 11,814
Storm Damage Recovery Rider	\$ 5	\$ 15
Tax Savings Credit Rider	\$ -	\$ (3,395)
Solar Generation Fund Rider	\$ -	\$ 968
Virtual Net Metering Credit	\$ (74,296)	\$ 74,296

Total \$ (59,139) \$ 256,245

*Typical solar capacity factors are approximately 10%-25%.

**Assumes:

- (1) that net demand is customer demand minus VNM system output,
- (2) that the VNM system operates at least 20% capacity factor during times of peak customer demand, and
- (3) no minimum demand.

***Represents lost revenue for the State of Ohio.