

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Commission's)	
Review of Chapter 4901:1-10, Ohio)	Case No. 12-2050-EL-ORD
Administrative Code, Regarding)	
Electric Companies.)	

**COMMENTS OF THE
INTERSTATE RENEWABLE ENERGY COUNCIL, INC.
ON PROPOSED MODIFICATIONS
TO OHIO'S NET METERING RULES**

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On behalf of the Interstate Renewable
Energy Council, Inc.

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Pursuant to the Administrative Provisions and Procedure of the Public Utilities Commission of Ohio (Commission) in Ohio Administrative Code (O.A.C.) Chapter 4901-1, and the Commission's Entry dated November 7, 2012, the Interstate Renewable Energy Council, Inc. (IREC) respectfully submits these comments on the proposed changes to Ohio's net metering provisions in Chapter 4901:1-10-28, O.A.C., and addresses the Commission's inquiry regarding pricing of electricity and capacity from small renewable energy generators.

I. Introduction

IREC is a non-profit organization that has worked for three decades to expand retail electric customer access to renewable energy resources through the development of programs and policies that reduce barriers to renewable energy deployment and increase consumer access to solar and other distributed renewable energy technologies. IREC has worked in over 40 states, including proceedings before this Commission, to implement successful regulatory policies that further deployment of these technologies, including net metering rules, community renewable energy programs, interconnection procedures, and policies that allow third-party ownership of distributed generation. IREC appreciates the opportunity to submit these comments.

The Commission's Entry requests, among other things, comments on proposed revisions

to Rule 4901:1-10-28 (Net Metering Rules).¹ IREC generally supports the Commission's proposals to modify the net metering rules, and takes this opportunity to focus on potential improvements. Following the ordering of the eight issues identified in the Entry on pages 3 to 5, Section II of these comments is organized into parts A through G. Of these eight issues, three command the most attention here because IREC believes that the treatment of these three issues will have a significant impact on the size of the potential market for net-metered renewable energy in Ohio. First, the Commission requests comment on issue (a), regarding clarification that a customer-generator can either host or lease a generator, and IREC suggests that it is even more important to clarify that a customer-generator can host a third-party-owned generator that sells energy to the customer. That model is quickly becoming the predominant model for net-metered systems across the country.

The second issue that IREC focuses on here is Entry issue (d), regarding treatment of excess generation. While almost all states with active net metering programs allow rollover of excess kilowatt-hours (kWh), Ohio's approach is to monetize the generation component, based on a narrow reading of an Ohio Supreme Court case. As discussed in these comments, IREC concludes that the Commission can approximate how net metering functions in other states while complying with the case in question.

And finally, IREC focuses on Entry issue (g), regarding virtual net metering and meter aggregation. These policies have been pursued elsewhere, and have the potential to significantly expand the net metering market in Ohio.

To address these issues, IREC offers the following three proposals:

- The Commission clarify that third-party-owned systems may engage in net metering where a customer "hosts" that system on his or her premises and has a contractual arrangement with the owner for the generation of electricity, whether through a lease or a power purchase agreement;
- The Commission revisit rules on the treatment of excess generation and provide that excess generation will offset, indefinitely and on a one to one basis, all applicable bypassable, volumetric rate components; and,
- The Commission implement aggregate or virtual net metering as it will expand the existing market and provide particular benefits to government entities and agricultural enterprises that have multiple utility accounts under common ownership.

¹ Entry at 3-5, ¶ 10. IREC's comments are in regard to Entry Paragraphs 10 and 11.

In addition to these proposals, IREC appreciates the opportunity to comment on the other net metering issues raised in the Entry as well as the issue raised in Entry Paragraph 11, regarding standard rates for Qualifying Facilities under the Public Utility Regulatory Policies Act. In Section III, IREC proposes that the Commission develop resource-specific standard rates based on state procurement requirements.

II. Comments on Net Metering: Entry Paragraph 10, Sections (a) through (g).

A. Clarifying the Ability of Third-Party-Owned Systems to Engage in Net Metering Has the Potential to Substantially Expand the Distributed Generation Market in Ohio. (Paragraph 10(a))

IREC supports third-party ownership of distributed generation as a best practice that removes the initial financial hurdle for many customers that are interested in hosting a distributed generation system. Clarifying the permissibility of third-party-owned net metering systems is a “low-hanging fruit,” in policy terms, because it can be accomplished simply by modifying the definition of a customer-generator and bring immediate interest from established companies that have established markets in other states that expressly allow such arrangements. Under the typical third-party ownership (TPO) model, customers who wish to host a distributed generation system, most often for the purposes of net metering, enter into a contractual arrangement with a company to own, operate, and maintain the system. By monetizing available tax credits and incentives and aggregating operations to achieve economies of scale, TPOs are able to lower overall systems costs for customers, who often lack the tax appetite to fully take advantage of available tax credits. This is particularly true for government entities and other tax-exempt organizations that are otherwise unable to leverage tax benefits to justify installation of onsite generation. Schools, local governments, and houses of worship have all seen a benefit in utilizing the TPO model to capture tax benefits and avoid the hefty upfront capital investment necessary to purchase a system outright.

These TPO contractual arrangements can take the form of a lease, as is explicitly contemplated in the proposed rules, or can be accomplished through a power purchase agreement (PPA) where a host customer pays the owner of the system only for the actual electric output generated. The PPA model has become the dominant model in the nation’s largest solar and net metering markets. For example, recent data from the California market, which accounts for

nearly 40% of the installed solar capacity in the country,² shows that more than 75% of new solar facilities in that state use the third-party owner (TPO) model.³

IREC appreciates the staff's inclusion of third-party-owned systems where the customer "hosts or leases" the system, but encourages the Commission to go further and explicitly clarify that a host customer may enter into a PPA with a third-party owner and still engage in net metering. Arguably, the word "hosts" would encompass the PPA model, because the customer does provide the site for the TPO's system under the PPA model. However, some may argue that if "hosts" was intended to be an all-encompassing term, there would not be a need to specify that leases are included. IREC suggests that the ambiguity be resolved. IREC views the statutory definition of customer-generator, as the "user" of the net metering system, to be sufficiently broad to support third-party ownership of net-metered systems, but cautions that the solar services industry will likely find the term "hosts or leases" in the proposed revisions too vague to signal that the use of PPAs is permissible in Ohio. To accomplish this, IREC proposes the following modification to proposed Rule 4901.1-10-28(A)(1) (proposed revisions are underlined):

- (1) "Customer Generator" shall have the meaning set forth in section 4928.01(A)(29) of the Revised Code. A customer that hosts ~~or leases~~ generation equipment on its premises is considered a customer-generator, including arrangements where the customer leases the generation equipment or enters into a contractual agreement with a third party that will own and operate the generation equipment for the customer's benefit.

IREC notes, however, that TPOs are unlikely to consider Ohio "open for business" if there is a risk that the unique circumstances of PPA arrangements would be lumped together with other entities, like competitive retail electric suppliers or utilities who are offering distinct, all-requirements services to customers. As these TPO arrangements represent a private, behind-the-meter arrangement, and only provide as-available electric output to customer-generators, the Commission should make clear that it does not intend to exert jurisdiction over TPOs.

² Larry Sherwood, *U.S. Solar Market Trends 2011* (Interstate Renewable Energy Council), Table 3, p. 9 (July 2012).) available at <http://www.irecusa.org/news-events/publications-reports/>.

³ PV Solar Report Analysis Executive Brief: Third-party-owned Residential Solar Delivers \$1 Billion to California (8/23/12) (showing that 75% of PV installs in California in 2012 were accomplished by third-party ownership), available at http://www.pvsolarbuzz.com/images/stories/PDFs/thirdprty_solar_1billion_ca.pdf.

B. Establishing Size Limits Based on 120% of a Customer's "Requirements for Electricity" Is Reasonable, But Would Not Be Necessary If the Commission Adopts IREC's Proposal to Allow Indefinite Rollover. (Paragraph 10(b))

IREC sees little problem with adopting a presumption that a customer that generates less than 120% of the customer-generator's electricity requirements is a customer-generator that intends "primarily to offset" part or all of their requirements for electricity. Several other states have instituted similar requirements, and the 120% threshold is within the range of these practices. For example, Maryland recently created a system size eligibility limit for net metering based on 200% of the customer's baseline annual usage.⁴ Colorado Rule 3664, states that a system should be sized up to 120% of expected annual consumption.⁵ Pennsylvania recently adopted a 110% limit for third-party-owned net metering systems, to remove any incentive for wholesale, merchant generators to try to mask their systems as net metering facilities and take advantage of the attendant benefits while continuing to sell substantial amounts of excess generation to the utility or into the wholesale market.⁶

In practice, allowing sizing to meet more than the customer's expected consumption helps avoid conflicts regarding how expected consumption is measured. A customer expecting 12,000 kWh of consumption based on an expected load and planning to install a system that will produce that much electricity need not go through protracted discussions with a utility that estimates load will be 11,000 kWh.

IREC's proposal to adopt indefinite rollover, without the option of a payout (discussed in part II-D of these comments), would render this provision moot. With indefinite rollover, a customer has no incentive to size a system beyond his or her needs, because the excess generation would have no value if the customer perpetually carries unused credits. IREC agrees with the spirit of the Staff's recommended 120% threshold, however, since net metering is not intended to be a program to incentivize generation in excess of the customer-generator's own needs.

⁴ Md. Code Regs. 20.50.10.01(D)(1)(b). The Maryland Commission reasoned that at 200%, a customer-generator was still meeting half of its load with on-site generation, which is enough to satisfy the statutory mandate that the generator be "primarily" intended to offset on-site load.

⁵ 4 C.C.R. 723-3, Rule 3664.

⁶ See Order, Pennsylvania Public Utilities Commission Docket M-2011-2249442 (March 29, 2012).

C. Proposal to Base a Customer-Generator’s “Requirements for Electricity” on a Three-Year Average Is Reasonable, But Would Also Be Unnecessary with Indefinite Rollover. (Paragraph 10(c))

IREC supports the proposed revisions to the rule that would base a customer-generator’s requirements for electricity on an average of three-years of usage, but notes that this provision would not be necessary if the Commission adopts IREC’s proposal for indefinite rollover of excess generation credits (see part II-B of these comments). It is reasonable to determine system size eligibility on a three-year average of a customer-generator’s usage, as doing so will account for seasonal or individual changes in usage that follow weather patterns, extended customer vacations or building vacancies. This provides additional accuracy in determining the appropriate sizing for customer-generators, but would not be necessary if the Commission allowed indefinite rollover of excess generation credits. Indefinite rollover puts the risk of appropriate sizing on the customer-generator and provides additional flexibility for customer-generators that wish to size a system based on expected future load, which may account for expansion of the structure or an increase in business. Accordingly, indefinite rollover is a best practice because it avoids unnecessary administrative determinations and allows the marketplace to fashion an appropriate and economically optimal solution for a customer-generator’s specific needs.

D. The Proposed Rules Can Be Modified to Allow Indefinite Rollover of Kilowatt-Hour Credits to Offset Future Usage for All Bypassable, Volumetric Rate Components. (Paragraph 10(d))

Net metering has been a key driver of the distributed generation market in the United States, and the value of excess generation—i.e., generation that exceeds onsite usage over the applicable billing period—is at the heart of the value proposition for utility customers who are unable to consume the entire output of the systems in real-time and need the net metering mechanism to be able to utilize all of the kilowatt-hours that their systems generate. The logic of net metering is that any of the “banked” excess credits can be rolled forward and used in future months just as if the generation had been produced and consumed in that month, providing a full offset from the components of the utility bill that are charged on a per kilowatt-hour basis (i.e., volumetric charges). It is IREC’s understanding that, currently, Ohio net metering policy limits

the rollover value of excess generation to merely the generation rate component.⁷ IREC encourages the Commission to revisit this essential element of net metering and proposes that the Commission may value excess kWhs based on applicable rate components that are both volumetric and bypassable, beyond the current “generation only” practice.

IREC makes this proposal fully aware of prior Commission and Ohio Supreme Court precedent⁸ on this issue and encourages the Commission to consider how it may expand the viability of net metering while respecting the explicit dictates of the Ohio Supreme Court.

IREC’s proposal for treatment of excess generation

IREC’s proposal to value and manage customer-generator’s excess generation has two aspects. First, IREC proposes that the Commission consider implementing indefinite rollover of excess generation credits in lieu of staff’s proposed yearly reconciliation process, which results in a payment to customers for any unused credits. Paying customers for excess credits at the generation rate raises issues of customer tax liability, raises jurisdictional issues if the rate of payment is in excess of the utility’s avoided cost,⁹ and creates an incentive for customers to oversize systems. Moreover, the proposal to annually reconcile net metering accounts on May 31st of each year means that customers will not be able to carry excess kWh credits accumulated during the winter to offset usage during high-use summer months.¹⁰

In contrast to the shortcomings of an annual reconciliation mechanism, indefinite rollover without the possibility of payout for excess generation eliminates customer incentives to oversize systems, gives customer-generators an ongoing, full value for their onsite generation, and avoids potential legal issues related to the proper rate of such payout and the taxation of such payments

⁷ *Database of State Incentives for Renewables and Efficiency* (DSIRE), Ohio Net Metering Page, available at http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=OH02R&re=0&ee=0.

⁸ *First Energy Corp. v. Pub. Util. Comm’n*, 95 Ohio St. 3d 401 (2002) (invalidating a Commission modified net metering rider that would allow customer-generators to avoid “transition charges”).

⁹ *See, e.g., MidAmerican Energy Company*, 94 FERC ¶ 61,340 at 62,263 (2001) (holding that net metering only involves a “sale” where there is excess generation at the end of the applicable billing period.); *SunEdison LLC*, 129 FERC ¶ 61,146 at P 18 (2009) (reaffirming *MidAmerican* in noting that any sale at the end of the applicable billing period would be governed by the Federal Power Act unless the generator was a qualifying facility and the rate of purchase does not exceed the utility’s avoided costs).

¹⁰ A May 31st programmatic year-end is favorable for solar energy systems, and other states have used springtime end-dates. This allows summertime excess generation to be used in the less-sunny months of winter. However, other types of generation do not peak in the summertime and are more likely to experience excess generation outside of summer months, making May 31st an unfavorable year-end.

as personal income. For these reasons, IREC considers indefinite rollover a net metering best practice that achieves the goal of incentivizing customer participation through the bill credit mechanism while avoiding potential legal complications that result from payments to customers.

Second, IREC proposes that excess kWh hours be carried forward and applied to offset all volumetric rate components, except for those that are determined to be nonbypassable under Ohio law. In addition to the generation rate component, IREC suggests that rolled-over excess generation from previous months should be used to offset transmission and distribution-related rate components (i.e., delivery charges) that are also assessed through volumetric charges. This does not require utilities to credit customers for non-volumetric charges, such as fixed monthly charges, or charges which have been determined by the Commission or the courts to be nonbypassable and not eligible to be offset by excess generation.

The First Energy case does not foreclose the Commission’s ability to value excess generation beyond solely the volumetric generation rate component.

IREC understands that the *First Energy* case, decided in 2002, inserts a limiting legal principle to Commission implementation of Revised Code Section 4928.67, but it does not preclude the Commission from developing improved net metering rules that are reasonable and consistent with law. In the Commission’s 2008 order approving revisions to its net metering rules, the Commission cited the *First Energy* case and characterized IREC’s request at that time to allow full-retail credit rollover as an attempt to “overturn or distinguish prior precedent in which the Ohio Supreme Court prohibited the full credit for excess generation advocated for by IREC.”¹¹ IREC’s current proposal to credit excess kWhs against volumetric, bypassable rate components does not seek to overturn Ohio Supreme Court practice, but, rather, seeks to harmonize *First Energy*’s sole affirmative declaration of law—that customer-generators may not avoid nonbypassable rate charges—with the dominant form of net metering in the United States: full retail rate net metering.

It is important to note that in 2002, net metering was still a relatively new policy and Ohio was one of a handful of states that had implemented that policy. Currently, most states have adopted net metering policies, and most of those value excess generation credits at the full retail

¹¹ See Finding and Order, Public Utilities Commission of Ohio Case No. 06-653-EL-ORD at 24, ¶ 62 (November 5, 2008).

rate, as shown in Table 1, primarily by providing a kWh credit rollover, but in some cases by monetizing the excess credits each month and rolling them forward as a dollar figure. IREC’s proposal is to roll forward any excess generation as kWh credits, but it also accounts for the fact that some rate components, as the *First Energy* court observed in the case of transition charges, are mandatory and nonbypassable and will not be offset by those credits.

Table 1. Credit for Excess Generation by State

Excess kWh Rolled Over to Subsequent Bills at Retail Rate or to Offset Retail kWh	Excess kWh Rolled Over at Avoided Cost, Wholesale Rate or at Generation Rate
AR, AZ, CA, CO, CT, DC, DE, FL, HI, IA, IL, IN, KS, KY, LA, ME, MD, MA, MI, MN, MT, NE, NV, NH, NJ, NY, NC, OR, PA, RI, SC (IOUs), UT, VT, VA, WA, WV, WI, WY	AK, MO, NM, ND, OH, OK

IREC views its current proposal as consistent with *First Energy*, based on its understanding that the Commission’s authority to include delivery-related and other bypassable rate components in the excess generation credit calculation turns on a question of fact and is not controlled by the pure question of law that was settled by the court. As the court held in *First Energy*, “[t]his appeal does not turn on factual determinations, either as to the adequacy of, or the weight to be accorded to, the record evidence.”¹² Instead, the court held that the case “involved questions of law...” over which it “has complete and independent power of review....” Within the scope of this standard of review, the court provided only one explicit and purely legal determination: it was “contrary to law and is unreasonable...” to “require the utility to pay transition charges to the customer-generator.”¹³

Importantly, the court’s determinations, as a matter of law, draw their authority in statute. For its most explicit holding on the legality of the rider under consideration, the court cited Section 4929.39 of the Revised Code to establish that crediting customer-generators for transition revenue charges violated the statutory mandate that utilities “shall receive” transition revenues. By analogy, the court inferred that similar mandatory statutory language in reference to Universal Service and Energy Efficiency Funds prohibited those rate components from being

¹² *First Energy*, 95 Ohio St. 3d at 404.

¹³ *Id.* at 406.

compensated to customer-generators through any excess generation credits.¹⁴

The court did not make similar affirmative declarations of law in regard to the delivery-related rate components that it considered. In relation to these other types of rate components, the court simply observed that customer-generators do not incur the same types of expenses as the utility. In this way, the court framed the Universal Services and Energy Efficiency funds and transmission, distribution, and ancillary services costs as expenses that only utilities face. The court did not, however, go on to characterize the collection of revenues for transmission and distribution as nonbypassable. Rather, the court's observation that customer-generators do not incur transmission and distribution expenses appears to be mere dictum, as the court never articulated that it would be unreasonable or illegal for customer-generators to avoid paying or to receive a credit against this type of rate component.

To that point, IREC suggests that the reasonableness of crediting a customer-generator's excess kWhs against delivery-related volumetric charges involves a factual determination that is not foreclosed by *First Energy*. While it is true that customers do not build or own the utilities' distribution infrastructure, it is also true that net metering customers bring tangible benefits to the grid that approximate or exceed the actual costs they are avoiding through net metering credits. In essence, the reasonableness of including delivery-related charges in the net metering credit for excess generation is a question of costs and benefits. This is a pure question of fact that is not governed by the legal principles decided in *First Energy*.

As a factual matter, IREC suggests that the Commission could readily establish reasonable grounds to conclude that customer-generator exports do provide some degree of benefit to the utilities' distribution and transmission systems. It is a long-established proposition that solar PV can provide tangible distribution-related benefits.¹⁵ In the case of PV, on a circuit that peaks in the afternoon or early afternoon, customer-generator exports can reduce grid

¹⁴ *Id.*

¹⁵ See, e.g., T. Hoff, D.S. Shugar; "The value of grid-support photovoltaics in reducing distribution system losses," Energy Conversion, IEEE Transactions, vol.10, no.3, pp.569-576, Sept. 1995; Shugar, D.S.; "Photovoltaics in the utility distribution system: The evaluation of system and distributed benefits," Photovoltaic Specialists Conference, 1990, Conference Record of the Twenty First IEEE, pp.836-843 vol.2, 21-25 May 1990; T. Hoff, D.S. Shugar; "The value of grid-support photovoltaics to substation transformers," Proceedings for 1994 IEEE/PES winter meeting.

congestion and line losses by providing generation that will be consumed by other customers on the same circuit. Additionally, customers utilizing net metering on these circuits often reduce their own contribution to circuit peak, providing a tangible capacity benefit by allowing more headroom on the circuit and possibly enabling the utility to defer upgrades or capacity additions to that circuit or substation. While each utility service territory is unique, a recent circuit level study by Southern California Edison (SCE) provides evidence that solar PV can significantly reduce peak demand on certain circuits, typically commercial circuits that peak when solar generation is at its peak.¹⁶ Thus, the reasonableness of compensating customer-generators for their contribution of benefits to the transmission and distribution grids turns on facts—whether such facilities deliver any benefits to the grid—and not a question of law. The Commission need not show that benefits exceed costs, merely that there is some correlation between customer-generator exports and grid benefit that justifies using the T&D rate components as a proxy to credit customer-generators.¹⁷

Put simply, Ohio’s net metering statute and the proposed rule revisions do not require “generation only” crediting for a customer-generator’s excess generation. Section 4928.67(B)(3)(b) of the Revised Code makes no distinction based on rate components for standard net metering, and broadly states that “[i]f electricity is provided to the utility, the credits for that electricity shall appear in the next billing cycle.” IREC encourages the Commission to reconsider its statutory authority to determine a credit value for excess generation that accounts for other bypassable rate components, including volumetric delivery-related components.

E. Defining Premises to Include Contiguous Properties Is Reasonable and Could Support Additional Policies Under Consideration. (Paragraph 10(e))

IREC supports Staff’s proposal to define premises to include contiguous properties. This should be a non-controversial provision, as it is reasonable and a commonly accepted practice. Moreover, defining a customer’s premises expansively could prove important to ANM,

¹⁶ In a recent rate case, A.11-06-007, SCE study that took a sample size of 80 commercial customers with solar PV and compared these customers’ coincident and non-coincident peak demands before and after installation of solar PV. The study revealed that these customers’ coincident demands were 39% lower after installing solar PV. The study was made publicly available as attachment RTB-2 to the Solar Energy Industries Association’s testimony in a separate proceeding, A.11-10-002. To request a copy of this testimony, please email tculley@kfwlaw.com.

¹⁷ IREC does not believe that a full cost-benefit study is necessary to give the Commission a reasonable basis to include delivery-related charges in the net metering credit.

especially if the Commission were to put a geographic limit on the accounts a customer can aggregate. In that case, an expansive definition of premises is necessary to accommodate ANM for commercial or government building complexes, college campuses, and farms that may span over multiple, contiguous properties.

From past experience, IREC suggests that the Commission clarify that properties divided by an easement or public road will be treated as contiguous properties. Without such a clarification, parties will be left to wonder about this fine point that invariably arises.

F. “Microturbine” Should Be Defined to Require that such Generators Use Renewable Fuel Sources. (Paragraph 10(f))

IREC notes that Ohio is among a small number of states that allow microturbine generators to participate in net metering. Few states explicitly permit microturbines to net meter, except in the context of combined heat and power (CHP) systems.¹⁸ Indeed, Ohio is one of three states that IREC identified that allow microturbines to net meter without conditioning participation on the use of renewable fuels.

IREC recommends that the Commission should limit microturbine eligibility to those systems that are powered by renewable fuels. One of the policy objectives in common among state net metering policies is the preference for sustainable customer-sited distributed generation resources. Microturbines can be appropriate net metering technologies, but only where powered by renewable fuels. Otherwise, there is nothing inherently sustainable about microturbines that makes their inclusion as an eligible technology consistent with overall net metering policy objectives.

G. Establishing Aggregate and Virtual Net Metering Would Expand the Appeal of Net Metering to Multi-Metered Customers and Provide Benefit to Government, Agricultural and School District Customers. (Paragraph 10(g))

IREC appreciates the Commission’s consideration of Aggregate Net Metering (ANM) and Virtual Net Metering (VNM). ANM and VNM represent innovative policy adaptations of standard net metering that typically benefit customers who have the unique circumstances of having multiple meters dispersed throughout a property or throughout a defined geographical

¹⁸ IREC has no recommendation on whether CHP systems should be allowed to net meter.

area. ANM allows customers with multiple meters to size a single renewable energy system to meet their aggregate load rather than requiring the connection of smaller systems to each of their meters. VNM on the other hand, refers to the mechanism whereby customers receive generation credits from a facility that is not physically connected to the customer's meter that is being credited. In this way, VNM can refer to many things, from a means of accomplishing aggregate net metering to the means of applying net metering credits from a community-owned generation system to multiple participants in that project. In the current context, we assume that the Commission is considering VNM as a means of accomplishing aggregate net metering, and we, accordingly, focus our attention on the development of a viable ANM policy for Ohio.

IREC strongly supports Commission adoption of ANM, as it is a modest change to net metering policy that serves to capture economies of scale for multiple-metered customers who can enjoy additional flexibility in deciding how to size and where to site a generation system. For example, if a customer operating a large farm with multiple meters wants to invest in on-site generation to serve their load, the customer has two basic options: (1) site a generator at each meter and bear any installation and interconnection costs for each system; or (2) physically aggregate all loads by constructing additional facilities to put all loads behind one meter served by on-site generation (i.e. master meter their property). In both instances, the customer investment is often stymied. In the case of master metering, the additional cost of rewiring their property to master meter usually will make the project uneconomic. This is why it is important to allow eligible customers to aggregate their loads virtually, without requiring "physical aggregation." If a customer were to install multiple, individual systems to serve the load behind each of their meters, economies of scale are undermined and interconnection costs are needlessly duplicated. In sum, both options drive up the cost of renewable energy in direct opposition to state policy objectives.

Because the benefits of ANM support overall state policy goals of encouraging the installation of renewable energy, IREC supports its availability to all customer classes. The current best practice is, therefore, to allow ANM without class restrictions and with flexible geographic limitations. In IREC's experience, farms, school districts, and state and local governments are ideal candidates for ANM (even when the policy is limited to a single property), as these customer types might have multiple meters or accounts on a single property or campus.

Moreover, of the 13 states we have identified with explicit ANM policies, only 3 restrict the types of customers that may participate, as shown in Table 2.

Table 2. Limitations in State ANM Policies

Type of Limitation	States that feature this limit	States that do not limit
Meter aggregation only on customer's property or contiguous property	CO, OR, MA, RI	
ANM within 2 miles of generating facility	PA, WV	
ANM within service territory of utility	NY (load zone), DE, CA, CT, VT, WA, ME	
Only certain classes may engage in ANM	CA, CT, NY	CO, DE, OR, PA, WV, VT, MA, RI, WA, ME

IREC proposes that ANM be permitted for customers who have multiple accounts under common ownership, regardless of the customer's class and of the distance between those accounts, so long as they are located within the same service territory of an electric distribution utility and are served by the same electricity provider. Additionally, IREC suggests that the Commission take an expansive view of "common ownership" to accommodate local government customers that may have different accounts payable names, but share a common source of appropriations. For example, a city library and fire department are part of the same municipal structure, but it might not be readily apparent that such customers were under "common ownership," particularly where they use different names on their utility accounts. Such a policy will allow school districts and state and local governments to realize savings in energy expenditures by allowing all accounts under the umbrella of those organizations an opportunity to participate in ANM.

IREC has developed its own standard language for ANM, which is featured in IREC's Model Net Metering Rules, 2009 edition.¹⁹ IREC proposes the following unnumbered language, based on modified version of its own model rules, to accomplish ANM in Ohio:

- (x) For customer-generators participating in meter aggregation, the following provisions apply:
- (x) For the purpose of measuring electricity usage under these Net

¹⁹ See *Net Metering Model Rules* (IREC), 2009, subsection (d), available at www.irecusa.org/wp-content/uploads/2009/11/IREC_NM_Model_October_2009-1-51.pdf.

Metering rules, an electric utility must, upon request from a customer-generator, aggregate for billing purposes a meter to which the net metering facility is physically attached (“designated meter”) with one or more meters (“additional meter”) in the manner set out in this subsection.

- (x) An electric utility must, upon request from a customer-generator, aggregate all additional meters that are located within that electric utility’s service territory.
- (x) A customer-generator must give at least 30 days notice to the electric utility to request that additional meters be included in meter aggregation. The Specific meters must be identified at the time of such request. In the event that more than one additional meter is identified, the customer-generator must designate the rank order for the additional meters to which net metering credits are to be applied.
- (x) The net metering credits will be applied to the customer-generator’s accounts, in rank order, as set forth in Section 4901.1-10-28 (B)(9) of the Administrative Code.
- (x) If in a monthly billing period, the net metering facility supplies more electricity to the electric utility than the energy usage recorded by the customer-generator’s designated meter, the electric utility will apply net metering credits to additional meters in the rank order provided by the customer-generator, and any remaining credits after doing so will be rolled over to the designated meter for use during the next monthly billing period.
- (x) A customer-generators designated meter and additional meters do not have to be on the same rate schedule.

IREC stands ready to work with other parties to refine these concepts to fashion ANM in a way that is attractive to eligible customers and administratively manageable for utilities. IREC encourages the Commission to implement ANM in Ohio or, at a minimum, to require the utilities to operate pilot programs to gain experience with the practice before full roll-out of the program.

III. The Commission Should Consider Creating Multi-Tiered Standard Avoided Cost Pricing to Reflect State Procurement Requirements. (Entry Paragraph 11)

IREC’s focus in this proceeding is net metering, but it is important to consider the overlap and relevance of the Public Utility Regulatory Policies Act of 1978 (PURPA) as a backdrop to these policies. For instance, the Federal Energy Regulatory Commission (FERC) has ruled that net metering does not involve the sale of electricity, so long as there is no excess

generation over the applicable billing period.²⁰ The applicable billing period is not strictly defined and a large number of states (as discussed in part II-D of these comments) utilize indefinite rollover, and, thus, never risk triggering FERC's wholesale sale jurisdiction. Where there is excess generation over the applicable billing period, FERC has held that a sale has occurred and that the generating facility must be a qualifying facility (QF) under PURPA and the rate of purchase may not exceed the utility's avoided cost.²¹ Accordingly, a standard rate for PURPA purchases is directly relevant to the payment that is allowed to a customer-generator.

In light of recent FERC rulings, IREC encourages the Commission to utilize its authority to develop multi-tiered standard avoided cost rates to reflect the state's current renewable procurement requirements and, specifically, the solar carve out. The overarching message of FERC's recent rulings is that states may base avoided cost rates on the costs of specific types of generation being avoided, such as renewable resources, where the state has required the utility to buy energy from that type of generating resource.²² This type of price differentiation is supported by FERC's guidance and would create another avenue to encourage distributed generation. Moreover, the relevant measuring stick for any payments to net metering QFs for excess generation should be the avoided cost of renewable energy or solar energy—in light of the carve out for solar energy in the state RPS—and not the avoided cost of a natural gas-fired CT plant.

IV. Conclusion

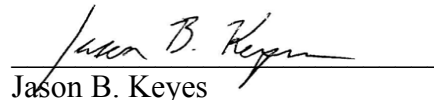
IREC appreciates the opportunity to offer these comments and encourages the Commission to adopt our three primary proposals: (1) increase the value of net metering to attract additional participation by expanding the value of net metering by including T&D rate components and by allowing indefinite rollover of credits; (2) encourage the growth of distributed generation and net metering by permitting third-party ownership of net metered systems to be accomplished through a PPA; and (3) allow multiple-metered customers to engage in aggregate net metering through either physical or virtual means. In addition, IREC encourages the Commission to use the present opportunity to establish multi-tiered avoided cost pricing to account for state-mandated procurement requirements.

²⁰ See, e.g., *MidAmerican*, 94 FERC ¶ 61,340 at 62,263; *SunEdison*, 129 FERC ¶ 61,146 at P 18.

²¹ *Id.*

²² *California Public Utilities Commission*, Order Denying Rehearing, 134 FERC 61,044 (2011).

Respectfully submitted on January 7, 2013,

A handwritten signature in black ink, reading "Jason B. Keyes", is positioned above a horizontal line.

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Summary: Comments COMMENTS OF THE
INTERSTATE RENEWABLE ENERGY COUNCIL, INC.
ON PROPOSED MODIFICATIONS
TO OHIO'S NET METERING RULES

electronically filed by Mr. Thad B Culley on behalf of Interstate Renewable Energy Council,
Inc.