

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

**In the Matter of the Commission's
Review of Chapter 4901:1-10, Ohio
Administrative Code, Regarding
Electric Companies**

Case No. 12-2050-EL-ORD

**JOINT MEMORANDUM CONTRA OF OHIO EDISON COMPANY,
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,
THE TOLEDO EDISON COMPANY AND OHIO POWER COMPANY**

INTRODUCTION

Pursuant to R.C. 4903.10 and Rule 4901:1-35, Ohio Administrative Code, Ohio Edison Company ("Ohio Edison"), The Cleveland Electric Illuminating Company ("CEI"), and The Toledo Edison Company ("Toledo Edison") (collectively, the "Companies"), and Ohio Power Company ("AEP Ohio") hereby jointly file their Memorandum Contra the Applications for Rehearing filed by the Office of the Ohio Consumers' Counsel ("OCC"), IGS Solar, LLC, IGS Generation, LLC, and Interstate Gas Supply, Inc. (collectively, "IGS"), the Environmental Law & Policy Center, Ohio Environmental Council, Environmental Defense Fund, Natural Resources Defense Council, and Vote Solar (collectively, "Environmental Advocates"), and One Energy Enterprises, LLC, ("One Energy") (altogether collectively, "Other Parties") seeking modification of the Commission's Finding and Order entered in the journal on November 8, 2017, in the above-captioned case ("Order").

As explained in more detail below, the Commission's Order in this case with respect to the issues raised by Other Parties is reasonable and lawful, to wit: 1) the Commission did not err when it clarified that a capacity component should not be included in SSO monetary credit for excess generation; 2) the Commission did not err when it recognized the utility's role in

protecting public and worker safety related to electric distribution; and 3) the Commission did not err when it evaluated the role that interval or advanced metering would allow for shopping customers' credit for excess generation.

At the outset it should be noted that comparing the Ohio Administrative Code net metering rules to other States' policies is irrelevant without full comparability of the enabling statutes, Public Utility Commission Orders, and court reviews. Such comparisons belong in front of the General Assembly, not this Commission's Rule Review. For the reasons set forth herein, the Commission should deny the Applications for Rehearing on these issues.

ARGUMENT

I. The Commission did not err when it clarified that the SSO capacity component should not be included in the credit for excess generation for non-shopping customers taking service under the Companies' Net Energy Metering Tariff.

Environmental Advocates, OCC, and IGS each argue that the Commission erred when it "removed" the capacity component from the utilities' compensation for excess generation.¹ Ignoring that under neither the Companies' tariff nor AEP Ohio's tariff there never has been a capacity component payment, their arguments betray a fundamental ignorance of how PJM market settlement and customer billing function for a utility's net metering tariff. The

¹ OCC Memorandum in Support at p. 4. Inexplicably, OCC claims that paying a capacity component is the current status quo even though it identifies that Duke only recently began doing so, and the Companies and AEP Ohio have never paid a capacity component pursuant to the Supreme Court of Ohio ruling in *FirstEnergy v. Pub. Util. Comm'n*, (2002). Further, the Commission's prior order in this proceeding newly requiring a capacity component for excess generation credits was challenged on appeal, withdrawn from JCARR, and never implemented.

dynamics of PJM market settlement, SSO Supplier and customer invoicing, and the operating characteristics of customer-generators combine to support the Commission's Order.

A. Even without a capacity component for excess generation credits, net metering customers are fully- if not over-compensated.

OCC, Environmental Advocates and IGS assert that excess generation, even mere peak load reduction, somehow provides a pot of gold from which utilities should compensate customer-generators for an alleged "value of capacity." OCC goes so far as suggest that excess generation is somehow sold to neighboring customers. However, this is true neither for monthly net excess generation nor for within-month excess generation.

Considering the latter scenario when within-month generation does not result in net monthly excess generation, Environmental Advocates argue that merely reducing peak demand has value that must be compensated, stating:

[i]gnoring that peak reduction gives utilities a free pass to purchase more capacity than they need, resulting in higher costs for all customers. Or, if utilities do actually incorporate excess generation from net metered customer-generators into their load forecasts as a demand-side reduction and procure less capacity as a result, then those net metered customer-generators are in fact providing capacity value to the system for which they should be fairly compensated.²

Environmental Advocates note with favor the statement in the Commission's Order that "customer-generators may generate electricity at times of peak demand,"³ before going on to argue that the Commission erred by not requiring a capacity component in the SSO customer-

² Memorandum in Support, Application for Rehearing of Environmental Law Policy Center, Environmental Council, Natural Resources Defense Council, Environmental Defense Fund, and Vote Solar, pp. 1-2.

³ Environmental Advocates at p. 4, (quoting Order at 17).

generator's credit for excess generation at the time of system peak. OCC and IGS make similar arguments.⁴ These arguments are wrong for several reasons. Preliminarily it should be noted that larger commercial and industrial customer-generators on the Companies' net energy metering tariff (and similarly on AEP Ohio's tariff) already have bi-directional interval meters capable of measuring inflows and outflows at the time of system peak; however, SSO service by design is average-based pricing, not time-of-use based pricing. Choosing SSO service means choosing average pricing rather than the tailored pricing possible through shopping.

The first reason why these arguments are wrong is because under the Commission's adopted rule, in the event of excess generation that does not exceed a non-shopping residential customer-generator's load during the monthly billing period, the customer-generator receives an economic benefit that is effectively a full SSO retail price credit. Within-month excess generation effectively spins the meter backwards while on the utility's net energy metering tariff, subtracting the excess kWh from the customer-generator's billing determinants, which lowers the net kWh consumption to which all kWh-based rider charges are applied. Thus, non-shopping customer-generators continue to receive substantially more than a full value SSO capacity component for within-month excess generation.

Second, non-shopping residential customer-generators generating in excess of their requirements for a monthly billing period do not pay any capacity charges at all in that month

⁴ See, for example, OCC at p. 4 ("The status quo, where net metering customers receive a credit consisting of energy and capacity, should remain pending the detailed, state-wide policy review based on a more current record as discussed above."); IGS at p. 12 ("The Order, however, limited compensation to the energy portion of the SSO rate. As a practical matter, the Order reduced economic viability of distributed generation resources by eliminating an important value stream.").

no matter how many kWh they have consumed. Even consumption at the time of system peak is not charged to them because their kwh-based charges will be zero—and it is then a zero that is used for retail billing as well as determination of the next year’s PLC and NSPL values. For example, if a residential non-shopping customer-generator’s air conditioning and other consumption exceeds generation by 200 kWh on average during the five system peak hours, but the monthly net is zero or negative, that customer will pay nothing to cover their contribution toward the capacity costs incurred to meet their actual needs in hours where they were more likely than not to be consuming electricity – not generating excess amounts. If there is anything unfair about this scenario, it is that other non-net metering customers are forced to make up the difference between capacity costs caused customer-generators’ and capacity costs paid by them.

B. It has not been demonstrated that net energy metering customers produce excess generation as the time of the SSO peak demand.

No evidence has been presented at any time throughout this proceeding that net metering customer-generators produce excess generation at the time of system peak. There has been much innuendo, but as Environmental Advocates recognize “a single large cloud may significantly reduce solar production”⁵ that could cause any given solar resource to fail to provide excess generation at any time. Absent bi-direction interval metering, excess generation at the time of system peak by customer-generators is nothing more than proponents’ unsupported assertion. Conversely, studies have demonstrated that on average

⁵ Environmental Advocates at p. 10.

and in total⁶ customer-generators with solar systems generate less than they consume at system peak because fixed arrays are typically installed facing southward to maximize daily kWh production, while system peak occurs in late afternoon or evening when south-facing arrays receive less direct sunlight. In other words, solar generation decreases sharply while consumption is still increasing sharply.⁷

Even if one assumes that on balance excess distributed solar generation has shifted the system peak load marginally to later in the day, the fact remains that at the time of the new peak hour, solar customer-generators are likely to be net consumers during that hour and therefore contribute to the actual SSO capacity costs. A net consumer at system peak should not be capacity-compensated for monthly net excess generated in off-peak periods while also being relieved of paying for contributed costs.

C. SSO energy and capacity obligations have been fully transferred to SSO Suppliers.

As mentioned above, there is no pool of money available to EDUs produced by customer-generators' excess generation from which to pay for excess generation. The energy and capacity costs to serve SSO customers are the obligation of SSO Suppliers, not the EDUs. The Companies are no longer vertically integrated—they only collect billed revenues from customers before forwarding payments to Suppliers pursuant to the outcome of the Competitive

⁶ See, for example, *The Solar Value Cliff: The Diminishing Value of Solar Power*, Institute for Energy Research, <https://instituteforenergyresearch.org/studies/solar-value-cliff-diminishing-value-solar-power/> (last visited 12/16/17); Brown, Ashley, and Bunyan, Jillian, *Valuation of Distributed Solar: A Qualitative View*, *The Electricity Journal*, Volume 27, Issue 10 (December 2014).

⁷ Continental wind resources tend to peak at night, making it even more likely that excess generation occurs during off-peak hours.

Bid Process. SSO Suppliers settle supply and demand in the marketplace, absorbing differences including any excess generation that may be produced by customer-generators.

Specifically, the Companies' settlement process today treats excess kWh as part of Unaccounted-For Energy ("UFE") that is assigned to wholesale suppliers serving all of the Companies' customers – both SSO Suppliers and Competitive Retail Electric Service ("CRES") providers. Thus, there is no bucket of money generated as anticipated by Other Parties from which the Companies would draw on to pay credits for excess generation because the kWhs are already in the payments made to SSO Suppliers. In other words, the Companies do not overpay SSO Suppliers and later send them a negative load bill based on excess generation that the SSO Suppliers give back money to the Companies – it simply doesn't work this way.

Clearly OCC and Environmental Advocates do not understand that settling negative loads through UFE means that it is the Load Serving Entities ("LSEs") that receive the benefit of excess generation. OCC's recommendation that cost recovery for monetary credits paid by EDUs to non-shopping customer-generators be netted against revenues from selling excess generation to other customers results in the same full costs being recoverable.

On the other hand, IGS explicitly identifies UFE as one of two potential accounting destinations for the benefit, suggesting it knows full well how excess generation is settled.⁸ However, what IGS fails to provide to this Commission is an explanation of what it does as a Competitive Retail Electric Service provider ("CRES") with the benefit it receives when the Companies allocate negative load through UFE to its account? Does it commensurately reduce the overall prices it offers customers? Does it pocket the benefit as unearned profit? IGS's only

⁸ IGS at p. 8.

explanation about what it might be doing is that such benefit is difficult to quantify and hard to explain to customers.⁹

Finally, with respect to cost recovery, IGS's argument that EDUs should not be permitted to recover in distribution rates the costs of monetary credits paid to customer-generators lacks any foundation in the law or in practice. Simply considering the Commission's PURPA implementation accomplished in this same docket dispels any notion that the Commission's adopted rule regarding cost recovery is impermissible under the law. When the Commission adopted its new rule regarding a Qualifying Generator's ("QF") rights to choose selling electrical output to its local EDU rather than into the marketplace, it explicitly allowed EDUs to recover the costs associated with such purchases through distribution rate mechanisms.¹⁰ Like net metering, QFs may elect to sell their generation through a competitive market, or to force the utility to purchase its output, and EDUs may recover that cost in distribution rates without violating O.R.C. 4928.02(H).

D. Non-shopping customer-generators on an EDU's net energy metering tariff are not subjected to different charges than customers on the underlying tariffs.

In their zeal to increase hidden tax incentive subsidies for renewables, Environmental Advocates raise the oxymoronic argument that customer-generators must be given a capacity component credit for excess generation because "[u]nder the utilities' standard service offer tariffs, a non-net-metered customer saves money on the both the energy *and* capacity

⁹ *Id.* And yet, IGS insists that EDUs provide a capacity benefit without advanced metering data.

¹⁰ Second Entry on Rehearing, Par. 53 (p. 25), May 28, 2014 ("Further, the Commission finds that the EDU may recover all prudently incurred costs associated with energy payments to QFs, including any market settlement charges, attributable to the QF, through the existing mechanisms that the EDU currently uses to recover other costs incurred to serve SSO load through the auction process.")

components of their bill when they contribute to lower system demand at peak times by reducing their electricity usage.”¹¹ This argument lacks credibility both on its face and under any logical analysis.

As explained above, customer-generators on an EDU’s net energy metering tariff save money on both energy and capacity components for their reduced electric requirements in the same way as any customer investing in energy efficiency. Consider, for example, a residential net metering customer-generator whose generation never exceeds consumption in any hour—the behind-the-meter generation would impact monthly billing in the same manner as replacing an old air conditioner or refrigerator with a more efficient model. Both customers receive exactly the same sort of kWh-based savings on their bill. There is complete congruence with the underlying tariff charges for electric service consumption.

However, customer-generators whose generation sometimes exceed their load also receive additional credits for excess generation that occurs at any time over the course of the month. Non-net metering customers without any generating capability cannot produce excess generation and therefore receive no compensation of any amount for it. In other words, there simply is no possible comparison of the monetary credit for excess generation with a non-net metering customer’s bill.

Further, IGS, OCC, and Environmental Advocates make a fundamental mistake in arguing that a monetary credit for monthly net excess generation should be equal to what SSO customers pay to SSO Suppliers for full requirements service. SSO Suppliers contract with the Companies (and AEP Ohio) to procure capacity that fully meets all of PJM’s requirements for

¹¹ Environmental Advocates at pp. 6-7. (emphasis in original)

capacity products, including being offered into the market auctions and being dispatchable upon demand by the RTO. Without these marketplace characteristics, net metering customer-generators' excess generation simply does not provide the same services and value of capacity that SSO Suppliers provide. SSO customers should not be required to pay the same price for an inferior product.

Despite Environmental Advocates' hope that the Commission would ignore the factual evidence of the capacity value of distributed generation in net metering and artificially "put it on an even footing with other electricity resources,"¹² net metering simply does not provide the same quality features of SSO supply resources.

II. The Commission did not err when it considered the role that advanced metering could play in allowing CRES providers to value and compensate excess generation.

Environmental Advocates and IGS both complain that the Commission's Order is unreasonable and unlawful because utilities have not widely deployed advanced metering capabilities or have not developed time of use tariffs.¹³ Interestingly, neither party raised this complaint in opposition to the proposed rule during Initial or Reply Comments in this phase of the proceeding. In fact, Environmental Advocates did not oppose the proposed amendment,¹⁴ and IGS actively supported¹⁵ the Commission's proposal adopted herein to separate shopping and non-shopping based net metering in its Initial Comments in December 2015, both despite the status of utilities' advanced metering deployment at that time. In fact, IGS' only caveat

¹² Environmental Advocates at p. 11.

¹³ See Environmental Advocates at p. 13, and IGS at p. 6.

¹⁴ Joint Comments at p. 9 (December 18, 2015) (conditioned only upon proper consumer protections).

¹⁵ Comments of IGS at p. 3, 4 (December 18, 2015)(conditioned only upon crediting for proactive meter purchases).

seemed to be that if one of its shopping net metering customers proactively paid for an advanced meter, that it receive a credit for the cost of that meter as against the utility's future charges to deploy such meters.¹⁶

The Companies agree that advanced metering is helpful to precisely ascertain the value of excess energy at the time of generation as well as the value of any contribution to capacity during system peak load. However, that is precisely the distinction the Commission has appropriately made in this proceeding: pursuant to the enabling legislation, standard net energy metering tariff customers receive a credit for excess generation at the applicable energy component of the average SSO generation rate while only hospital SSO net metering customer-generators receive a credit for excess generation at LMP energy prices. To the extent there is additional untapped value above the utility's credits for excess generation, competitive market forces are best equipped to identify and compensate that value. If there is no such extra value, it is inappropriate to create an unwarranted regulatory incentive to be paid by non-net metering customers.

Requiring net metering customers to pay for the meter upgrades necessary to accommodate net metering is required pursuant to statute.¹⁷ Thus, a standard net metering customer is required to pay for the cost of a bi-directional meter, and a hospital net metering customer is required to pay for a bi-directional interval meter capable of measuring the value of excess generation at the time it is generated. To the extent a shopping customer-generator

¹⁶ *Id.* at p. 5.

¹⁷ Ohio Revised Code 4928.67(B)(1). (“(1) Net metering under this section shall be accomplished using a single meter capable of registering the flow of electricity in each direction. If its existing electrical meter is not capable of measuring the flow of electricity in two directions, *the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is capable of measuring electricity flow in two directions.*”) (emphasis added).

proactively requests that an advanced meter be installed in order to pursue the full market value of its excess generation, it may be appropriate, as IGS initially requested, to later receive a credit against EDU charges for regional or system-wide deployment of advanced metering that such customer would have received and ultimately paid for. However, metering is not the only market-based solution to more precise valuation—sophisticated modeling could be developed to approximate metered results. The Commission is correct to let competitive forces foster such innovation instead of trying to mandate innovation via regulatory fiat.

The Commission should reject these belated protests about the status of advanced meter deployment, and deny Applicants request to modify its adopted rules regarding non-shopping customer-generators' credit for excess generation.

III. The Commission did not err when it recognized the role for electric distribution utilities to deny unsafe interconnection applications.

One Energy stands alone in challenging the Commission's Order recognizing that EDUs should review interconnection applications with an ability to reject installations that present a danger to public safety and system integrity. One Energy argues that the Commission gave the electric utilities an unlawful expansion of their review and approval authority for interconnection of generating equipment operating in parallel with the utilities' electric system. One Energy's arguments have no merit.

In the first place, it is the Commission's adopted definition of a customer's "premises" to include a "contiguous" lot separated by a public road that is new, not the utilities' role in reviewing interconnection applications for public safety. There is no denying that electric distribution and transmission is inherently dangerous and is subject to intense regulatory

scrutiny. Electric distribution utilities, with over one hundred years of experience, expertise, and compliance with regulatory oversight are uniquely situated and relied upon to take the necessary precautions to protect public safety. From this standpoint alone, the Commission is correct to acknowledge the evaluative role of utilities in its adopted rule.

Secondly, One Energy seems to have confused its identity as a private developer with that of a public utility. Notably, three of the four¹⁸ examples One Energy attached to its Application to suggest it could receive the proper authorization from CSX, Hancock County, Marathon Pipeline or the Ohio Department of Transportation (“ODOT”) to string electric lines over or under railroad tracks or public thoroughfares offer those rights and responsibilities to utilities only—not private companies. Specifically, CSX defines “wirelines” to include “electrical utility lines”¹⁹ not “electrical private developer net metering lines”; Hancock County provides for a “Utility Permit,”²⁰ not a Wind Turbine Net Metering Developer Permit; and in Attachment D “Policy for Accommodation of Utilities,” the definition of “Utility” in these ODOT regulations specifically excludes a private company like One Energy.²¹

In isolation, this identity confusion could be understood as wishful thinking for ambitious efforts to obtain permits. However, One Energy has forcefully denied being a public utility in the Commission’s investigation into submetering, Case No. 15-1594-AU-COI,²² as well as in this proceeding in response to the late-filed comments of Buckeye

¹⁸ In what is apparently a pipeline safety website resource for Marathon Pipeline, there is no distinction regarding ownership of “electric cables.” (One Energy at Attachment B).

¹⁹ One Energy at Attachment A, provision 1.2 “Definitions”, page 1 of 13 (emphasis added).

²⁰ One Energy at Attachment C, Section 2 (emphasis added).

²¹ One Energy at Attachment D, p. 81- 7 (“The term utility includes those facilities used solely by the utility which are a part of its operating plant. Service lines privately owned and devoted exclusively to supplying the various commodities to the owner, and not directly or indirectly serving the public, are not considered to be a utility.”)

²² Application for Rehearing of One Energy Enterprises, LLC, Case No. 15-1594-AU-COI, filed January 6, 2017 for example, at p. 5 (requesting clarification that: “The Commission will apply the *Shroyer* test to determine whether an

Power.²³ In particular, the Companies note One Energy’s position that a contract for the sale of electrical output from its turbines to a load center constitutes a customer-generator’s net metering system seems at odds with One Energy’s delivery of that power across a highway.

Third, One Energy correctly notes that electric distribution utilities are indeed subject to local permitting requirements. However, even with such local “Home Rule” authority governing the installation of utility assets, electric utilities remain subject to on-going Commission jurisdiction regarding inspection and maintenance of their facilities to ensure public safety pursuant to the Ohio Revised Code and corresponding Commission Rules. Noticeably absent from One discussion of this issue is an explanation of what happens to a customer-generator owned that line goes down? Who is a motorist or pedestrian encountering the downed line supposed to call for help?

Expansion of One Energy’s business opportunities—even if it fosters growth in distributed generation—is not worth the risk to public safety inherent in One Energy’s Application for Rehearing. Because customer- or developer-owned lines crossing public roads could present hazards, it was appropriate for the Commission to include the electric distribution utilities, who have expertise with respect to such issues that a customer-generation may not. One Energy’s demand that utility approval be eliminated should be denied.

CONCLUSION

entity is a *public utility*. The Commission will not apply the *Shroyer* test to determine whether an entity is engaging in “retail sales” or is some other type of service provider.”)

²³ One Energy Enterprises, LLC Memorandum Contra Buckeye Power Inc.’s Motion for Leave to File Comments Out of Time, p. 8, January 5, 2017.

For all of the foregoing reasons, the Companies respectfully request that the Applications for Rehearing of OCC, Environmental Advocates, IGS, and One Energy be denied.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that the foregoing Joint Memorandum Contra of Ohio Edison Company, The Cleveland Electric Illuminating Company The Toledo Edison Company and Ohio Power Company has been filed with the Commission's Docket Information System on December 18, 2017 and is available for all interested parties.

/s/ Robert M. Endris
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