THE PUBLIC UTILITIES COMMISSION OF OHIO

IN THE MATTER OF THE COMMISSION'S REVIEW OF CHAPTER 4901:1-10 OF THE OHIO ADMINISTRATIVE CODE.

CASE NO. 12-2050-EL-ORD

FIFTH ENTRY ON REHEARING

Entered in the Journal on December 19, 2018

I. SUMMARY

{¶ 1} In this Fifth Entry on Rehearing, the Commission grants, in part, and denies, in part, the applications for rehearing filed by One Energy Enterprises, LLC, and Interstate Gas Supply, Inc. The Commission denies all other applications for rehearing filed in this proceeding.

II. DISCUSSION

{¶ 2} R.C. 111.15(B) and R.C. 106.03(A) require all state agencies to conduct a review of their rules every five years to determine whether those rules should be continued without change, be amended, or be rescinded. Currently, the Commission is reviewing the net metering rules contained in Ohio Adm.Code 4901:1-10-28.

{¶ 3} On November 8, 2017, the Commission issued a Finding and Order (November 2017 Order) amending the net metering rules contained in Ohio Adm.Code 4901:1-10-28.

{¶ 4} Pursuant to R.C. 4903.10, any party who has entered an appearance in a Commission proceeding may apply for rehearing with respect to any matters determined in that proceeding by filing an application within 30 days after the Commission's order is journalized. Any party may file a memorandum contra to an application for rehearing within ten days after its filing. Ohio Adm.Code 4901-1-35.

{¶ 5} On December 8, 2017, the Ohio Consumers' Counsel (OCC); Interstate Gas Supply, Inc. (IGS); The Environmental Law & Policy Center, Ohio Environmental Council, Environmental Defense Fund, Natural Resources Defense Council, and Vote Solar (collectively, Environmental Advocates or Advocates); One Energy Enterprises, LLC (One Energy); and Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company (collectively, FirstEnergy) filed applications for rehearing of the Commission's November 2017 Order. The Environmental Advocates, One Energy, the Dayton Power and Light Company (DP&L), IGS, and FirstEnergy, who submitted jointly with the Ohio Power Company (AEP), filed memoranda contra the applications for rehearing.

{¶ 6} As scheduled by an Entry dated December 21, 2017, the Commission heard oral arguments on the issues raised by the various parties on rehearing on January 10, 2018.

III. DISCUSSION

{¶ 7} On rehearing, the parties submit a wide range of arguments regarding five main topics, with OCC offering three miscellaneous assignments of error. Some arguments challenge the Commission's adopted rules, some challenge language in the November 2017 Order, and some challenge a combination of the two. To the extent that any assignment of error is not specifically addressed in the foregoing discussion, it is deemed denied.

A. Sizing of Microturbines (Ohio Adm.Code 4901:1-10-28(A)(7)) and of Net Metering Systems (Ohio Adm.Code 4901:1-10-28(B)(7)(b)).

{¶ 8} In its application for rehearing, FirstEnergy takes aim at two aspects of the net metering rules related to size: the definition of a microturbine and the permissible size of a customer-generator's net metering facility. As to the former, FirstEnergy contends that adopted Rule 4901:1-10-28(A)(7), in which a microturbine is defined as

having a capacity of up to two megawatts, is unjust and unlawful because it exceeds a reasonable interpretation of the underlying statute. Here, FirstEnergy restates its position taken during the comment period: because R.C. 4928.01(A)(31)(a) distinguishes a "microtrubine" from other types of combustion engines eligible for net metering, because the Commission originally limited the capacity of a microturbine to 100 kilowatts (kW), and because the General Assembly has not amended the statute in the interim, it is error to adopt a two-megawatt capacity ceiling. Adding that "reliable current industry sources" put the upper range for a microturbine at 250 kW to 500 kW, FirstEnergy asserts that the Commission has acted capriciously in defining microturbine and deems the Commission's justification for doing so faulty. FirstEnergy criticizes as illogical the Commission's reasoning that a two-megawatt microturbine would generally qualify for Level 2 expedited review procedure for interconnection and would thus promote the implementation of distributed generation across customer classes, as encouraged in R.C. 4928.02(K). FirstEnergy also rejects any notion that the definitional size of a microturbine is a secondary size limit due to the requirement that a customer-generator must intend primarily to offset part or all of its requirements for electricity when sizing its facility.

{¶ 9} FirstEnergy also critiques adopted Rule 4901-10-28(B)(7)(b) as unreasonable and unlawful because it allegedly allows a customer-generator to intentionally generate in excess of its annual requirements for electricity. FirstEnergy states that, in allowing a customer-generator to size its net metering system so as to not exceed 120 percent of its requirements for electricity at the time of interconnection, the Commission has clearly exceeded its statutory bounds. FirstEnergy asserts that no reasonable interpretation of R.C. 4928.01(31)(d) supports a net metering facility deliberately sized at more than one hundred percent of a customer-generator's requirement for electricity. Anything more, in FirstEnergy's opinion, is clearly intended to be more than all or part of the requirements.

{¶ 10} Both IGS and the Environmental Advocates address FirstEnergy's sizing arguments in their memoranda contra rehearing. As to the first argument, IGS points out that R.C. Chapter 4928 does not define microturbine and, in fact, only references the term once (as an allowable fuel source); therefore, the Commission enjoys wide latitude to rely on its own expertise and state policy to define that term, which it did in referencing R.C. 4928.02(K) in its discussion of the amended rule. IGS additionally supports the Commission's reference to the interconnection rules in defining the size of a microturbine as a further indication of the Commission's exercise of its discretion and expertise to further state policy of making distributed generation less burdensome.

{¶ 11} IGS also argues, as do the Advocates, that FirstEnergy's argument to limit net metering systems to a strict one hundred percent of a customer-generator's requirements for electricity lacks merit. Both groups express the need for flexibility in sizing a net metering system, citing the known variances in customer usage and in the amount of electricity generated by distributed generation resources such as solar and wind. It is these variances, they argue, that must be recognized in sizing a system "intended primarily to offset part or all of the customer-generator's requirements for electricity." R.C. 4928.01(A)(31)(d). The Environmental Advocates denounce FirstEnergy's restrictive reading of R.C. 4928.01(A)(31)(d). The Advocates state that the word "primarily" must be given meaning and that, by correctly allowing leeway in calculating and reaching "all of the customer-generator's requirements for electricity," the Commission has reasonably interpreted the statute.

{¶ 12} The Commission finds that FirstEnergy has raised no new arguments on rehearing. November 2017 Order at ¶ 14, 33-35. Accordingly, FirstEnergy's assignments of error regarding the appropriate sizing of microturbines and of net metering systems should be denied.

B. The Standard Net Metering Tariff (Ohio Adm.Code 4901:1-10-28(B)(1)(a)).

{¶ 13} Under adopted Rule 4901:1-10-28(B)(1)(a), each electric distribution utility (EDU) must offer a standard net metering tariff to all customers taking service under the utility's standard service offer (SSO) only; there is no corresponding requirement for an EDU to offer its net metering tariff to customers who procure generation from competitive retail electric service (CRES) providers (shopping customers). Rather than mandating that CRES providers offer net metering, the adopted net metering rules are permissive. Under adopted Rule 4901:1-10-28(B)(1)(c), any CRES provider may offer net metering contracts consistent with Ohio Adm.Code Chapter 4901:1-21 and under such terms as negotiated and agreed to by the CRES provider and the customer-generator. Although initially supportive of this laissez-faire approach, IGS changes course in its application for rehearing.

{¶ 14} On rehearing, IGS takes the position that the Commission's November 2017 Order unjustly and unreasonably discriminates against shopping customers who, under adopted Rule 4901:-1-10-28(B)(1)(a) and (c), must choose between compensation for excess generation under an EDU's standard net metering tariff available only to SSO customers or the possibility of zero compensation for net metering with a CRES provider. IGS further submits that this approach undermines the state policy in favor of customer choice and distributed generation expressed in R.C. 4928.02(A)-(D) and (K). Citing the lack of wide-spread advanced meters and limitations of the EDUs' current billing systems, IGS states that it is impossible for CRES providers to provide net metered compensation to non-interval metered customers in three of the four major EDU territories. IGS argues that, without an advanced meter that records hourly energy production and updated billing systems, there is no way for an EDU to provide CRES providers with any form of credit or load reduction. And, without the necessary credit to essentially pass on to their customer-generators, the CRES providers would be unable to provide compensation for excess generation to those customer-generators. As such,

according to IGS, a CRES provider is in an untenable position: either provide no compensation to a customer-generator or recommend that the customer-generator revert to taking service from the SSO, under which compensation is provided by rule. As a remedy, IGS suggests that the Commission direct EDUs to offer its standard net metering tariff to both SSO and shopping customers on a non-discriminatory basis.

{¶ 15} DP&L disagrees with IGS's position. Although the utility agrees that greater deployment of advanced meters will further distributed generation and net metering, DP&L submits that the amended net metering rules provide a proper mechanism for compensating all net-metering participants. Specifically, DP&L points to amended Rule 4901:1-10-28(B)(9)(h), which requires EDUs to ensure that any final settlement data sent to the regional transmission organization includes negative loads provided to a CRES provider and that when a customer-generator has non-hourly billing, that customer generation will offset the CRES provider's energy obligation. Thus, explains DP&L, even when fully advanced meters are not available, there is a mechanism for CRES providers to receive credit, which the CRES providers can then pass along to their respective customer-generators as needed. Therefore, DP&L argues that the amended Rule does not discriminate against shopping customers and there is no justification for shifting any burden from the CRES providers to the EDUs.

{¶ 16} The Commission finds that rehearing on IGS' assignment of error should be granted. Although, in the long-term, net metering service should be a competitive retail electric service delivered to shopping customers by their CRES providers, we agree that further deployment of advanced meters and improvements to the EDU's billing systems are necessary before the EDU net metering tariffs can be limited to SSO customers. We will continue to explore and develop the question of when and how to transition net metering service to a competitive service through our PowerForward initiative. Further, we will consider a waiver of this rule, on a case-by-case basis, for any EDU that can demonstrate full deployment of appropriate advanced meters in its service

territory and demonstrate that its billing systems are fully compatible with net metering service provided by CRES providers. Finally, as discussed below, EDUs should recover all of the costs of providing net metering through an appropriate nonbypassable rider.

C. Definition of Premises (Ohio Adm.Code 4901:1-10-28(B)(6)).

{¶ 17} With regard to adopted Rule 4901:1-10-28(B)(6), One Energy asserts that the Commission's Order is unreasonable and unlawful because the definition of the term "premises" is unreasonably vague and arbitrarily grants EDUs the authority to regulate matters clearly beyond the scope of net metering, interconnection, and the jurisdiction of the Commission. One Energy takes issue with the phrase "so long as it would not create an unsafe or hazardous condition as determined by the electric utility on a case by case basis." One Energy asserts that the language is vague as to what exactly is being judged for safety, or by what standard, and grants EDUs unfettered discretion in approving or disapproving a proposed net metering system. One Energy states that conceding such discretion to the EDUs is in direct conflict with the Commission's amended rules and the comprehensive, long-standing legal framework already governing the interconnection process in Ohio. To the extent that the Commission intended to limit the EDUs' discretion to the safety of the interconnection of a net metering system and its effect on grid performance and reliability, One Energy has no complaint. In that case, however, it does ask that the Commission provide clarification. On the other hand, One Energy strenuously objects to any intention to grant EDUs discretion in other aspects of net metering systems, such as engineering designs and the crossing of land in which a utility has no legal interest.

{¶ 18} In part a continuation of its first assignment of error, One Energy also alleges that the Order is unreasonable and unlawful because the definition of "premises" disregards various state laws and the rights of non-utility easement holders in granting electric utilities the power to arbitrarily decide whether a net metering facility is safe. One Energy contends that it is the appropriate state and local authorities and private land

owners—not the EDUs—that have the legal authority to decide whether a customer-generator may safely place a structure in an easement, thoroughfare, or right-of-way. And, argues One Energy, these decisions are already guided by a comprehensive, long-standing legal framework, a framework the utilities themselves must abide by in crossing private and public land.

{¶ 19} Finally, in its third assignment of error, One Energy faults the Commission with failing to consider all of the evidence in the record before adopting its definition of the term premises within Rule 4901:1-10-28(B)(6). More specifically, One Energy points to arguments it made during the comment period that mirror those made in its application for rehearing, all of which challenge the EDUs' position that net metering systems on contiguous lots or which cross an easement or right-of-way are presumptively unsafe. To the contrary, One Energy states, the same legal framework that has ensured the safety of net metering systems will continue to do so, even where the premises on which a net metering system is installed crosses an easement or contains contiguous lots.

{¶ 20} The culmination of One Energy's arguments is this amendment to the definition of premises:

> A contiguous lot to the area with the customer-generator's metering point is considered the customer-generator's premises regardless of easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way. ~~,so long as it would not create an unsafe or hazardous condition as determined by the electric utility on a case-by-case basis.~~

{¶ 21} In a jointly filed memorandum contra rehearing, FirstEnergy and AEP disagree with One Energy. FirstEnergy and AEP stress that it is the EDU's role, not a third-party developer of net metering systems' role, to take necessary precautions to protect public safety as well as the integrity and reliability of the grid. In its own

memorandum contra rehearing, DP&L also argues against removing an EDU's ability to determine on a case-by-case basis whether net metering on contiguous premises would create an unsafe or hazardous condition. Indeed, DP&L asserts that the EDUs are in the best position to facilitate safe and reliable service and, thus, must be the final arbiters of whether a net metering system on continuous lots—including infrastructure transmitting the energy over those contiguous lots—would affect the safety and reliability of the utilities' distribution systems. DP&L further maintains that the Commission's adopted rule does not usurp or conflict with the rights of easement holders. Instead, DP&L explains that the rule strikes a balance between the rights of the landowners, easement holders, and the EDU; the customer-generator must go through the typical easement or local permitting processes in designing and building the system, but it is the EDU's right and duty to ensure that the system does not create an unsafe or hazardous condition for the electric distribution system to which it interconnects. The roles are complementary, not mutually exclusive.

{¶ 22} In its own application for rehearing, FirstEnergy argues that the Commission's definition is too expansive. More specifically, FirstEnergy challenges the Commission's adopted amendment to Rule 4901:1-10-28(B)(6) as unreasonable and unlawful because it would allow customer-generators to cross boundaries of non-owned property, such as streets and public rights-of-way and allow third-party-owned equipment to supply electricity across property lines. This, FirstEnergy claims, is contrary to the General Assembly's statutory grant of exclusive certified territories and promotes unsafe conditions. FirstEnergy reasons that premises consisting of contiguous lots simply are not a "single location" as that term is used in R.C. 4933.18(E), especially where such lots are separated by easements, public thoroughfares, and rights-of-way.[1]

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1 R.C. 4933.18(E) defines "electric load center" as "all the electric-consuming facilities of any type or character owned, occupied, controlled, or used by a person at a single location which facilities have been, are, or will be connected to and served at a metered point of delivery and to which electric service has been, is, or will be rendered."

Moreover, FirstEnergy argues, the EDUs' tariffs do not permit customers to string their own electric wires across easements, etc., to serve other properties owned by that customer. Thus, FirstEnergy requests that the Commission amend the adopted rule to exclude contiguous lots from the definition of premises.

{¶ 23} Responding, One Energy disagrees with FirstEnergy's statutory interpretation. One Energy concurs that R.C. 4933.83(A) grants each electric supplier the exclusive right to serve electric load centers within its certified territory, but disagrees that contiguous lots would fail to qualify as a single location as that term is used in R.C. 4933.18(E). Instead, One Energy points to the language within that statute that specifies that the "facilities have been, are, or will be connected to and served at a metered point of delivery." One Energy explains that, even if contiguous lots are implicated, any net metering system will have but a single metered point of delivery, albeit with longer collection lines. One Energy additionally states that an electric load center does not cease to be a single electric load center simply because a portion of the net metering system crosses an easement. Finally, One Energy stresses its disagreement with FirstEnergy's insistence that contiguous lots will necessarily lead to unsafe conditions.

{¶ 24} In their memorandum contra rehearing, the Environmental Advocates first voice strong support for the inclusion of contiguous lots in the definition of a customer-generator's premises. Continuing, they deem FirstEnergy's argument regarding certified territories to be misguided. The Advocates argue that the statutes regarding certified territories dictate who can provide electricity to the end user, not what kind of facility can be installed. Furthermore, the Advocates reject the notion that contiguous properties are not a "single location" as contemplated by R.C. 4933.18(E), especially given the realities of land use by large customers whose businesses run across multiple parcels in a single locale. In short, with regard to this issue, the Environmental Advocates support the Commission's adopted rule, oppose the EDUs' arguments regarding contiguous lots and oversight of net metering systems in their entirety, and, to that end, also back One

Energy's recommendation for the Commission to clarify the scope of the utility's authority to approve or deny a customer-generator's net metering system.

{¶ 25} The Commission finds that One Energy's application for rehearing should be granted. One Energy has demonstrated that the proposed rule 4901:1-10-28(B)(6) unduly restricts the deployment of distributed generation and contravenes the policy of the state to encourage the development of distributed generation facilities. R.C. 4928.02(C), (F), and (K). We also agree that the determination of unsafe or hazardous conditions should not be the sole discretion of the EDU. Instead the determination of unsafe or hazardous conditions should be governed by the Commission's interconnection standards contained in Ohio Adm.Code Chapter 4901:1-22, particularly Ohio Adm.Code 4901:1-1-22-03 which incorporates industry standards for safety and performance standards. Accordingly, we will amend proposed rule 4901:1-10-28(B)(6) as follows:

> A contiguous lot to the area with the customer-generator's metering point may be considered the customer-generator's premises regardless of easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way, so long as it would not create an unsafe or hazardous condition pursuant to the interconnection standards set forth in Chapter 4901:1-22 of the Administrative Code.~~as determined by the electric utility on a case-by-case basis.~~

{¶ 26} Further, rehearing on FirstEnergy's assignment of error should be denied. We are not persuaded that the definition of "premises," as amended, implicates or enables violations of the Certified Territories Act, codified at R.C. 4933.81-4933.90. The General Assembly was no doubt mindful of the Certified Territories Act when it enacted the state policy to ensure that an EDU's transmission and distribution systems are available to a customer-generator or owner of distributed generation, so that the

customer-generator or owner can market and deliver the electricity it produces. R.C. 4928.02(F).

D. Compensation for Excess Generation (Ohio Adm.Code 4901:1-10-28(B)(9)(c)).

{¶ 27} Several parties raise arguments on rehearing regarding the Commission's adoption of Rule 4901:1-10-28(B)(9)(c), by which compensation for excess generation is limited to the energy component of the electric utility's SSO rate.

{¶ 28} IGS submits that removing capacity compensation, i.e., compensating only on the energy portion of the SSO rate, reduces the economic viability of distributed generation resources by eliminating an important value stream. This is so, says IGS, because until advanced meters are fully deployed in Ohio, there is no way for a shopping or an SSO customer to receive a capacity cost reduction based on that customer's usage during peak hours.

{¶ 29} The Environmental Advocates argue that the Commission acted unlawfully and outside its statutory authority by removing the capacity component from compensation because it treats customer-generators less favorably than customers who do not net meter in violation of R.C. 4928.67. R.C. 4928.67(A)(1) states that an EDU's standard net metering tariff shall be identical in rate structure, all retail rate components, and any monthly charges to which the same customer would be assigned if that customer were not a customer-generator. The Advocates contend that for rate structure to be identical as between non-net-metering and net-metering customers, said customers' contributions to lowering peak demand must be treated identically. According to the Environmental Advocates, by removing the capacity component from the customer-generator's credit, the Commission violates this statutory mandate because non-net-metering customers save money on both the energy and capacity components of their bill when they contribute to lowering peak system demand by reducing their electricity usage whereas customer-generators who contribute to lowering peak system demand by

producing more electricity than they consume are only compensated for the energy portion. This group also points to R.C. 4928.67(B)(3)(b), which provides that customer-generators producing excess generation should be given credits for that "electricity." The Advocates submit that, statutorily, any credit provided to a customer-generator must compensate for electricity as a whole, i.e., both the energy and capacity components.

{¶ 30} The Environmental Advocates proffer two additional assignments of error regarding their belief that the Commission acted unreasonably in removing capacity compensation. First, the Advocates contend that the Commission unreasonably ignored their arguments and previously submitted evidence that distributed generation has reliable capacity value. And, by removing capacity compensation, the Commission is tacitly permitting EDUs to buy more capacity than is necessary, which results in additional costs to all customers. Second, and similar to IGS, the Advocates insist that the Commission's observations regarding time-of-use tariffs are unreasonable because such rates require higher cost equipment, are not prevalent, and are ill designed to compensate customer-generators for their contributions to lowering peak demand. Thus, until the necessary technology is widespread and time-of-use tariffs are tailored to recognize the capacity contributions from customer-generators, the Environmental Advocates state it is unreasonable to remove the capacity component from net metering credits.

{¶ 31} OCC also finds fault with the amendment to Rule 4901:1-10-28(B)(9)(c), as well as with the Commission's November 2017 Order adopting the rule. OCC claims that that the rule and the November 2017 Order are unreasonable for two reasons: (1) because net metering customers should be compensated with a capacity credit for their excess generation and (2) because the Commission allegedly failed to provide a legal explanation for veering from its previous position supporting a capacity credit. As to the former, OCC submits that the Commission should maintain the status quo—compensating excess generation with a credit consisting of both energy and capacity

components—until a more detailed, contemporary state-wide policy review can be completed. As to the latter, OCC asserts that the Commission inappropriately reversed its previous order that compensation for excess generation should include capacity without establishing a legal foundation for its change in course.[2]

{¶ 32} In their memorandum contra rehearing, AEP and FirstEnergy dispute the positions taken by IGS, OCC, and the Environmental Advocates and support the Commission's adoption of Rule 4901:1-10-28(B)(9)(c). FirstEnergy and AEP argue that, even without the capacity component, net metering customers are fully compensated regardless of whether the customer-generator generates in excess of its monthly electricity consumption: those who do not generate more than they consume see a reduction to net kWh consumption, which in turn reduces all kWh-based rider charges, and those who generate in excess of consumption pay no capacity charge for the month irrespective of how many kWh consumed during periods of peak demand. FirstEnergy and AEP further argue that, despite the Advocates protestations to the contrary, it has not been demonstrated that net metering customers produce excess generation at times of peak SSO demand. Additionally, they state that SSO energy and capacity obligations have been fully transferred to SSO suppliers, which means it is the load serving entities—not the EDUs—that receive the benefit of excess generation. As to the Environmental Advocates' allegation that the Commission's order is in violation of R.C. 4928.67, AEP and FirstEnergy submit that there is simply no possible comparison of the monetary credit for excess generation between a net metering customer and a non-net metering customer because the latter by definition will never produce or be compensated for excess generation. Finally, FirstEnergy and AEP assert that the Commission correctly considered the role that advanced metering and time-of-use tariffs can play in

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2 Although not raising the issue as a specific assignment of error, both IGS and the Environmental Advocates also allude to changes to this aspect of Ohio Adm.Code 4901:1-10-28(B)(9)(c) over the course of the rule review in this docket.

compensation for excess generation, stating that market forces—not administrative regulations—are best equipped to foster innovation in distributed generation.

{¶ 33} The Commission affirms our decision to base compensatory credits for excess generation on only the energy component of the electric utility's SSO rate. We are not persuaded that net metering customer's contributions to reducing the capacity requirements to serve that customer can be accurately measured until appropriate advanced meters are fully deployed in any given EDU's service territory; and until that time, load-serving entities, whether CRES providers or wholesale suppliers of SSO generation, must continue to obtain capacity to serve those customers at peak demand. It would be manifestly unfair to pay customer-generators for reducing capacity requirements when that capacity reduction is not reflected in the cost to serve the customer-generator. Rehearing on these assignments of error should be denied. However, we note that the Commission may revisit this issue through the PowerForward process if technological and regulatory changes merit a change in policy.

E. Cost Recovery (Ohio Adm.Code 4901:1-10-28(B)(9)).

{¶ 34} During the comment process, the EDUs argued that Ohio Adm.Code 4901:1-10-28(B)(9) should be modified to explicitly allow the recovery of costs associated with net metering, which would better allow the utilities to upgrade their billing systems to accommodate net metering. The Commission did not include language regarding cost recovery in the adopted rule, explaining that we would not establish a cost-recovery mechanism by rule, particularly where the enabling statute is silent as to the same. Instead, in the November 2017 Order, the Commission concluded that the EDUs should be provided the opportunity to file an application for the deferral of costs of providing customer credits from net metering in base distribution rates or through some other appropriate rider or mechanism. November 2017 Order at ¶ 52. On rehearing, IGS, FirstEnergy, and OCC express concerns regarding the Commission's treatment of cost recovery.

{¶ 35} IGS and OCC urge caution in cost recovery. IGS insists that the Commission erred by including the cost recovery language in the November 2017 Order. IGS posits that because the Order treats net metering as a competitive service, permitting cost recovery through base distribution rates would violate R.C. 4928.02(H). IGS also argues that there is no need for EDUs to recover the cost of net metering through distribution rates in order to be made whole. Similarly, OCC argues that the Commission should limit cost recovery until a detailed, statewide policy review is completed. In the interim, OCC states that the Commission should limit deferrals to utility excess generation payments made minus any payments received from SSO customers who consumed the excess generation. Any other course, says OCC, may result in double recovery by the EDUs.

{¶ 36} FirstEnergy complains that the Commission's Order unjustly constrains cost recovery to only the cost of providing credits for excess generation and does not consider, or at least is silent as to, considerable other costs associated with implementation of net metering. FirstEnergy states it would be unjust and unreasonable to force the EDUs to incur the significant costs of modifying billing systems, compiling and providing 36 months of consumption history to assist in the sizing of facilities, and making interval data available on a timely basis without the ability to seek recovery. Thus, FirstEnergy urges the Commission to modify the November 2017 Order to clarify that any and all compliance costs shall be included within any recovery mechanism approved by the Commission.

{¶ 37} In its memorandum in opposition to rehearing, DP&L defends the Commission's approach to cost recovery. Responding to OCC and IGS, DP&L points out that excess generation costs resulting from net metering are properly reflected and recovered through generation rates. Moreover, because the EDUs are statutorily obligated to provide and facilitate net metering, DP&L argues that administrative costs incurred with respect to net metering—costs to change billing systems, customer service

costs, and similar organizational costs—are properly recovered through distribution rates.

{¶ 38} Rehearing on these assignments of error should be denied. We affirm our decision that EDUs should recover the costs of providing generation credits to customers through an appropriate nonbypassable rider, particularly since we have amended the proposed rules to ensure that EDU net metering service is available to both shopping and SSO customers. All other costs of providing net metering service are appropriately recovered through base distribution rates, although we will entertain applications to defer for future recovery reasonable and verifiable expenses of providing net metering service.

F. Miscellaneous Assignments of Error

{¶ 39} In addition to weighing in on the foregoing issues, OCC raises three additional assignments of error.

{¶ 40} First, OCC contends that the November 2017 Order is unreasonable because the Commission should protect consumers from unfair contract terms and conditions that could be offered by marketers. Here, OCC is critical of the Commission's determination in Rule 4901:1-10-28(B)(1)(c) that CRES providers may offer net metering contracts to their customers, consistent with Ohio Adm.Code Chapter 4901:1-21, at any price, rate, credit or refund for excess generation. OCC argues that the customer protections found in Ohio Adm.Code Chapter 4901:1-21 may be insufficient to protect net-metering customers from unfair sales practices and urges the Commission to take the immediate opportunity to adopt customer protection rules specific to net metering. OCC states that the Commission should hold Rule 4901:1-10-28(B)(1)(c) in abeyance until the CRES rules are amended under Commission Case No. 17-1843-EL-ORD.

{¶ 41} Second, OCC contends that the November 2017 Order is unreasonable because the Commission should clarify that EDUs are required to file updates of their supplier tariffs to reflect the cost that will be charged to CRES providers for billing net-metering customers. Citing to the requirement in adopted Rule 4901:1-10-28(B)(9)(e) that an EDU move a CRES provider's customer-generator to bill-ready billing unless the provider and the customer-generator have agreed to dual billing, OCC complains that without a commensurate change to the EDU's supplier tariff, an unlawful subsidy occurs. Thus, OCC proposes the Commission modify its November 2017 Order to include a requirement for updated supplier tariffs.

{¶ 42} IGS responds to each of these assignments of error. As to the former, IGS observes that OCC's argument misinterprets or ignores existing rules that address concerns of consumer protection as between CRES providers and their customers. IGS also faults OCC's argument as being vague. Thus, IGS submits that OCC's request for additional consumer safeguards is neither justified nor ripe. Similarly, IGS states that the latter argument lacks merit and is, essentially, an improper collateral attack on existing billing arrangements between EDUs and CRES providers.

{¶ 43} Finally, OCC contends that the November 2017 Order is unlawful because it assumes the Commission has the required authority to decide applications for utility-provided, captive-customer funded, behind-the-meter services. In other words, OCC believes the Commission acted outside its statutory authority in stating that an EDU could file an application to offer net metering in a manner not contemplated by R.C. Chapter 4928 or Ohio Adm.Code 4901:1-10-28 without providing strict guidelines. OCC counsels the Commission to amend the November 2017 Order to reflect that additional legislative authority must be obtained prior to considering any application for utility-provided, behind-the-meter services.

{¶ 44} DP&L, on the other hand, commends the Commission for its restraint in not addressing issues not properly before it in this limited rule-review proceeding. DP&L

maintains it would be improper for the Commission to proceed beyond the scope of a rulemaking decision in order to opine and render judgment upon what types of scenarios an EDU be a customer-generator. Thus, DP&L argues against OCC's proposed modification.

{¶ 45} The Commission finds that rehearing on OCC's final three assignments of error should be denied. First, we disagree with OCC that the consumer protections in Ohio Adm.Code Chapter 4901:1-21 are insufficient to protect consumers from unfair practices by CRES provides in providing net metering service. The consumer protections contained in Ohio Adm.Code Chapter 4901:1-21 require the full disclosure of all material terms in the marketing, solicitation and sale of competitive retail electric service. In a competitive market, prices, terms and conditions should be set by the agreement of the parties, not the Commission, as long as the CRES providers do not engage in unfair, misleading, deceptive, or unconscionable acts or practices. Second, the Commission finds that it is unnecessary to specifically order EDU's to amend their supplier tariffs to be consistent with the proposed rule. Given the substantial amendments to the net metering rule in this rulemaking, modifications to the EDU supplier tariffs will no doubt be necessary.

{¶ 46} Moreover, we find that the arguments raised by OCC in support of its final assignment of error are premature. We will address the issues raised by OCC either through our PowerForward initiative or if and when an EDU files an application to provide behind-the-meter services to retail customers. Such issues are outside of the scope of this rulemaking; therefore, rehearing on this assignment of error should be denied.

{¶ 47} As noted above, the Commission recognizes that the provision of net metering service is subject to rapid technological and regulatory changes. We will continue to explore and develop the issues related to net metering service through our PowerForward initiative. However, in the interim, the proposed amendments to the net

metering rule should continue to encourage the deployment of distributed generation in this state in accordance with the state policy set forth in R.C. 4928.02(C), (E) and (K).

IV. ORDER

{¶ 48} It is, therefore,

{¶ 49} ORDERED, That the applications for rehearing filed by One Energy and IGS be granted, in part, and denied, in part. It is, further,

{¶ 50} ORDERED, That the applications for rehearing filed by OCC, the Environmental Advocates, and FirstEnergy be denied. It is, further,

{¶ 51} ORDERED, That a copy of this Fifth Entry on Rehearing be served upon all parties of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO

Asim Z. Haque, Chairman

M. Beth Trombold

Thomas W. Johnson

Lawrence K. Friedeman

Daniel R. Conway

PAS/sc

Entered in the Journal

DEC 19 2018

Barcy F. McNeal
Secretary

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4901:1-10-28 Net metering.

(A) For purposes of this rule, the following definitions shall apply:

(1) "Advanced meter" means any electric meter that meets the pertinent engineering standards using digital technology and is capable of providing two-way communications with the electric utility to provide usage and/or other technical data.

(2) "CRES provider" shall mean any provider of competitive retail electric service.

(3) "Customer-generator" shall have the meaning set forth in section 4928.01(A)(29) of the Revised Code. A customer that hosts or leases third party owned generation equipment on its premises is considered a customer-generator.

(4) "Electric utility" shall have the meaning set forth in section 4928.01(A)(11) of the Revised Code.

(5) "Hospital" shall have the meaning set forth in section 3701.01(C) of the Revised Code.

(6) "Interval meter" means any electric meter that is capable of measuring interval usage data on at least an hourly basis.

(7) "Microturbine" shall mean a turbine or an integrated modular turbine package with a capacity of two megawatts or less.

(8) "Net metering" shall have the meaning set forth in section 4928.01(A)(30) of the Revised Code.

(9) "Net metering system" shall have the meaning set forth in section 4928.01(A)(31) of the Revised Code. Net metering system includes all facilities, regardless of whether the customer-generator is on the electric utility's net metering tariff or engaged in net metering with a CRES provider.

(10) "Third party" means a person or entity that may be indirectly involved or affected but is not a principal party to an arrangement, contract, or transaction between other parties.

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~~(A)~~(B) ~~Standard n~~Net metering.

(1) Each electric utility shall develop a standard net metering tariff and a hospital net metering tariff. The electric utility shall make such tariffs ~~tariff for net metering. Such tariff shall be made~~ available to ~~qualifying customer~~ customer-generators upon request, in a timely manner, and on a nondiscriminatory basis.

(a) Each electric utility shall offer a standard net metering tariff to all customers upon request~~taking service under the electric utility's standard service offer~~.

(b) Each electric utility shall offer the hospital net metering tariff to all qualifying hospital customers upon request.

(c) A CRES provider may offer net metering contracts to its customers, consistent with Chapter 4901:1-21 of the Administrative Code, at any price, rate, credit, or refund for excess generation. The CRES provider and the customer shall define the terms of any contract, including the price, rate, credit, or refund for any excess production by a customer-generator. A CRES provider is not required to enter into any net metering contract with any customer. Only customers who have signed an interconnection agreement with the electric utility may engage in net metering with a CRES provider.

~~(a) A qualifying customer generator is one whose generating facilities are:~~

~~(i) Fueled by solar, wind, biomass, landfill gas, or hydropower, or use a microturbine or a fuel cell.~~

~~(ii) Located on a customer generator's premises.~~

~~(iii) Operated in parallel with the electric utility's transmission and distribution facilities.~~

~~(iv) Intended primarily to offset part or all of the customer generator's electricity requirements.~~

~~(b) Net metering arrangements shall be made available regardless of the date the customer's generating facility was installed.~~

(2) Except as used by hospitals, a net metering system must use as its fuel either solar, wind, biomass, landfill gas, or hydropower, or use a microturbine or a fuel cell.

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(3) Net metering arrangements shall be made available regardless of the date the customer-generator's net metering system was installed.

~~(2)~~(4) The electric utility's standard net metering tariff ~~for net metering~~ shall be identical in rate structure, all retail rate components, and any monthly charges~~,~~ to the tariff to which the same customer would be assigned if that customer were not a ~~customer generator~~customer-generator. Such terms shall not change simply because a customer becomes a ~~customer generator~~customer-generator.

(a) The electric utility shall disclose on the electric utility's website, and to any customer upon request, the name, address, telephone number, and email address of the electric utility's net metering department or contact person.

(b) The electric utility shall provide on the electric utility's website, and to any customer upon request, all necessary information regarding eligibility for the electric utility's net metering tariffs. The electric utility shall also provide this information to any customer, upon request, within a net metering application packet. The website and application packet shall describe and provide the following information in a straightforward manner: net metering tariff terms and conditions, sample net metering and interconnection agreements, and the terms and conditions for eligibility to be a net metering customer-generator. The website and application packet shall also provide information on costs that the customer may incur as a result of net metering enrollment, including any costs associated with the following: application, interconnection, and meter installation.

~~(3)~~(5) ~~No~~ The electric utility's net metering tariffs ~~for net metering~~ shall not require ~~customer generators~~ customer-generators to:

(a) Comply with any additional safety or performance standards beyond those established by rules in Chapter 4901:1-22 of the Administrative Code~~,~~ and section 4928.67(B)(4) of the Revised Code~~and the "National Electrical Code," the "Institute of Electrical and Electronics Engineers," and "Underwriters Laboratories,"~~ in effect as set forth in rule 4901:1-22-03 of the Administrative Code.

(b) Perform or pay for additional tests beyond those required by paragraph ~~(A)(3)(a)~~(B)(5)(a) of this rule.

(c) Purchase additional liability insurance beyond that required by paragraph ~~(A)(3)(a)~~(B)(5)(a) of this rule.

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(6) A net metering system must be located on the customer-generator's premises. A customer-generator's premises is the area that is owned, operated, or leased by the customer-generator with the metering point for the customer-generator's account. A contiguous lot to the area with the customer-generator's metering point may be considered the customer-generator's premises regardless of easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way, so long as it would not create an unsafe or hazardous condition pursuant to the interconnection standards set forth in Chapter 4901:1-22 of the Administrative Code~~as determined by the electric utility on a case-by-case basis~~.

(7) Unless it is a hospital, a customer-generator must intend primarily to offset part or all of the customer-generator's requirements for electricity, regardless of whether the customer-generator is on the electric utility's net metering tariff or engaged in net metering by contract with a CRES provider.

(a) The electric utility shall communicate with and assist a customer-generator in calculating the customer-generator's requirements for electricity based on the average amount of electricity supplied by the electric utility to the customer-generator annually over the previous three years. In instances where the electric utility cannot provide data without divulging confidential or proprietary information, or in circumstances where the electric utility does not have the data or cannot calculate the average annual electricity supplied to the premises over the previous three years due to new construction, vacant properties, facility expansions, or other unique circumstances, the electric utility shall use any available consumption data or measures to establish an appropriate consumption estimate. Upon request from any customer-generator, the electric utility shall provide or make available to the customer-generator either the average electricity supplied to the premises over the previous three years or a reasonable consumption estimate for the premises.

(b) A customer-generator must size its facilities so as to not exceed one hundred and twenty percent of its requirements for electricity at the time of interconnection, regardless of whether the customer-generator intends to take service through an electric utility a CRES provider.

~~(4)~~(8) Net metering shall be accomplished using a single meter capable of registering the flow of electricity in each direction. ~~A customer's existing single-register meter that is capable of registering the flow of electricity in both directions satisfies this requirement. If the customer's existing electrical meter is not capable of measuring the flow of electricity in two directions, the electric utility, upon written request from~~

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~~the customer, shall install at the customer's expense a meter that is capable of measuring electricity flow in two directions.~~Upon request from a customer-generator, the electric utility shall provide the customer-generator with a detailed cost estimate of installing an interval meter. If the net metering system is located in an area where advanced meters have been deployed or are proposed to be deployed within 12 months, then the electric utility shall provide the customer-generator with a detailed cost estimate of installing an advanced meter that is also an interval meter.

(a) If a customer-generator requests an advanced meter that is also an interval meter, then such cost shall be paid by the customer-generator through the applicable smart grid rider. If the net metering system is not located in an area where the electric utility has deployed, is deploying, or proposes to deploy within 12 months advanced meters, then the electric utility may install any interval meter.

(b) The electric utility, at its own expense and with the written consent of the customer-generator, may install one or more additional meters to monitor the flow of electricity in each direction. No electric utility shall impose, without commission approval, any additional interconnection requirement or additional charges on customer-generators refusing to give such consent.

(c) If a customer's existing meter needs to be reprogrammed for the customer to become a customer-generator, or to accommodate net metering, then the electric utility shall provide the customer-generator a detailed cost estimate for the reprogramming or setup of the existing meter. The cost of setting up the meter to accommodate net metering shall be at the customer's expense. If a customer-generator has a meter that is capable of measuring the flow of electricity in each direction, is sufficient for net metering, and does not require setup or reprogramming, then the customer-generator shall not be charged for a new meter, setup, or reprogramming to accommodate net metering.

(d) For hospital customer-generators, net metering shall be accomplished using either two meters or a single meter with two registers that are capable of separately measuring the flow of electricity in both directions. One meter or register shall be capable of measuring the electricity generated by the hospital at the output of the generator or net of the hospital's load behind the meter at the time it is generated. If the hospital's existing electric meter is not capable of separately measuring electricity the hospital generates at the time it is generated, the electric utility, upon written request from the hospital, shall install at the hospital's expense a meter that is capable of such measurement.

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~~(5) The electric utility, at its own expense and with the written consent of the customer generator, may install one or more additional meters to monitor the flow of electricity in each direction. No electric utility shall impose, without commission approval, any additional interconnection requirement or additional charges on customer generators refusing to give such consent.~~

~~(6)~~(9) The measurement of net electricity ~~supplied or generated~~ supplied by the electric utility or received from the customer-generator shall be calculated in the following manner:

(a) The electric utility shall measure the net electricity produced or consumed during the billing period, in accordance with normal metering practices.

(b) If the electricity supplied by the electric utility exceeds the electricity received from the customer-generator over the monthly billing cycle, then the customer-generator shall be billed for the net electricity consumed by it in accordance with normal metering practices.

(c) For customer-generators on the electric utility's standard net metering tariff, when the electric utility receives more electricity from the customer-generator than it supplied to the customer-generator over a monthly billing cycle, the excess electricity shall be converted to a monetary credit at the energy component of the electric utility's standard service offer and shall continuously carry forward as a monetary credit on the customer-generator's future bills. The electric utility shall not be required to pay the monetary credit, other than to credit it to future bills, and the monetary credit may be lost if a customer-generator does not use the credit or stops taking service from the electric utility.

(d) The hospital net metering tariff shall be based upon the rate structure, rate components, and any charges to which the hospital would otherwise be assigned if the hospital were not a customer-generator and upon the market value of the customer-generated electricity at the time it is generated. The market value means the locational marginal price of energy determined by a regional transmission organization's operational market at the time the customer-generated electricity is generated.

(e) A CRES provider may offer a net metering contract at any price, rate, or manner of credit for excess generation. The CRES provider shall notify the electric utility whenever a net metering contract has been entered into with a customer-generator. The electric utility may move the customer-generator to bill-ready

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billing, unless the CRES provider and the customer-generator agree to dual billing.

(f) If a customer-generator is net metering with a CRES provider and uses an advanced meter capable of measuring at least hourly interval usage data, the electric utility shall transmit or make available to the CRES provider the customer-generator's interval data for that billing period within 24 hours of performing industry-standard validation, estimation, and editing processes. The electric utility shall also transmit or make available to the CRES provider the customer-generator's daily interval usage data within 24 hours of performing daily industry-standard validation, estimation, and editing processes.

(g) The electric utility shall at least annually calculate and provide or make available to the CRES provider the individual network service peak load values and peak load contributions of customer-generators engaged in net metering with that CRES provider.

(h) The electric utility shall ensure that any final settlement data sent to a regional transmission organization includes negative loads in the hourly load calculation of any electricity provided to a CRES provider from its customer-generators with hourly interval metering. Load from a customer-generator shall be incorporated in the CRES provider's total hourly energy obligation reported to the regional transmission organization and will offset the CRES provider's reported load to the regional transmission organization. For customer-generators with non-hourly metering, customer generation will offset the CRES provider's energy obligation.

~~(b) If the electric utility supplies more electricity than the customer-generator feeds back to the system in a given billing period, the customer-generator shall be billed for the net electricity that the electric utility supplied, as measured in accordance with normal metering practices.~~

~~(c) If the customer-generator feeds more electricity back to the system than the electric utility supplies to the customer-generator, only the excess generation component shall be allowed to accumulate as a credit until netted against the customer-generator's bill, or until the customer-generator requests in writing a refund that amounts to, but is no greater than, an annual true-up of accumulated credits over a twelve-month period.~~

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~~(7)~~(10) In no event shall the electric utility impose on the ~~customer-generator~~ customer-generator any charges that relate to the electricity the ~~customer-generator~~customer-generator feeds back to the system.

(11) All customer-generators shall comply with the interconnection standards set forth in Chapter 4901:1-22 of the Administrative Code.

(12) Renewable energy credits associated with a customer-generator's net metering facility shall be the property of the customer-generator unless otherwise contracted with an electric utility, CRES provider, or other entity.

(13) The electric utility shall annually report to the commission the total number and installed capacity of customer-generators on the electric utility's net metering tariffs for each technology and consumer class. The electric utility shall provide any other net metering data to the commission upon request and in a timely manner.

~~(B) Hospital net metering.~~

~~(1) Each electric utility shall develop a separate tariff providing for net metering for hospitals. Such tariff shall be made available to qualifying hospital customers upon request.~~

~~(a) As defined in section 3701.01 of the Revised Code, "hospital" includes public health centers and general, mental, chronic disease, and other types of hospitals, and related facilities, such as laboratories, outpatient departments, nurses' home facilities, extended care facilities, self-care units, and central service facilities operated in connection with hospitals, and also includes education and training facilities for health professions personnel operated as an integral part of a hospital, but does not include any hospital furnishing primarily domiciliary care.~~

~~(b) A qualifying hospital customer-generator is one whose generating facilities are:~~

~~(i) Located on a customer-generator's premises.~~

~~(ii) Operated in parallel with the electric utility's transmission and distribution facilities.~~

~~(2) Net metering arrangements shall be made available regardless of the date the hospital's generating facility was installed.~~

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~~(3) The tariff shall be based both upon the rate structure, rate components, and any charges to which the hospital would otherwise be assigned if the hospital were not taking service under this rule and upon the market value of the customer-generated electricity at the time it is generated. For purposes of this rule, market value means the locational marginal price of energy determined by a regional transmission organization's operational market at the time the customer-generated electricity is generated.~~

~~(4) For hospital customer-generators, net metering shall be accomplished using either two meters or a single meter with two registers that are capable of separately measuring the flow of electricity in both directions. One meter or register shall be capable of measuring the electricity generated by the hospital at the time it is generated. If the hospital's existing electrical meter is not capable of separately measuring electricity the hospital generates at the time it is generated, the electric utility, upon written request from the hospital, shall install at the hospital's expense a meter that is capable of such measurement.~~

~~(5) The tariff shall allow the hospital customer-generator to operate its electric generating facilities individually or collectively without any wattage limitation on size.~~

~~(6) The hospital customer generator's net metering service shall be calculated as follows:~~

~~(a) All electricity flowing from the electric utility to the hospital shall be charged as it would have been if the hospital were not taking service under this rule.~~

~~(b) All electricity generated by the hospital shall be credited at the market value as of the time the hospital generated the electricity.~~

~~(c) Each monthly bill shall reflect the net of paragraphs (B)(6)(a) and (B)(6)(b) of this rule. If the resulting bill indicates a net credit dollar amount, the credit shall be netted against the hospital customer generator's bill until the hospital requests in writing a refund that amounts to, but is no greater than, an annual true-up of accumulated credits over a twelve-month period.~~

~~(7) No electric utility's tariff for net metering shall require hospital customer generators to:~~

~~(a) Comply with any additional safety or performance standards beyond those established by rules in Chapter 4901:1-22 of the Administrative Code, and the~~

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~~National Electrical Code, the institute of electrical and electronics engineers, and underwriters laboratories, in effect as set forth in rule 4901:1-22-03 of the Administrative Code.~~

~~(b) Perform or pay for additional tests beyond those required by paragraph (B)(7)(a) of this rule.~~

~~(c) Purchase additional liability insurance beyond that required by paragraph (B)(7)(a) of this rule.~~

~~(8) In no event shall the electric utility impose on the hospital customer-generator any charges that relate to the electricity the customer generator feeds back to the system.~~