

BEFORE

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

ENTRY

The Commission finds:

- (1) R.C. 111.15(B) requires all state agencies to conduct a review, every five years, of their rules and to determine whether to continue their rules without change, amend their rules, or rescind their rules. At this time, the Commission is reviewing the net metering rule in Ohio Adm.Code 4901:1-10-28.
- (2) R.C. 106.03(C) requires that the Commission determine whether the rules:
  - (a) Should be continued without amendment, be amended, or be rescinded, taking into consideration the purpose, scope, and intent of the statute under which the rules were adopted;
  - (b) Need amendment or rescission to give more flexibility at the local level;
  - (c) Need amendment to eliminate unnecessary paperwork;
  - (d) Incorporate a text or other material by reference and, if so, whether the text or other material incorporated by reference is deposited or displayed as required by R.C. 121.74, and whether the incorporation by reference meets the standards stated in R.C. 121.71, 121.75, and 121.76;
  - (e) Duplicate, overlap with, or conflict with other rules;
  - (f) Have an adverse impact on businesses, as determined under R.C. 107.52; and

- (g) Contain words or phrases having meanings that in contemporary usage are understood as being derogatory or offensive.
- (3) In addition, on January 10, 2011, the governor of the state of Ohio issued Executive Order 2011-01K, entitled "Establishing the Common Sense Initiative," which sets forth several factors to be considered in the promulgation of rules and the review of existing rules. Among other things, the Commission must review its rules to: determine the impact that a rule has on small businesses; attempt to balance the critical objectives of regulation and the cost of compliance by the regulated parties; and amend or rescind rules that are unnecessary, ineffective, contradictory, redundant, inefficient, or needlessly burdensome, or that have had negative, unintended consequences, or unnecessarily impede business growth.
- (4) Additionally, in accordance with R.C. 121.82, in the course of developing draft rules, the Commission must evaluate the rules against the business impact analysis (BIA). If there will be an adverse impact on businesses, as defined in R.C. 107.52, the agency is to incorporate features into the draft rules to eliminate or adequately reduce any adverse impact. Furthermore, the Commission is required, pursuant to R.C. 121.82, to provide the Common Sense Initiative (CSI) office the draft rules and the BIA.
- (5) On January 15, 2014, the Commission issued a Finding and Order in this case that adopted amended and no change rules in Ohio Adm.Code Chapter 4901:1-10, and ordered that they be filed with the Joint Committee on Agency Rule Review (JCARR), the Secretary of State, and the Legislative Service Commission. Pursuant to R.C. 106.03, all state agencies are required to conduct a review of their rules and to determine whether to continue their rules without change, amend their rules, or rescind their rules. The Commission regularly reviews and amends its rules to further its mission of ensuring that residential and business consumers have access to reliable and adequate resources, a safe and secure grid, and cost effective rates.
- (6) After issuing its Order and filing the rules with JCARR, rule 4901:1-10-28, regarding net metering, was withdrawn from JCARR for further consideration of the matter.

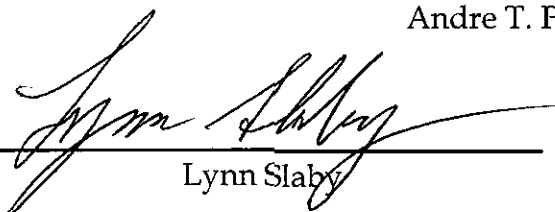
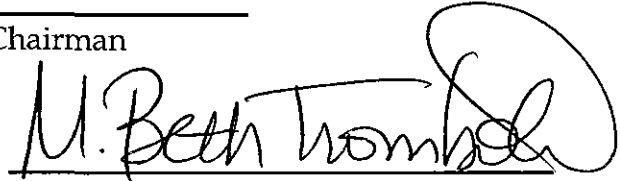

- (7) Each electric utility is required to develop a standard contract or tariff for net metering pursuant to R.C. 4928.67. The proposed rule being issued for comment and reply comment from stakeholders implements R.C. 4928.67 by requiring each electric utility to develop a standard contract or tariff for net metering and making it available to all standard service offer customers. Additionally, the proposed rule is intended to provide increased opportunities for electric services companies to offer unique and diverse net metering contracts to customers. The Commission has determined that this proposed rule will assure residential and business consumers access to reliable and adequate electricity at just and reasonable rates, and will promote the competitive marketplace by providing competitive retail electric service providers expanded opportunities to offer net metering to customers.
- (8) On May 5, 2015, the Commission's Staff conducted a workshop to receive stakeholder input on net metering. Numerous stakeholders attended the workshop and provided Commission Staff with insight on how the net metering rules should be developed. The May 5, 2015, workshop was the Commission's second workshop in this proceeding. However, the purpose of the May 5, 2015 workshop was solely related to the issue of net metering.
- (9) Pursuant to the significant stakeholder involvement in the Commission's efforts to revise Ohio Adm.Code 4901:1-10-28 to implement net metering in the state of Ohio, the Commission finds that this proposed rule should be issued for stakeholder comment and reply comment. Accordingly, the Commission requests comments from interested stakeholders to assist in the review required by R.C. 106.03 and Executive Order 2011-01K. Comments on the draft rule should be filed, either via electronic filing or in hard copy, by December 18, 2015. Reply comments should be filed by January 8, 2016. Additionally, the Commission intends to hold a public forum or en banc hearing to receive additional input from stakeholders in January or February of 2016.
- (10) In order to avoid needless production of paper copies, the Commission will serve a paper copy of just the entry and will make Ohio Adm.Code 4901:1-10-28 available online at: [www.puco.ohio.gov/puco/rules](http://www.puco.ohio.gov/puco/rules). All interested persons may download the proposed rule from the above website.

It is, therefore,

ORDERED, That all interested persons shall have until December 18, 2015, to file comments on the proposed rule and until January 8, 2016, to file reply comments.

ORDERED, That a copy of this Entry be served upon all electric utilities in the state of Ohio, all certified competitive retail electric service providers in the state of Ohio, the Electric-Energy industry list-serve, and all other interested persons of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO

  
\_\_\_\_\_  
Andre T. Porter, Chairman  
\_\_\_\_\_  
Lynn Slaby  
\_\_\_\_\_  
M. Beth Trombold  
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Asim Z. Haque  
\_\_\_\_\_  
Thomas W. Johnson

BAM/sc

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**NOV 18 2015**

  
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Barcy F. McNeal

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) "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.
- (3) "Electric services company" shall have the meaning set forth in section 4928.01(A)(9) of the Revised Code.
- (4) "Electric utility" shall have the meaning set forth in section 4928.01(A)(11) of the Revised Code.
- (5) "Microturbine" shall mean a turbine with a capacity of two megawatts or less.
- (6) "Net metering" shall have the meaning set forth in section 4928.01(A)(30) of the Revised Code.
- (7) "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 an electric services company.
- (8) "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.

(A)(B) Standard net metering.

- (1) Each electric utility shall develop a tariff for net metering. ~~Such tariff shall be made and make such tariff~~ available to ~~qualifying customer-generators~~ customer-generators taking service under the electric utility's standard service offer upon request, in a timely manner, and on a nondiscriminatory basis. Customer-generators on an electric utility's net metering tariff shall not be precluded from shopping for competitive retail electric service but shall be informed that they will not remain on the electric utility's net metering tariff and will not be credited by the electric utility for excess generation.

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An electric services company may offer a net metering contract to its customers, consistent with chapter 4901:1-21 of the Administrative Code. The electric services company and the customer shall define the terms of the contract, including the price, rate, credit, or refund for any excess production by a customer-generator. An electric services company 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 an electric services company.

(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) 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.

(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 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 to any customer, upon request, and on the

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electric utility's website, all necessary information regarding eligibility for the electric utility's net metering tariff. 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, but not limited to, any costs associated with the following: application, interconnection, and meter installation.

- (3)(5) ~~No~~The electric utility's tariff 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 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) of~~ paragraph (A)(5)(a) of this rule.
  - (c) Purchase additional liability insurance beyond that required by ~~paragraph (A)(3)(a) of~~ paragraph (A)(5)(a) of this rule.
- (6) A net metering system must be located on the customer-generator's premises, regardless of whether the customer-generator is on the electric utility's net metering tariff or engaged in net metering with an electric services company. A customer-generator's premises is an area with a metering point that is owned, operated, or leased by the customer-generator, and may include a contiguous lot that is owned, operated, or leased by the customer-generator. For purposes of this rule, an area is considered a contiguous lot regardless of easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way.
- (7) 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 an electric services company.

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(a) The electric utility shall calculate a customer-generator's requirements for electricity as 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 does not have the data or cannot calculate the average annual electricity supplied to the premises over the previous three years, such as instances of new construction, vacant properties, facility expansion, 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, the electric utility shall provide to the customer the average annual electricity supplied to the premises over the previous three years, or provide a consumption estimate for the premises.

(b) The electric utility's net metering tariff shall provide that customer-generators taking service under the electric utility's standard service offer must size their facilities so as not to exceed one hundred and twenty percent of their requirements for electricity at the time of interconnection. No limit on the size of a net metering facility shall be applied to customers taking service from an electric services company, except that customer-generators taking service from an electric services company must intend primarily to offset part or all of their requirements for electricity.

(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 directionseach direction, the electric utility, upon written request from the customer, shall provide the customer with detailed cost estimates of installing a new meter capable of measuring the flow of electricity in each direction and of installing an advanced meter capable of measuring interval usage data on at least an hourly basis. With the signed consent of the customer, the electric utility shall install at the customer's expense either a meter that is capable of measuring electricity flow in two directionseach direction or an advanced meter capable of measuring interval usage data on at least an hourly basis.

(a) With the signed consent of a customer-generator, an electric services company may request that the electric utility install an advanced meter capable of measuring interval usage data on at least an hourly basis, and the electric utility shall install such a meter at the electric services company's expense. If the net metering system is located in an area where the electric utility's distribution system would not



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support an advanced meter, or if the electric utility does not have the capability to install or support an advanced meter, then the electric utility shall install any meter capable of measuring interval usage data on at least an hourly basis.

(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 or set up 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.

~~(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-received shall be calculated in the following manner:

(a) The electric utility shall measure the net electricity ~~produced or consumed~~supplied or received 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 a monthly billing cycle, then the customer-generator shall be billed for the net electricity supplied to it in accordance with normal metering practices. When the electric utility receives more electricity than it supplies to the customer-generator over a monthly billing cycle, the excess electricity shall be converted to a monetary credit at the electric utility's standard service offer rate and be carried forward as a monetary credit to the customer-

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generator's future bills for a period of thirty-six months. The electric utility shall not be required to pay the monetary credit, other than having it credited to future bills, and the monetary credit may be lost if the customer-generator does not use the credit within thirty-six months or stops taking service under the electric utility's standard service offer. The electric utility shall apply the monetary credit to customer bills on a first-in, first-out basis after calculating the customer-generator's bill for each month.

- (c) An electric services company may offer a net metering contract at any price, rate, or manner of credit for excess generation.
- (d) If a customer-generator is engaged in net metering with an electric services company, and uses a meter capable of measuring hourly interval usage data, at least twenty-four hours before the electric utility sends a bill to a customer-generator the electric utility shall transmit to the electric services company the customer-generator's interval data for that billing period. The electric utility shall also transmit to the electric services company the customer-generator's daily interval usage data within twenty-four hours.
- (e) The electric utility shall at least annually calculate and provide to the electric services company the individual network service peak load values and peak load contributions of customer-generators engaged in net metering with that electric services company.
- (f) 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 an electric services company from its customer-generators. Load from a customer-generator shall be incorporated in the electric services company's total hourly energy obligation reported to the regional transmission organization, and will offset the energy services company's reported load to the regional transmission organization.
- ~~(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~~

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~~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.~~

- ~~(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 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 the electric utility or electric services company.
- (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 tariff, for each technology and customer class. The electric utility shall provide any other net metering data to the commission, upon request, and in a timely manner.

~~(B)~~(C) 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~~customer-generator is one whose generating facilities are:
- (i) Located on a ~~customer-generator's~~customer-generator's premises.
- (ii) Operated in parallel with the electric utility's transmission and distribution facilities.

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- (2) ~~Net metering~~ Net metering arrangements shall be made available regardless of the date the hospital's generating facility was installed.
- (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-generator~~ customer-generator, 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 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. The interconnection review process shall determine any needed distribution equipment upgrades to accommodate the hospital net metering system, and these additional costs shall be borne by the hospital customer-generator.
- (6) The hospital ~~customer-generator's~~ 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 and delivered to the electric utility rather than consumed on-site shall be measured and 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)(C)(6)(a)~~ and ~~(B)(6)(b)(C)(6)(b)~~ of this rule. If the resulting bill indicates a net credit dollar amount, the credit shall be netted against the hospital ~~customer~~

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~~generator's 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. If the full amount of the monetary credit is not used within the next monthly billing period, it shall be credited to the hospital customer-generator in subsequent months where the monetary credit from the previous month is insufficient to cover the cost of the hospital customer-generator's bill. The monetary credit shall carry forward for a period of thirty six months and shall be applied to hospital customer-generator bills on a first-in, first-out basis after calculating the customer-generator's bill for each month.~~

- (7) No electric utility's tariff for net metering shall require hospital ~~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 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 ~~(B)(7)(a)(C)(7)(a)~~ of this rule.
  - (c) Purchase additional liability insurance beyond that required by paragraph ~~(B)(7)(a)(C)(7)(a)~~ of this rule.
- (8) In no event shall the electric utility impose on the hospital ~~customer generator~~customer-generator any charges that relate to the electricity the ~~customer generator~~customer-generator feeds back to the system.

# CSI - Ohio

## The Common Sense Initiative

### Business Impact Analysis

Agency Name:	<u>Public Utilities Commission of Ohio (PUCO)</u>
	<u>Attention: Angela Hawkins, Legal Director</u>
	<u>Phone: 614-466-0122 Fax: 614-728-8373</u>
	<u>Angela.Hawkins@puc.state.oh.us</u>
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Regulation/Package Title:	<u>Net Metering</u>
Rule Number(s):	<u>4901:1-10-28</u>
	<u></u>
	<u></u>
Date:	<u>November 18, 2015</u>
<b>Rule Type:</b>	
<input checked="" type="checkbox"/> New	<input checked="" type="checkbox"/> 5-Year Review
<input checked="" type="checkbox"/> Amended	<input type="checkbox"/> Rescinded

The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

## **Regulatory Intent**

### **1. Please briefly describe the draft regulation in plain language.**

***Please include the key provisions of the regulation as well as any proposed amendments.***

The proposed revisions to Ohio Adm.Code 4901:1-10-28 regarding net metering are in accordance with the State of Ohio's 5-year rule review procedures. R.C. 106.03 requires state agencies to conduct a review of their rules and to determine whether to continue their rules without change, amend their rules, or rescind their rules. The Commission issues proposed revisions to Ohio Adm.Code 4901:1-10-28 to implement R.C. 4928.67 by setting standards for net metering in the state of Ohio. Pursuant to R.C. 4928.67(C), the commission must adopt rules relating to additional control and testing requirements for customer-generators that the Commission determines are necessary to protect public and worker safety and system reliability. Additionally, the proposed rule promotes the policies of the state of Ohio in R.C. 4928.02. Specifically, R.C. 4928.02(F) states that it is the policy of this state to ensure that an electric utility'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. Further, R.C. 4928.02(K) states that it is the policy of this state to encourage implementation of distributed generation access across customer classes through regular review and updating of administrative rules governing critical issues such as, but not limited to, interconnection standards, standby charges, and net metering.

The Commission notes that Ohio Adm.Code 4901:1-10-28 is just one rule in Ohio Adm.Code Chapter 4901:1-10. The other rules in Ohio Adm.Code Chapter 4901:1-10 have already been filed with JCARR and become effective. The CSI office issued its business impact analysis (BIA) regarding the rules in Ohio Adm.Code Chapter 4901:1-10 and did not have any recommendations for the rule package. However, after filing the rule package with JCARR, the Commission determined that further consideration and stakeholder input was necessary to understand and properly implement net metering in the state of Ohio. Accordingly, the Commission withdrew Ohio Adm.Code 4901:1-10-28 from JCARR. Thereafter, on May 5, 2015, the Commission conducted an additional stakeholder workshop to receive further stakeholder input on net metering in the state of Ohio. At this time, the Commission is reissuing a proposed net metering rule for comment and reply comment from stakeholders.

The proposed rule begins by adopting definitions for the terms “advanced meter,” “customer-generator,” “electric utility,” “microturbine,” “net metering,” “net metering system,” and “third party.” These definitions will provide clarity to electric utilities, electric services companies, and customers on how to implement the rule when it becomes effective.

Next, the rule requires each electric utility to develop a tariff for net metering and make that tariff available to all customers taking electric service from the electric utility’s standard service offer. If a customer is taking electric service from an electric services company instead of their electric utility, then the electric services company may offer net metering to its customers, but is not required to offer it. However, in the state of Ohio, customers are permitted to shop for competitive retail electric service. So if an electric services company does not offer a net metering contract to a customer with a net metering system, then that customer may shop for a new competitive retail electric service provider.

Consistent with R.C. 4928.01 and 4928.67, a net metering system must use solar, wind, biomass, landfill gas, hydropower, a microturbine, or a fuel cell. Further, net metering systems must be sized such that the customer’s primary intent is only to offset part or all of their requirements for electricity. Since a customer’s requirements for electricity fluctuate, the rule provides that customer’s must not size their facilities larger than 120 percent of their requirements for electricity if they are on the electric utility’s standard service offer.

Further, if a net metering customer generates more than it needs, the excess generation will be converted to a monetary credit at the electric utility’s standard service offer generation rate, and then applied to the customer’s next monthly bill. If there is a remaining credit after offsetting the customer’s next monthly bill, that remaining credit will carry over for a period of 36 months to be used in the customer’s future monthly bills.

Additionally, Ohio Adm.Code implements R.C. 4928.67 by establishing net metering requirements for hospitals. Hospitals may engage in net metering using either two meters or a single meter with two registers, which permits hospitals to be credited for electricity at the market rate at the time the hospital generated the electricity. Pursuant to the rule, after being converted to the market rate, the credit would be credited to the hospital for the next month’s bill, and then for 36 months thereafter.

**2. Please list the Ohio statute authorizing the Agency to adopt this regulation.**

The revisions to Ohio Adm.Code 4901:1-10-28 are in response to R.C. 106.03, which requires all state agencies to conduct a review, every five years, of their rules and to



determine whether to continue the rules without change, with amendments, or with rescissions. The Commission has determined that certain revisions to the rule are necessary.

- 3. Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program?**

*If yes, please briefly explain the source and substance of the federal requirement.*

Ohio Adm.Code 4901:1-10-28 does not implement a federal requirement and is not being adopted or amended to obtain or maintain approval to administer a federal law or program. Net metering is a state program, provided for by R.C. 4928.67.

- 4. If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.**

Ohio Adm.Code 4901:1-10-28 does not implement a federal requirement.

- 5. What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?**

The Commission is proposing Ohio Adm.Code 4901:1-10-28 pursuant to R.C. 4928.67. R.C. 4928.67(C) requires the Commission to adopt rules to ensure safe and reliable electric service. The proposed revisions to the rule will provide greater detail on how electric utilities and electric services companies should provide net metering service to customers in a safe way that ensures the reliability of the utilities' electric distribution systems.

- 6. How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?**

This rule implements net metering in the state of Ohio. The success of the regulation in terms of outputs and outcomes will be measured based upon customer and electric utility feedback. Additionally, the rule contains a requirement for electric utilities to annually file a report to the Commission detailing the number of net metering customers, the capacity of all the net metering systems, and the technology and customer class of net metering customers. This reporting requirement will enable the Commission to measure the effectiveness of the rule and determine whether net metering is working in the state of Ohio. Additionally, the rule provides greater opportunities for electric services companies to offer net metering contracts to customers in the state of Ohio, so the Commission will be closely watching the market to determine if additional electric services companies begin offering unique and diverse net metering contract arrangements to customers.

**Development of the Regulation**

**7. Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.**

*If applicable, please include the date and medium by which the stakeholders were initially contacted.*

The Commission has received a significant amount of stakeholder feedback on Ohio Adm.Code 4901:1-10-28 and net metering generally. Initially, the Commission conducted a workshop on August 17, 2012, at the offices of the Commission to receive feedback from interested stakeholders and the general public. The entry providing notice of the workshop was served upon all investor-owned electric utilities in the state of Ohio, all competitive retail electric service providers in the state of Ohio, and the Electric-Energy industry list-serve. Over 21 stakeholders signed the provided sign-in sheet for the workshop.

Thereafter, the Commission considered the stakeholder input and issued a final rule. However, numerous applications for rehearing were filed by stakeholders and the Commission considered each of the arguments raised in the applications for rehearing. After holding the workshop, receiving numerous comments from stakeholders, issuing a final rule, and considering the arguments raised by stakeholders on rehearing, the Commission filed with rule with JCARR.

However, after filing the rule with JCARR, the Commission determined that further consideration and stakeholder input was necessary to understand and properly implement net metering in the state of Ohio. Accordingly, the Commission withdrew Ohio Adm.Code 4901:1-10-28 from JCARR. Thereafter, on May 5, 2015, the Commission conducted an additional stakeholder workshop to receive further stakeholder input on net metering in the state of Ohio. At this time, the Commission is reissuing a proposed net metering rule for comment and reply comment from stakeholders. Significant stakeholder input has been received by the Commission and the Commission expects further stakeholder input as it proceeds with the rulemaking process. Stakeholder input has been provided to the Commission from electric utilities, electric services companies, environmental organization, industry associations, and individual customers.

**8. What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?**

The Commission first considered stakeholder input at its initial workshop on August 17, 2012. Over three years later, the Commission is still receiving stakeholder input on the rule. The Commission used the stakeholder input to develop a better understanding of net metering and its impacts on the electric grid. Additionally, the Commission used stakeholder input to provide opportunities for electric services companies to become more engaged in net metering in the state of Ohio. The Commission has taken over three years of stakeholder input to draft a proposed rule that will provide safer, more reliable net metering service to customers, while supporting development of the retail market in Ohio.

**9. What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?**

No scientific data was provided or considered. In proposing revisions to Ohio Adm.Code 4901:1-10-28, the Commission has take into account feedback from numerous stakeholders and the general public. While no scientific data was used to develop the rule, stakeholders provided data on the types of net metering systems being built in Ohio and the current barriers to net metering. The Commission used the data to develop a proposed rule that will provide greater opportunities for electric service companies to offer unique net metering contracts to customers.

**10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn't the Agency consider regulatory alternatives?**

The proposed rule itself is an alternative proposal from what was original proposed and filed with JCARR. The Commission determined that further stakeholder input was necessary to develop an alternative proposal. The alternative proposal being issued by the Commission for comment decreases the burden on ratepayers while providing increased opportunities for customers to engage in net metering with electric services companies. To accomplish this, the Commission considered the advantages and disadvantages of smart meters for net metering customers. By using smart meters with interval data capabilities, net metering customers can engage in unique and diverse net metering arrangements with electric services companies.

**11. Did the Agency specifically consider a performance-based regulation? Please explain.**

*Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.*

No performance-based regulation was considered. The standards are not performance-based or outcome-based.

**12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?**

The Commission has reviewed other Ohio regulations and found no duplicate. Furthermore, no duplicate has been identified by stakeholders.

**13. Please describe the Agency's plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.**

Upon completion of the rulemaking process, the Commission will ensure implementation of the rule by requiring each electric utility to file revised tariffs consistent with the new rule. Thereafter, the Commission will exercise its general supervisory authority to ensure that the rule is being implemented properly and consistently across the state of Ohio. Finally, the Commission will use the utilities' annual net metering report to analyze the market and determine if the rule has been effective at ensuring safe and reliable electric service for net metering customers.

**Adverse Impact to Business**

**14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:**

**a. Identify the scope of the impacted business community;**

The scope of the business community impacted by the proposed revisions to Ohio Adm.Code 4901:1-10-28 includes all electric utilities in the state of Ohio, all electric services companies, all net metering customers, hospitals net metering customers, and all customers generally. All customers will be provided opportunities to engage in net metering, whether by taking service under the electric utilities' standard service offer and being on the utilities' net metering tariff, or through shopping for generation service with an electric services company and signing a net metering contract with the electric services company. Further, Ohio Adm.Code 4901:1-10-28(B) applies to

hospital net metering customers, so this rule provides guidance on how hospitals may engage in net metering.

**b. Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and**

The proposed rule was drafted in an effort to minimize any adverse impact on business, while promoting the policies of the state of Ohio in R.C. 4928.02. However, there are some adverse impacts.

First, in proposed Ohio Adm.Code 4901:1-10-28(B)(1), the electric utilities are required to develop a net metering tariff and offer it to their customers. Additionally, the electric utility is required to disclose on its website, and to any customer upon request, its net metering department or contact person and all necessary information regarding net metering.

Next, in proposed Ohio Adm.Code 4901:1-10-28(B)(8), if a customer's meter is not capable of net metering, the electric utility must provide the customer with detailed cost estimates of what it would cost to install a meter capable of net metering and what it would cost to install a smart meter capable of taking interval data. With the signed consent of the customer, the electric utility shall install a meter capable of net metering or a smart meter so that the customer may engage in net metering. Additionally, with the signed consent of a net metering customer, an electric services company can request that the utility install a smart meter capable of taking interval data, which would be paid for by the electric services company.

Additionally, in proposed Ohio Adm.Code 4901:1-10-28(B)(9)(d-f), the electric utilities must provide interval meter data and individual network peak load data to electric services companies. Further, the electric utilities must ensure that final settlement data sent to the regional transmission operator incorporates negative load to account for electricity provided from net metering customers.

In proposed Ohio Adm.Code 4901:1-10-28(B)(13), the electric utilities must file an annual report with the Commission so that the Commission can monitor the effectiveness of the rule and the state of the market.

Finally, in proposed Ohio Adm.Code 4901:1-10-28(C), the electric utilities are required to develop a net metering tariff to be offered to hospitals that desire to engage in net metering.

**c. Quantify the expected adverse impact from the regulation.**

*The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a “representative business.” Please include the source for your information/estimated impact.*

First, in proposed Ohio Adm.Code 4901:1-10-28(B)(1), the electric utilities are required to develop a net metering tariff and offer it to their customers. The expected adverse impact from this section is minimal because the electric utilities each already have a net metering tariff on file with the Commission. Therefore, the electric utilities will only be required to revise their existing tariff and to file the revisions with the Commission. This adverse impact could be quantified in hours to comply, and would be expected to be approximately three to five hours.

Next, in proposed Ohio Adm.Code 4901:1-10-28(B)(8), if a customer’s meter is not capable of net metering, the electric utility must provide the customer with detailed cost estimates and to potentially install a new meter. The expected adverse impact of providing cost estimates is minimal because the electric utilities should already know how much their meters cost and approximately what it costs to install. Additionally, the installation of a new meter is paid by the net metering customer or the electric services company, which is consistent with the principle of cost causation. Further, the rule does not require a new meter, so since a new meter is optional, the cost to install a new meter does not need to be incurred at all. It is difficult to quantify this impact in terms of dollars because it will be different for each utility and each situation, but the Commission has ensured that customers are provided cost estimates before deciding whether they want to incur the cost.

Additionally, in proposed Ohio Adm.Code 4901:1-10-28(B)(9)(d-f), the electric utilities must provide interval meter data, individual network peak load data, and final settlement data. This data should be readily available by the electric utilities, so the adverse impact to business would be in hours to comply to report or provide the data.

The Commission expects that this adverse impact could be quantified as approximately eight hours, or one full workday.

In proposed Ohio Adm.Code 4901:1-10-28(B)(13), the electric utilities must file an annual report with the Commission so that the Commission can monitor the effectiveness of the rule and the state of the market. Again, this adverse impact would best be quantified in hours to comply, and the Commission expects that this would take approximately four hours or one half of a full workday.

Finally, in proposed Ohio Adm.Code 4901:1-10-28(C), the electric utilities are required to develop a net metering tariff to be offered to hospitals that desire to engage in net metering. The expected adverse impact from this section is minimal because the electric utilities each already have a net metering tariff on file with the Commission. Therefore, the electric utilities will only be required to revise their existing tariff and to file the revisions with the Commission. Similar to the net metering tariff requirement above, this adverse impact could be quantified in hours to comply, and would be expected to be approximately three to five hours.

**15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?**

The adverse impacts on business identified by the Commission are minimal, yet they are necessary to ensure that the rule is properly implemented. These adverse impacts are necessary to protect customers by giving them detailed cost estimates before deciding whether to incur a cost, to support the market by ensuring that the Commission has the data that it needs, and to ensure safe and reliable electric service by establishing the efficient sharing of data between electric utilities and electric services companies. Each of these adverse impacts is justified by the need to ensure safe and reliable retail electric service.

**Regulatory Flexibility**

**16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.**

Electric utilities are under the jurisdiction of the Commission and may not be exempted from the requirements provided in Ohio Adm.Code 4901:1-10-28. Electric services companies are unregulated, though the Commission does have general supervisory authority to protect the public interest and to monitor the market. While there are not alternative means of compliance for the electric utilities, the proposed rule provides greater opportunities for

electric services companies to offer net metering services to customers. This will decrease the regulatory burden on the electric utilities to comply with the rule and will benefit electric customers.

**17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?**

This section is not applicable. There are no penalties or fines in proposed Ohio Adm.Code 4901:1-10-28. Further, costs to be incurred by customers are optional, and will only be assessed after they have been provided detailed cost estimates.

**18. What resources are available to assist small businesses with compliance of the regulation?**

Commission Staff works with small businesses to ensure compliance with the rules. In Commission Case No. 12-2050-EL-ORD, stakeholders and the general public, including small businesses, were invited to participate in the rulemaking process to explain to Commission Staff potential revisions to the rules to decrease or eliminate any negative effects on business. Small businesses may contact Commission Staff at any time and may comment on the proposed revisions during the open comment period once the proposed revisions have been released via Commission Entry. The Commission has engaged numerous stakeholders in this rulemaking process, for a period of over three years, and the Commission has sought to assist business with understanding the rule and how it applies if they choose to engage in net metering.