

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

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

**COMMENTS
BY
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL**

BRUCE J. WESTON
OHIO CONSUMERS' COUNSEL

Melissa R. Yost
Assistant Consumers' Counsel

Office of the Ohio Consumers' Counsel
10 West Broad Street, Suite 1800
Columbus, Ohio 43215-3485
(614) 466-1291 – Telephone
yost@occ.state.oh.us

January 7, 2013

TABLE OF CONTENTS

	PAGE
I. INTRODUCTION	1
II. SPECIFIC COMMENTS.....	2
4901:1-10-01 Definitions.....	2
A. Comments On The Proposed New Definitions.....	2
B. Comments Advocating For The Inclusion Of A Newly Defined Term.....	4
4901:1-10-05 Metering.....	5
4901:1-10-07 Outage Reports.....	6
4901:1-10-08 Emergency Plan; Annual Emergency Contact Report and Annual Review of Emergency Plan; Critical Customers; Emergency Exercise; and Coordination.....	8
4901:1-10-09 Minimum Customer Service Levels.	10
4901:1-10-10 Distribution System Reliability.	11
4901:1-10-11 Distribution Circuit Performance.....	16
4901:1-10-12 Provision of Customer Rights and Obligations.	18
4901:1-10-14 Establishment of Credit for Applicants and Customers.....	22
4901:1-10-22 Electric Utility Customer Billing and Payments.....	25
4901:1-10-24 Customer Safeguards and Information.	28
4901:1-10-27 Inspection, Maintenance, Repair, and Replacement of Transmission and Distribution Facilities (Circuits and Equipment).....	30
4901:1-10-28 Net Metering.....	31
4901:1-10-33 Consolidated Billing Requirements.	38
4901:1-10-34 Compliance with the Public Utility Regulatory Policies Act of 1978, as amended by the Energy Policy Act of 2005.	39
III. CONCLUSION.....	41

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

comments, toward the result of better service quality, safety, and reliability for Ohio residential electric consumers.⁴

II. SPECIFIC COMMENTS

4901:1-10-01 Definitions.

A. Comments On The Proposed New Definitions.

The PUCO Staff proposed the inclusion of three new definitions in the rules including a definition for “Customer energy usage data,” “De-identified energy usage data,” and “Third-party developer.” OCC appreciates the PUCO Staff’s recognition of the need for additional customer privacy protection in this era of grid modernization and the opportunities that were previously provided for interested parties to file comments specific to this topic.⁵

The application of new technologies in the electric industry, specifically the use of automation in metering, presents scenarios where the disclosure of customer energy usage data (“CEUD”) to a third party user of “smart meter” data, in conjunction with disclosure of personally identifying information such as name, address, telephone number, billing history and account number, would pose substantially increased risks to the privacy and safety of Ohioans.⁶ Studies have demonstrated that the availability of real-time household energy usage data can reveal how many people are present in a

⁴ OCC’s proposals for new language are indicated by ALL CAPS. All deletions proposed by OCC are indicated with ~~strike through~~. The PUCO Staff’s proposals for new language are indicated by underline.

⁵ *In the Matter of the Review of the Consumer Privacy Protection, Customer Data Access, and Cyber Security Issues Associated with Distribution Utility Advanced Metering and Smart Grid Programs*, Case No. 11-277-GE-UNC, OCC’s Comments, (March 4, 2011).

⁶ National Association of State Utility Consumer Advocates (NASUCA) Energy Privacy Policy, Resolution 2011-8, November 15, 2011.

particular household, when people are present, what activities are occurring at a given time, what appliances are in use, and the characteristics of the appliances being used.⁷

Customer energy usage data is typically associated with automated metering infrastructure (“AMI”) or Smart Meters where the energy data can be collected and tabulated in a detailed and granular manner that provides the electric utility practically real-time access to the usage information. The proposed rules have a definition for customer energy usage data that is broader than the application typically associated with Smart Meters. OCC recommends the definition be amended and specifically applied to the collection of granular energy usage by AMI and Smart Meters.

The PUCO Staff also proposed a definition for “de-identified energy usage data.” OCC suggests this phrase be clarified as “generic customer load pattern information” as referenced in Ohio Adm. Code 4901:1-10-24(F)(2) and suggests this terminology be used as opposed to “de-identified energy usage data.” The PUCO should adopt the following changes in these definitions, for the purpose of protecting customer privacy.:

- (I) "Customer energy usage data" means THE GRANULAR energy usage information AND DATA COLLECTED USING ADVANCED METERS OR SMART METERS ~~and data that~~ CAN IDENTIFY THE SPECIFIC USAGE PATTERNS OF AN INDIVIDUAL ~~is identifiable to a retail customer.~~
- (J) “GENERIC CUSTOMER LOAD PATTERN INFORMATION”
~~"De-identified energy usage data"~~ means aggregated ENERGY USAGE information and data that DOES NOT IDENTIFY THE

⁷ National Institute of Standards and Technology (NIST), NISTR 7628, Guidelines for Smart Grid Cyber Security: Vol. 2, Privacy and the Smart Grid, The Smart Grid Interoperability Panel - Cyber Security Working Group, at page 11(August 10, 2010).

USAGE PATTERNS FOR is not identifiable to an individual retail customer or could not be used to reasonably ascertain a customer's identity.

B. Comments Advocating For The Inclusion Of A Newly Defined Term.

OCC proposes that the Commission adapt one additional definition in Ohio Adm. Code 4901:1-10-01. Specifically, the Commission should include a definition for “momentary outage.”

A definition for “sustained outages”⁸ is included in the rules. However, the rules do not include a definition for other shorter-term outages that also directly affect the quality of service and reliability of electric service that customers receive. Depending upon the level of distribution automation, metering, and outage management system capabilities in each of the electric utilities, there can be a lack of standardization in accounting for momentary outages.

OCC recommends later in these comments that the Commission adopt standards concerning momentary outages. Accordingly, the PUCO should adopt a definition for “momentary outages” to be included in Ohio Adm. Code 4901:1-10-01.

It is OCC’s position that it is appropriate to incorporate some of the standards adopted by the Institute of Electrical and Electronics Engineers (IEEE) into the Commission’s rules. The IEEE has, in general, defined “momentary outages” as interruptions of service to customers for a duration of less than five minutes.⁹ The

⁸ “[T]he interruption of service to a customer for more than five minutes.” Ohio Adm. Code 4901:1-10-01(AA).

⁹ IEEE Guideline for Electric Power Distribution Reliability Indices, IEEE Std 1366-2012, May 31, 2012.

Commission should include the following definition for “momentary outages” in Ohio

Adm. Code 4901:1-10-01:

“MOMENTARY OUTAGE” MEANS AN INTERRUPTION IN
ELECTRIC SERVICE WITH A DURATION LESS THAN FIVE
(5) MINUTES.

4901:1-10-05 Metering.

Paragraph F requires, in part, that electric utilities refund or credit customers (within 30 days) with any adjustment that is necessary when customers have overpaid their bill. Overpayments occur as a result of faulty meters, misread meters, or following periods of inaccurate estimated meter reads. The electric utilities have the discretion to determine if the customer will be provided a refund or if the refund will be credited to the customer’s account versus provided in cash. Fairness dictates that customers should make the decision whether they want to receive either a cash refund or a credit to their current account and to be informed about the option. Accordingly, OCC recommends the following change to paragraph (F)(5)(c):

Shall, within thirty days, pay or credit, AFTER INFORMING THE
CUSTOMER OF THE OPTION, any overpayment to the
customer, in accordance with one of the following billing
adjustments:

Paragraph I requires electric utilities to perform an actual meter reading of each meter at least once in each calendar year. However, that same paragraph also requires electric utilities to “make reasonable attempts” to obtain accurate, actual meter reads for each billing period.¹⁰ The standard of “reasonable attempts” though is overly subjective and can result in situations where meters are not actually read by the utility for extended

¹⁰ Ohio Adm. Code 4901:1-10-05(I)(1).

periods of time. In such situations, customers may be overcharged or undercharged for their actual usage.

Given that customers have a right to be billed accurately¹¹ and for only the amount of electricity that was actually used, a standard for actual monthly meter reads by the electric utilities should be adopted. (Situations where the customer and Company are in agreement for less frequent meter reads can be addressed by separate agreement as currently contemplated in the rules.). The PUCO should adopt the following change in paragraph (I)(1):

The electric utility shall ATTEMPT TO obtain actual readings of all its in-service customer meters EVERY BILLING PERIOD BUT MUST OBTAIN AN ACUTAL READ A MINUMUM OF FOUR TIMES A YEAR PER CUSTOMER. ~~at least once each calendar year. Every billing period, the electric utility shall make reasonable attempts to obtain accurate, actual readings of the energy and demand, if applicable, delivered for the billing period, except where the~~ THE customer and the electric utility CAN have agreed to LESS FREQUENT METER READS PROVIDED EACH METER IS READ AT LEAST ONCE ANNUALLY. ~~other arrangements.~~ Meter readings taken by electronic means shall be considered actual readings.

4901:1-10-07 Outage Reports.

Paragraph B requires electric utilities to immediately report an “outage” to the Commission outage coordinator. Paragraph A defines an “outage.” A service interruption is an “outage” if it involves (1) more than 2,500 customers for a *projected* duration of four hours or (2) more than 100 customers if the duration of the outage is *projected* to occur for more than twenty-four hours.¹²

¹¹ Ohio Adm. Code 4901:1-10-22(B).

¹² Ohio Adm. Code 4901:1-10-7(A)(1)-(2).

The requirement to provide outage reports is essentially triggered by the utilities' own assessment (projection) for how long the restoration will take.¹³ However, the rule should be amended so that outage reports are also required for interruptions of service that were not projected to last four hours or more (for 2,500 or more customers) or 24 hours or more (for 100 or more customers) but actually lasted longer than projected.

Accordingly, the Commission should modify its rules so that outage reports are submitted at any time when 2,500 or more customers are projected to be without service for more than four hours, or when the interruption has unexpectedly exceeded four hours. Additionally, outage reports should be provided any time that service is projected to be interrupted for a hundred or more customers for longer than twenty-four hours or when the interruption has unexpectedly exceeded twenty-four hours or more.

Furthermore, as stated above, Paragraph B requires electric utilities to provide outage reports to the PUCO's outage coordinator. Outage reports are also valuable to the state agency (OCC) that represents residential consumers, for addressing issues about specific outages and in assessing the quality of service being provided to residential consumers. The PUCO should adopt the following amendments to its rules regarding outage reports:

- (A) As used in this rule, "outage" means an interruption of service to:
 - (1) Two thousand five hundred or more customers in an area for a projected OR ACTUAL period of four hours or more.
 - (2) One hundred or more customers in an area for a projected OR ACTUAL period of twenty-four hours or more.

¹³ Ohio Adm. Code 4901:1-10-7(A)(1)-(4).

- (B) Each electric utility shall immediately report each outage to the commission's outage coordinator AND TO OCC in a format prescribed by the outage coordinator.

4901:1-10-08 Emergency Plan; Annual Emergency Contact Report and Annual Review of Emergency Plan; Critical Customers; Emergency Exercise; and Coordination.

Paragraph A requires each of the electric utilities to maintain emergency plans that outline an extensive list of requirements involving the plans, policies, and procedures for performing damage assessments, planning for additional resources, restoration priorities, coordination with emergency resources, outage updates, and after-action assessments following activation of the emergency plan. Paragraph B requires the electric utilities to make the emergency plan available to the Commission outage coordinator for review.

However, there is no requirement that the electric utilities specifically identify the circumstances when the emergency plan(s) will be implemented. There should be.

Further, the emergency plans should be kept on-site at the PUCO—and not just be available for review at the utility's offices—for ease of reference and efficiency in the state regulator's (PUCO) work on emergency issues. The PUCO did not have the emergency plans in its offices, under the current rules. The plans provided to the PUCO Staff for keeping at the PUCO's offices could be redacted, if appropriate under the PUCO's rules for protecting information.

In addition, the emergency plan(s) should be made available to the OCC in addition to the PUCO outage coordinator. To the extent practical, there should be transparency in the utility planning process for emergencies. This transparency will benefit consumers and others--such as Ohio local governments that are keenly interested in emergency plans and response for their constituents--with important information that is

uniformly made available across a service territory. Accordingly, the PUCO should adopt the following changes:

- (A)(1) A table of contents, mission statement, ~~and~~ major objectives for the plan, AND THE CIRCUMSTANCES THAT WARRANT IMPLEMENTATION OF THE PLAN(S).
- (B) Each electric utility shall maintain an emergency plan(s) in accordance with this rule. Each electric utility shall PROVIDE ~~make its emergency plan and amendments available for review by~~ TO the commission's outage coordinator AND TO OCC. In the emergency plan PROVIDED ~~made available~~ to the commission's outage coordinator AND TO OCC, the electric utility may delete the following confidential information:

Paragraph I requires the electric utilities to annually verify and update its list of critical customers. Given that by definition critical customers are those who have immediate life-threatening needs, only one annual update could result in out of date lists that do not reflect the current needs of customers. In addition, the rules do not require the electric utilities to provide notice to persons that provide care to critical customers about scheduled outages or to provide a priority response to restore outages for critical customers. Each electric utility should have this responsibility. Rule I should be amended as follows to support this requirement:

- (I) Each electric utility shall:
 - (1) ~~Maintain and annually verify and update its~~ A list of critical customers UPDATED AND VERIFIED AT LEAST ON A QUARTERLY BASIS.
 - * * *
 - (4) MAINTAIN CONTACT INFORMATION FOR PERSONS THAT PROVIDE CARE FOR CRITICAL CUSTOMERS AND INFORM THEM DURING PLANNED AND SUSTAINED OUTAGES.

- (5) PROVIDE A PRIORITY RESPONSE ON A REASONABLE ATTEMPT BASIS TO RESTORE SERVICE FOR CRITICAL CUSTOMERS FOLLOWING SUSTAINED OUTAGES.

Paragraph J requires an electric utility to conduct a comprehensive emergency exercise every three years to test and evaluate the effectiveness of the emergency plan. Paragraph K requires electric utilities to provide reports to the Commission outage coordinator when implementation of the emergency plan has occurred and a waiver is being requested to the three-year requirement. The electric utilities should provide to OCC any reports that they develop to assess their emergency plan effectiveness. In addition, any waiver request of the three-year test of the emergency plan should be publicly filed with and subject to approval by the Commission.

4901:1-10-09 Minimum Customer Service Levels.

The current rules do not include requirements for periodic customer satisfaction surveys to be conducted by the electric utilities, although the supporting justification for reliability performance standards do require customer perceptions about reliability to be performed no less than every three years.¹⁴ Customer satisfaction surveys can provide important insight to the Commission and other stakeholders about customers' perceptions of their electric service. Surveys can also provide valuable input for establishing a level of understanding the public has about their bills, requirements concerning service, customer obligations, responsibilities, and rights.

While it is possible that the utilities may currently perform surveys for their own purposes, there is no consistency in the survey methodologies employed by the electric utilities or the way the results are compiled into a single comparative report. Other states

¹⁴ Ohio Adm. Code 4901:1-10-10(B)(4)(b).

including Pennsylvania and Oklahoma¹⁵ require electric utilities to conduct and report the results of customer satisfaction surveys using state-established standards.¹⁶ The PUCO should adopt a requirement for standard customer satisfaction surveys as follows:

- (D) EACH ELECTRIC UTILITY SHALL ANNUALLY CONDUCT A CUSTOMER SATISFACTION SURVEY TO MEASURE CUSTOMER PERCEPTIONS ABOUT THE SERVICES PROVIDED BY THE ELECTRIC UTILITY. THE SURVEY WILL BE FUNDED BY THE ELECTRIC UTILITY SHAREHOLDERS AND WILL MEASURE PERCEPTIONS ABOUT SERVICES, UNDERSTANDABILITY OF THE BILL AND OTHER SERVICE OPTIONS, ABILITY TO CONTACT THE COMPANY, AND RESPONSIVENESS IN ADDRESSING ISSUES AND QUESTIONS. THE SURVEY METHODOLOGY AND QUESTIONS WILL BE DEVELOPED IN CONJUNCTION WITH THE PUCO STAFF AND OCC.

4901:1-10-10 Distribution System Reliability.

Paragraph B establishes service reliability indices and minimum performance standards that the electric utilities must meet on an annual basis. The two reliability indices are the customer average interruption duration index (“CAIDI”) and the system average interruption frequency index (“SAIFI”). SAIFI represents on an annual basis the average number of interruptions per customer. CAIDI represents the average time to restore service following an interruption. Both indices are critical in establishing minimum benchmark reliability standards in the state.

However, SAIFI and CAIDI alone are not indicators of the number of interruptions customers are experiencing or the duration of those interruptions. The

¹⁵ Oklahoma Corporation Commission Regulated Electric Utilities, 2010 Reliability ScoreCard, May 1, 2011, available at <http://www.occeweb.com/pu/PUD%20Reports%20Page/2011%20Reliability%20Report%20final.pdf>.

¹⁶ A copy of the Pennsylvania 2011 Customer Service Performance Report is available through the Pennsylvania Public Utility Commission Bureau of Consumer Services, http://www.puc.pa.gov/general/publications_reports/pdf/Quality_Of_Service_Rpt_11.pdf.

SAIFI and CAIDI reliability performance standards are more reflective of the normal day-to-day operation of the distribution system when the operational limits of the system are not being stressed due to inclement weather or other factors. As a result, the impacts of the outages that occurred on or about June 29, 2012, when over 1 million Ohioans lost service for several days, are not reflected in the standards. Again on October 29, 2012, over 300,000 Northeast Ohioans lost service for several days due to inclement weather and yet the impact of this outage is not reflected in the standards. The PUCO's rules enable the electric utilities to exclude outages associated with major events and transmission outages;¹⁷ only sustained outages are included in the calculations related to reliability performance.¹⁸

While there is a need and application for the reliability standards related to the normal day-to-day operation of the distribution system, the minimum reliability standards contemplated in Ohio law¹⁹ should be more reflective of the actual number of outages and duration of outages that Ohioans experience. Reliability standards that do not exclude major events or momentary outages are necessary benchmarks for assessing the reliability of the distribution systems. The implementation of Smartgrid programs with some of the Ohio electric utilities should enhance the availability of information to enable the effective development of additional momentary reliability standards.

The Commission has previously affirmed that the collection of momentary interruption data can be helpful and useful in assessing the reliability of electric service.²⁰ However, the Commission expressed concern that the time was "not ripe" for

¹⁷ Ohio Adm. Code 4901:1-10-10(B)(4)(c).

¹⁸ Ohio Adm. Code 4901:1-10-01(AA).

¹⁹ R.C. 4928.11.

²⁰ Finding and Order in Pub. Util. Comm., No. 06-653-EL-ORD, at page 14 (November 5, 2008).

implementing momentary standards given the lack of uniformity in collecting data.²¹

However, there is no indication in the PUCO Staff proposed rules that a review was performed to conclude that the time is not ripe now for implementing momentary interruption standards.

The time is ripe for the Commission to re-initiate the Momentary Average Interruption Frequency Index (“MAIFI”). MAIFI is an indication of the average frequency of momentary interruptions in service.²² Customers require ever-greater levels of reliability of service and the capture of momentary interruptions (those less than five minutes) will allow the Commission to continue to develop programs and policies that reflect this important indicator of reliability of service. Momentary outages are often more than an inconvenience and can have dramatic effects on various customers, including those on life support.

Vegetation management is usually a significant factor as a cause of momentary service interruptions, which last five minutes or less. These interruptions can cause loss of computer data and can result in the need to reset many types of modern appliances and electronics. For those electric utilities that do not have outage management systems (“OMS”) available to record momentary outages, the Commission should require that the electric utility file a plan within 30 days of the Order in this case to assure future reporting compliance.

OCC also recommends that the Commission re-initiate the system average interruption duration index (“SAIDI”). Unlike CAIDI, which is a measure of the

²¹ Id.

²² IEEE Guide for Electric Power Distribution Reliability Indices, IEEE Std. 1366-2012 (Revision of IEEE Std. 1366-2003), at page 9.

duration of outages for interrupted customers, SAIDI provides an indication of the total duration of interruptions for the average customer during a predefined period of time. SAIDI can provide an accurate indication of overall changes that are occurring in reliability performance as opposed to CAIDI which is more of an indicator of response times. SAIDI is a preferred method to measure the total costs of an outage, including utility repair costs and customer losses because it measures the duration of an outage.²³ Given that the electric utilities must determine the SAIDI for individual distribution circuits for the purpose of determining the eight percent worst performing circuits,²⁴ the establishment of a system SAIDI is reasonable. Without SAIDI there is no comprehensive measure for how well the overall distribution system is performing.

Accordingly, OCC recommends that the following amendments to the Commission's rules be adopted:

(10)(B) Service reliability indices and minimum performance standards.

(1) The service reliability indices are as follows:

“MAIFI” OR THE MOMENTARY AVERAGE INTERRUPTION FREQUENCY INDEX REPRESENTS THE AVERAGE FREQUENCY OF MOMENTARY INTERRUPTIONS. MAIFI IS EXPRESSED BY DIVIDING THE TOTAL NUMBER OF MOMENTARY CUSTOMER INTERRUPTIONS BY THE TOTAL NUMBER OF CUSTOMERS SERVED.

“SAIDI” OR THE SYSTEM AVERAGE INTERRUPTION DURATION INDEX REPRESENTS THE TOTAL DURATION OF INTERRUPTIONS FOR THE AVERAGE CUSTOMER OF AN PREDEFINED BASIS. SAIDI IS EXPRESSED BY DIVIDING THE SUM OF ALL CUSTOMER MINUTES OF

²³ IEEE Std. 1366, Annex B, at 28.

²⁴ Ohio Adm. Code 4901:1-10-11.

INTERRUPTION BY THE TOTAL NUMBER OF
CUSTOMERS SERVED.

Paragraph (C)(1) requires the electric utilities to file an annual report with the Commission by March thirty-first of each year concerning reliability performance.²⁵ The PUCO Staff is recommending changes in the rule to require more specificity concerning the reliability customers are receiving. OCC supports the PUCO Staff's recommended changes and recommends the additions of reporting momentary outage data and SAIDI during major events as follows:

- (C)(1) Annual performance and supporting data for each service reliability index set forth in paragraph (B) of this rule both with and without exclusions for major events and transmission outages. Supporting data includes, for example, the number of customers served, the number of customer interruptions, the number of customer minutes interrupted, THE NUMBER OF MOMENTARY INTERRUPTIONS, SAIFI data for a major event, CAIDI data for a major event, SAIDI DATA FOR A MAJOR EVENT, information concerning a transmission interruption, and a listing of distribution circuits interrupted during a transmission interruption.

Paragraph D requires the electric utilities to submit an action plan to the PUCO Staff if the electric utility fails to meet any of the reliability indices in a year. Considering that the annual report is publicly filed by March thirty-first of each year,²⁶ the action plan should be included within the filed report. Knowing that the electric utility missed a performance standard is meaningless if additional information about what the utility is doing to correct the situation is not provided. Other stakeholders must rely on public records requests to the PUCO in order to receive information that should be

²⁵ Ohio Adm. Code 4901:1-10-10(C)(1).

²⁶ Ohio Adm. Code 4901:1-10-10(D).

publicly filed. This process wastes time for the stakeholders and PUCO Staff. OCC recommends the rule be modified as follows:

- (D) ~~Except as otherwise provided in paragraph (E) of this rule, If~~ the annual performance of an electric utility does not meet the electric utility's performance standard for any index, the electric utility shall FILE AN ACTION PLAN WITH THE ANNUAL REPORT REQUIRED PURSUANT TO O.A.C. 4901:1-10-10(C). STATUS REPORTS ON EACH ACTION INCLUDED IN THE ACTION PLAN SHALL BE QUARTERLY FILED WITH THE COMMISSION. ~~submit an action plan to the director of the service monitoring and enforcement department, by March thirty-first of the same year following the year the standard was missed.~~

4901:1-10-11 Distribution Circuit Performance.

Paragraph (C)(1) requires the electric utilities to submit a report with the eight percent worst performing circuits to the director of the service monitoring and enforcement department within ninety days following the end of the annual reporting cycle.²⁷ Annual reporting cycles are typically from September first each year to August thirty-first.

OCC, the representative of Ohio residential consumers, also uses the reports with the eight percent worst performing circuits for analysis related to the reliability of service being provided to residential customers. But OCC must rely on obtaining copies of the report through public records requests. If the electric utilities were to provide the reports directly to OCC, then there would be no need to request the reports from the PUCO through public records requests. The rule should be changed to require electric utilities to provide the annual report with the eight percent worst performing circuits directly to OCC when it provides the report to the PUCO Staff. These changes should be adopted as follows:

²⁷ Ohio Adm. Code 4901:1-10-11(C)(1).

- (C)(1) Each electric utility shall submit, no later than ninety days after the end of its reporting period, a report to the director of the service monitoring and enforcement department that identifies the worst performing eight per cent of the electric utility's distribution circuits during the previous twelve-month reporting period. A COPY OF THE REPORT SHALL ALSO BE PROVIDED TO OCC.

Paragraph F establishes a process where a circuit that is listed for three consecutive years in the annual report with the eight percent worst performing circuits is determined to be a violation of the rule. However, the rule is unreasonable because it allows customers to be subject to **poor reliability performance for three years** before compliance actions may be initiated by the PUCO. And the reliability performance during major events and transmission outages are excluded from calculations of circuit performance.²⁸ Therefore the number of outages and duration of outages can be substantial for customers served by these inferior circuits. Electric utilities recover their costs related to investments and expenses through rates that are charged to customers – including those served with the worst performing circuits. Customers may experience financial losses as well from inadequate reliability (even millions of dollars collectively) without any possibility for the recovery of the losses. And, in the absence of adequate reliability, customers are not receiving the value for the utility cost that they are paying in rates.

The electric utilities should be required to prioritize the necessary improvements for these circuits such that the performance is improved the following year. OCC proposes that the rule be amended to designate a two-year

²⁸ Ohio Adm. Code 4901:1-10-11(B)(1).

period of time for circuits to be removed, through improvement, from the eight percent worst performing circuit reports as follows:

- (F) Electric utilities shall take sufficient CORRECTIVE remedial action to ~~cause each listed circuit to be removed from the list within two years~~ make sure that no circuit is listed on three TWO consecutive reports. The inclusion of a given circuit in the report under paragraph (C) of the rule for ~~three TWO~~ consecutive reporting periods shall create a rebuttable presumption of a violation of this rule.

4901:1-10-12 Provision of Customer Rights and Obligations.

Ohio Adm. Code 4901:1-10-12 requires each electric utility to have a written summary of customer rights and obligations. This is an important document that helps customers better understand their rights as Ohio residential utility consumers. However, a number of improvements are needed to provide better information to educate consumers. For example, the electric utilities are only required to provide customers with this information when they initially apply for service and thereafter, upon request. Existing customers may not be aware that they have to make subsequent requests to obtain this information.

For this reason, OCC recommends that the customer rights and obligations be provided in written form to all customers when they initially apply for service and annually thereafter. The information could be provided in conjunction with bills to help reduce postage expense. OCC recommends the following language be adopted by the Commission:

Each electric utility shall provide to new customers, upon application for service, and TO existing customers upon request; OR IN AN ANNUAL BILL INSERT, a written summary of their rights and obligations under this chapter. ***

Paragraph (B)(7) includes a new rule proposed by the PUCO Staff that seeks to inform customers that the electric utilities are held harmless from any liability associated with a security breach, invasion of privacy, or unlawful public disclosure of customer energy usage data. However, the rule as proposed is overly broad. Specific liability by the utilities is determined through a judicial process where the evidentiary facts can be discerned prior to Commission determination of the utility's responsibilities.

In addition, the proposed rule does not reference other state or federal laws that might apply to privacy protection matters. Finally, the customer rights and responsibilities document should provide customers with meaningful information concerning any privacy risks associated with disclosing customer energy usage data.

The PUCO should change the Rule as follows:

(B)(7) An explanation that the electric utility IS RESPONSIBLE FOR THE PROTECTION OF CUSTOMER ENERGY USAGE DATA. TO THE EXTENT THERE IS A ~~will not be held liable for any~~ security breach, invasion of privacy, or unlawful public disclosure resulting from the customer's or a third-party developer's disclosure of customer energy usage data-, STATE AND/OR FEDERAL LAWS WILL PRESCRIBE THE ELECTRIC UTILITY'S RESPONSIBILITIES AND LIABILITY.

Paragraph D requires the electric utilities to have a statement in the customer rights and obligations that customers may contact the electric utility to obtain additional information about alternative rates. While this rule is appropriate, it is limited to the extent that customers have to inquire about the alternative rates. Electric utilities may have other programs to assist consumers in reducing energy costs. Customer rights should be expanded to include placing a duty on the electric utilities to inform customers about alternative rates, plans, and programs. OCC proposes the following language:

(D)(2) A statement that THE ELECTRIC UTILITY WILL INFORM CUSTOMERS ABOUT ALTERNATIVE RATES AND/OR ENERGY EFFICIENCY PROGRAMS AND HOW TO OBTAIN DETAILS ABOUT THE PROGRAMS. ~~upon inquiry by a customer regarding rates or energy efficiency, the electric utility will disclose to the customer the existence and availability of the electric utility's alternative rates or any other energy efficiency programs.~~

Paragraph (F)(3) includes a new rule where customers are to be informed that the electric utility is prohibited from disclosing customer energy usage data without the customer's consent except for credit and collection purposes, participation in government assistance programs like HEAP and PIPP, government aggregation, the operative functions of providing CRES service, and the sharing of generic customer load pattern information or "de-identified energy usage data."

However, the utilities should be responsible for providing a privacy assessment prior to disclosing any customer energy usage data or generic customer load pattern information to any third party. For example, the electric utilities should only disclose the information needed that is appropriate for the activity. The disclosure of customer energy usage data for the purposes of credit and collection activities or reporting is unnecessary and can potentially subject customers to a breach of privacy for no reason.

Prior to the disclosure, the electric utility should perform a risk assessment that evaluates the specific customer information that is being considered for disclosure and the potential risks to the customer for disclosing the information. Privacy impact assessments are a comprehensive process for determining the privacy, confidentiality, and security risks associated with the collection, use, and disclosure of personal

information and measures to mitigate the risk.²⁹ Account-specific financial information may be appropriate for disclosure for credit and collection purposes, but specific customer energy usage data is not necessary. Customer energy usage data should never be disclosed by an electric utility without written customer consent or by court or PUCO order. The rule should be amended as follows.

- (F)(3) A statement that the electric utility is prohibited from disclosing customer energy usage data without the customer's written consent. ELECTRIC UTILITIES ARE REQUIRED TO PERFORM PRIVACY IMPACT ASSESSMENTS AND TO INFORM CUSTOMERS ABOUT ALL POTENTIAL PRIVACY RISKS PRIOR TO CUSTOMERS BEING ASKED TO PROVIDE WRITTEN CONSENT FOR DISCLOSING CUSTOMER ENERGY USAGE DATA. ~~or electronic authorization or without a court or commission order, except for the following purposes:~~

The current rules do not include a provision for credits to customers if multiple outages have been experienced by customers for reasons other than scheduled maintenance. Customers have the right to receive reliable service³⁰ that minimizes interruptions and the duration of the interruption.³¹ Lack of electricity causes a major economic and financial hardship on customers, and electric utilities need to take all reasonable efforts to avoid customers being without service. While some sustained outages are unavoidable, proper inspection, maintenance and repair of distribution facilities can assist in avoiding service interruptions. Service interruptions that are momentary can also be minimized by proper and routine maintenance.

²⁹ NISTR 7628, Guidelines for Smart Grid Cyber Security: Vol 2, Privacy and the Smart Grid, August 2010, at page 15.

³⁰ R.C. 4928.11(A).

³¹ National Regulatory Research Institute (NRRI), Ken Costello, Principal Researcher, Should Public Utilities Compensate Customers for Service Interruptions?, Report No. 12-08, July 2012.

The use of credits for customers who experience multiple outages can help reduce the financial impact on customers and also serve as an incentive for the electric utilities to reduce the occurrence of preventable outages. Credits for customers should be included within the rules, and customers should be informed about the availability of the credits as a customer right.

The state of the Illinois provides compensation for damages if more than 30,000 customers are affected by a power outage exceeding four hours in duration.³² Michigan compensates customers \$25 if the utility fails to restore service within 24 hours when 10% or more customers experience outages.³³ New York provides a “negative revenue adjustment” if the annual CAIDI and SAIFI standards (performance-based reliability standards) are not met. All “negative revenue adjustments” provide a benefit to the general body of customers.³⁴ Minnesota provides \$50 annual compensation if customers experience more than six interruptions or \$50 to individual consumers if interruptions longer than twenty-four hours are experienced.³⁵ The Commission should adopt a reasonable compensation mechanism comparable to one of the mechanisms identified above.

4901:1-10-14 Establishment of Credit for Applicants and Customers

The PUCO Staff proposes the addition of paragraphs (C)(1)(a) and (C)(1)(b) that address requests for social security numbers. According to the PUCO Staff’s proposal, electric utilities may request an applicant’s social security number but electric utilities

³² NRRI: Should Public Utilities Commissions Compensate Customers for Service Interruptions?, Report No. 12-08, July 2012, at page 16.

³³ Id. at 17.

³⁴ Id.

³⁵ Id. at 20.

may not refuse to provide service if the customer declines the utilities' request for a social security number.

The electric utilities have an exclusive right and obligation to serve customers in their certified territories.³⁶ There are several alternatives available for customers to demonstrate financial responsibility as a condition for obtaining service that do not involve providing a social security number.³⁷ Customers are routinely urged to protect their identity including limiting use of their social security number. However, the PUCO's rules set forth a process where the social security number may be requested even though it is not needed to establish service. And the rules should not emphasize one alternative without describing other available methods that demonstrate financial responsibility.

If an applicant declines to provide their social security number, the proposed rules enable the electric utility to verify creditworthiness by considering an applicant's employer and length of service and through use of substantive credit cards. There is no definition for substantive credit cards and employment should not be a consideration in determining if an applicant is creditworthy. A person may be creditworthy but be unemployed or retired. Additionally, a credit check would require use of the social security number. The Commission rules enable electric utilities to disclose social security numbers without customer consent for credit evaluations, CRES provider credit and collection evaluations, and participation in low-income assistance programs.³⁸ Given the potential for broad disclosure of the social security numbers, the electric utilities

³⁶ R.C. 4933.83.

³⁷ Ohio Adm. Code 4901:1-10-14(C)(2), (C)(3) and (E).

³⁸ Ohio Adm. Code 4901:1-10-21(E)(2).

should disclose methods in which the social security number can be provided to other parties. OCC recommends that the following amendments to the proposed rules be adopted:

- (C)(1)(a) The company may request the applicant's social security number in order to obtain credit information and to establish identity PROVIDED THAT THE ELECTRIC UTILITY INFORMS THE CUSTOMER THAT HE/SHE IS NOT REQUIRED TO PROVIDE HIS/HER SOCIAL SECURITY NUMBER TO OBTAIN SERVICE. ~~however~~ ~~if~~ IF the applicant elects not to provide his/her social security number, THEN the utility company may not refuse to provide service.
- (C)(1)(b) If the applicant declines the utility company's request for a social security number, the utility company shall inform the applicant of all other options for establishing creditworthiness IDENTIFIED IN O.A.C. 4901:1-10-14(C)(2) –(4); the electric utility verifies that the applicant is a creditworthy property owner ~~or verifies the applicant's creditworthiness in accordance with legally accepted practices to verify credit. Verification for residential applicants shall include, but not be limited to, consideration of the applicant's employer and length of service, reference letters, and substantive credit cards.~~

The PUCO Staff has proposed changes in paragraph G that concern the imposition of deposits for customers who are behind in payments. The current rules enable electric utilities to assess a deposit if payment is not made on two consecutive bills by the due date or if a disconnection notice was issued twice in the previous twelve months. The proposed rule enables the utility to assess a deposit if one bill is past due provided that the electric utilities first consider the “totality of the customer’s circumstances” in deciding if the deposit will be assessed. The proposed rules do not include any rationale for why the PUCO Staff is proposing the change.

However, deposits can be expensive and add a substantial financial burden on residential customers who are likely experiencing financial difficulties. Imposition of additional deposits that customers are unable to pay can result in more customers being disconnected for non-payment. In addition, the requirement for electric utilities to “consider the totality of the customer’s circumstances” is subjective and could lead to discriminatory practices.³⁹ OCC recommends that the Commission not adopt the PUCO Staff’s proposed changes in paragraph G.

4901:1-10-22 Electric Utility Customer Billing and Payments.

Paragraph (B)(23) requires the electric utilities to provide the preceding twelve months of usage history on the bill along with the total and average consumption over the period of time. Historical usage information is important for consumers in being able to evaluate usage and potential ways to conserve energy. Customers would also benefit from having their total electric costs for the preceding twelve months reflected on the bill. This information can help consumers better manage budgets and can be helpful in evaluating potential savings that may be available through CRES suppliers. OCC recommends the following change in this rule:

(B)(23)A numerical representation of the customer's historical consumption during each of the preceding twelve months, with a total and average consumption for such twelve-month period.
THE TOTAL ANNUAL COSTS FOR ELECTRICITY SHALL
BE LISTED ALONG WITH THE TOTAL CONSUMPTION.

The PUCO Staff proposed that paragraph (B)(25) be amended concerning the content of electric bills to include phase-in recovery charges being itemized separately from base rates on the bill. The PUCO Staff did not provide any rationale for proposing

³⁹ The National Consumer Law Center, Access to Utility Service, Fifth Edition, 2011, at page 89.

the change in the bill content. However, OCC generally supports charges that are itemized separately on the bill to the extent that the information helps customers understand the service they pay for.

In addition, Ohio law requires that customers be provided, to the extent possible, with a separate listing of each service component on the bill such that customers can recalculate the bill for accuracy.⁴⁰ To the extent that customers will benefit in having phase-in recovery charges itemized separate from base rates on the bill, customers would also benefit from having other charges separately itemized on the bill. OCC recommends that to the extent possible and without incurring unreasonable additional billing costs, the electric bill should separately itemize the charges customers pay. OCC's advocates for the following amendment to the PUCO Staff's proposal:

(B)(25)Any phase-in recovery charges AND OTHER COST RECOVERY RIDERS shall be listed separately from base rates.

Paragraph (D) allows authorized agents of the electric utility to charge customers up to \$2.00 for accepting payments. In addition, the rules do not limit the amount of the charge for payments made by credit card or debit card. The National Association of State Utility Consumer Advocates ("NASUCA") recently adopted a resolution urging utilities to eliminate convenience fees for payments made by credit and debit cards.⁴¹ NASUCA found that nationwide, approximately 50 to 70 million individuals lack access to traditional banking capabilities. Therefore, they are required to incur some charge to pay

⁴⁰ R.C. 4928.10(C)(2).

⁴¹ NASUCA Resolution 2012-07 Urging Utilities to Eliminate "Convenience" Fees For Paying Utility Bills with Debit and Credit Cards and Urging Appropriate State Regulatory Oversight, November 13, 2012.

utility bills.⁴² These charges can be in the form of fees that are incurred to pay the bill in person through an authorized agent or prepay credit or debit cards.

Additionally, many federal and state assistance programs such as social security, unemployment compensation, and child support provide benefits in the form of a debit card. The imposition of convenience fees erodes the already limited buying power of the debit card. NASUCA also found that (1) major credit card companies lowered the interchange rates for credit card transactions with utilities and (2) changes in the law further reduced debit card transaction costs.

OCC recommends that the Commission survey the electric utilities to determine the options that are available to consumers for paying utility bills without incurring additional charges. In addition, OCC recommends that the Commission support public policy objectives that enable consumers to be given the ability to make direct payment of their utility bills in person, or by debit or credit card, without excessive, unjustified fees.

The proposed rules also do not require electric utilities to offer customers the option to have their billing due date adjusted to meet their budgetary needs. However, many customers on fixed monthly incomes receive checks on a specific date each month. Having the due date for the electric bill coincide with when funds are available is of great benefit to consumers. Adjusted due dates help customers better plan and manage monthly finances and facilitate timely payments to utilities. OCC recommends that the rules be amended to include the following requirement:

⁴² U.S. Census Bureau, “Income, Poverty, and Health Insurance Coverage in the United States: 2011,” Sept. 2012, <http://www.census.gov/prod/2012pubs/p60-243.pdf>.

ELECTRIC UTILITIES SHALL OFFER CUSTOMERS WHEN THEY INITIALLY APPLY FOR SERVICE AND ONCE PER YEAR UPON REQUEST THEREAFTER, THE OPTION TO HAVE THE DUE DATE ON THE BILL ADJUSTED BY UP TO 14 DAYS WITHOUT RESULTING IN LATE PAYMENT FEES, DEPOSITS, OR OTHER PENALTIES.

4901:1-10-24 Customer Safeguards and Information.

Paragraph (E)(3) includes a new rule where the electric utilities are prohibited from disclosing customer energy usage data without the customer's written consent except for credit and collection purposes, participation in government assistance programs like HEAP and PIPP, government aggregation, the operative functions of providing CRES service, and the sharing of de-identified energy usage data.

Customer energy usage data is different from other types of customer account information. With the use of Automated Metering Infrastructure ("AMI") and Smart Meters, the electric utilities can have access to customer's usage patterns with a level of granularity that has never been available before. Combining this granular usage information with personal identity information (which utilities collect about their customers), creates the potential for privacy violations. Electric utilities that have implemented AMI and Smart Meters must also conduct the necessary privacy assessments to ensure protection of customer privacy. This type of assessment must be performed before any customer energy usage data or "de-identified energy data" is disclosed outside of the electric utility.

The proposed rules enable utilities to disclose customer energy usage data in a granular manner and without customer consent for a number of reasons where this granular usage information is not needed. For example, according to the proposed rules, the utilities could report this data for credit and collection purposes, even though it is not

needed. The disclosure of granular customer energy usage data should not be needed to enroll on PIPP or to participate in HEAP. Detailed granular customer energy usage data should not be needed by a government aggregator or a CRES supplier unless and until a privacy assessment is conducted by the government aggregator or CRES supplier concerning the potential impact that the disclosure could have on customers. Furthermore, the “reasonable sharing” of “de-identified energy usage data” is ambiguous.⁴³

The Commission should reject any proposed rules concerning the disclosure of customer energy usage data where the customer does not affirmatively agree to the release of the information. Any consent form that is presented to customers to agree to the disclosure of customer energy usage data should include a disclosure of all known privacy risks associated with releasing the data. OCC recommends that customer privacy be protected by adopting the following amendments to the proposed rules:

(E)(3) An electric utility shall not disclose customer energy usage data without the customer's written consent, or without a court order. AN ELECTRIC UTILITY THAT COLLECTS GRANULAR CUSTOMER ENERGY USAGE DATA SHALL CONDUCT A PRIVACY IMPACT ASSESSMENT AND IDENTIFY RISKS ASSOCIATED WITH IMPROPER DISCLOSURE OF THE DATA. ~~or without the customer's electronic authorization, except for the following purposes:~~

(a) ~~The electric utility's collection and/or credit reporting.~~

(b) ~~Participation in the home energy assistance program, the emergency home energy assistance program, and programs funded by the universal service fund, pursuant to Section~~

⁴³ NISTR 7628 Report, at page 30.

~~4928.52 of the Revised Code, such as the percentage of
income payment plan programs.~~

~~(c) Governmental aggregation.~~

~~(d) The operative functions involved in supplying retail electric
service.~~

~~(e) The reasonable sharing of de-identified energy usage data.~~

The electric utility shall use the consent form set forth in paragraph
(E)(4) of this rule, except that the consent form for electronic
authorization does not need to be a hard copy but may be provided
as a separate electronic document.

(4) The consent form shall be on a separate piece of paper and shall be clearly identified on its face as a release of personal information and all text appearing on the consent form shall be in at least sixteen-point type. The following statement shall appear prominently on the consent form, just prior to the signature, in type darker and larger than the type in surrounding sentences: "I realize that under the rules and regulations of the public utilities commission of Ohio, I may refuse to allow (name of the electric utility) to release the information set forth above. By my signature, I freely give (name of the electric utility) permission to release the information designated above." The information that the electric utility seeks to release shall be specified on the form WITH A STATEMENT OF THE POTENTIAL RISKS TO THE CUSTOMER THAT ARE ASSOCIATED WITH DISCLOSING THE DATA. Forms requiring a customer to circle or to check off preprinted types of information to be released may not be used.

**4901:1-10-27 Inspection, Maintenance, Repair, and Replacement of
Transmission and Distribution Facilities (Circuits and
Equipment).**

Paragraph (C)(2) requires each electric utility or transmission owner to submit a report to the Commission that identifies the performance of each transmission circuit for the previous year. Presently, there is a need to request copies of this report from the

PUCO through a public records requests to assess the reliability of service provided to residential electric consumers. OCC recommends that the rule be modified, as follows, so that a copy of the annual report is provided directly to the OCC when the report is given to the PUCO:

- (C)(2) Each electric utility or transmission owner shall submit a report TO THE COMMISSION AND TO OCC on electronic media in a format prescribed by the commission on or before March thirty-first of each year, that identifies the performance of each transmission circuit for the previous calendar year. Each annual report shall, at a minimum, provide the following information for each transmission circuit:

Paragraph (D)(4) requires each electric utility or transmission owner to submit a report to the Commission that concerns compliance with the inspection schedule from the previous year. Presently, there is a need to request copies of this report from the PUCO through public records requests to assess the reliability of service provided to consumers. OCC recommends that the rule be modified, as follows, so that a copy of the annual report is provided directly to the OCC when the report is given to the Commission:

- (D)(4) On or before March thirty-first of each year, each electric utility and transmission owner shall submit a report TO THE COMMISSION AND TO OCC in an electronic medium, in a format prescribed by the commission or its staff, DESCRIBING ~~of~~ the electric utility's and/or transmission owner's compliance with the inspection schedule in paragraphs (D)(1) to (D)(3) of this rule for the preceding calendar year. The annual report of inspection compliance shall include:

4901:1-10-28 Net Metering.

In its Entry, the Commission is seeking comments on its rule revisions specific to the Net Metering section of the Ohio Administrative Code. Overall, the proposed rules attempt to clarify specific issues related to Net Metering in support of R.C. 4928.64(B)(1) and 4928.02(C) and (K).

The OCC supports the clarification proposed in Ohio Adm.Code 4901:1-10-28(A)(1), regarding the definition of a customer-generator. That clarification would remove any ambiguity that may exist in situations where the customer generator hosts or leases the generating equipment. As hosting or leasing arrangements are popular options for customer generators whose core business is not related to electricity generation, this clarification should encourage these particular types of net-metering arrangements and expand distributed generation in support of R.C. 4928.64(B)(1) and 4928.02(C) and (K).

The OCC supports the clarification concept proposed in Ohio Adm. Code 4901:1-10-28(B)(6) that adds specificity to the existing statutory language in R.C. 4928.01(31)(d) (that states that a customer-generator's system should be "primarily to offset part or all of the customer-generator's requirements for electricity."). The proposal generally allows a customer-generator to generate up to 120 percent of their annual consumption. However, OCC maintains that the percentage calculation should occur only once, when the net-metering application is made by the customer. This approach requires less time and effort to monitor and does not penalize a customer generator who engages in aggressive energy efficiency, electric transportation, or whose consumption changes because of unforeseen changes in the size and nature of their household.⁴⁴

The 120 percent in the proposed rule provides some additional flexibility for customers in the sizing of their generation systems. However, requiring the utility to perform the percentage calculation annually would submit existing and future customer-generators to unreasonable risks of not getting remunerated for their excess electricity production (and increasing their investment paybacks). It could also reduce the amount

⁴⁴ Such as the death of an elderly relative living in the customer-generator's home or the adoption of some fuel-switching technology.

of distributed generation that develops in the state. While the annual process contemplated by the PUCO Staff and the proposed 120 percent of historic consumption may appear to be a reasonable average number, aggressive whole house retrofits can save 50 percent in total energy savings.⁴⁵ There is also probably a strong correlation with homes and businesses that invest in distributed generation technologies, also investing heavily in energy efficiency. These customers should not be penalized for maximizing utility energy efficiency programs in support of the state's Energy Efficiency Resource Standard as found in R.C. 4928.66.

In the case of electric vehicles, a customer may have a plug-in electric vehicle included in their historic electricity usage and may because of new driving needs replace it with a gasoline vehicle. For example, a Nissan Leaf has an 80 kW AC synchronous electric motor and a 24 kWh lithium-ion battery.⁴⁶ The car reports an average of 3.9 to 4.0 miles/KWhs out of the battery, and including the total driving efficiency (the battery efficiency and charger efficiency) brings the total efficiency to 3.77 miles/KWh.⁴⁷ On average, a car drives 12,000 miles a year. To operate the Leaf all year would require 3,183 kWh.⁴⁸

For an average customer using 750 kWh a month (9,000 kWh year), the Leaf alone could represent 26 percent of their electricity usage.⁴⁹ If that customer sold the Leaf and invested in energy efficiency in the home, the reduction in electricity use would

⁴⁵ Rogers, Edmunds, and Knight, "Home Performance with Energy Star®: Delivering Savings with a Whole-House Approach," ACEEE Summer Study 2006.

⁴⁶ http://www.nissanusa.com/leaf-electric-car/versions-specifications?next=ev_micro.overview.specs.button.

⁴⁷ http://www.suburbangreenrevolution.com/site.com/Leaf_Power.html.

⁴⁸ This depends on driving habits, terrain, weather, and use of regenerative braking.

⁴⁹ $(12,000/3.77) / (12,000/3.77 + (750*12)) = .026$.

be even greater. OCC has only given two possible problematic examples while there are hundreds of other possible changes to household electricity consumption that can transpire.

OCC therefore recommends that the 120 percent of annual load threshold be used once at the time of the net-metering application by the customer instead of trying to handle the vicissitudes of consumer electric usage. Also, existing net metering customers should be grandfathered and not be subject to this rule. In this way, consumers will not be penalized for embracing State energy policy by investing in distributive generation and energy efficiency. Accordingly, OCC proposes the following amendment:

- (B)(6) A customer-generator must intend primarily to offset part or all of the customer-generator's requirements for electricity AS CALCULATED IN SECTION (7) AND ONLY AT THE TIME THE CUSTOMER-GENERATOR APPLYS FOR A NET-METERING AGREEMENT. A customer-generator that annually generates less than one hundred and twenty percent of its requirements for electricity is presumed to be primarily intending to offset part or all of its requirements for electricity.

The Commission also requested comments on the proposed revision to clarify a customer-generator's "requirements for electricity" as the customer generator's average annual electricity consumption over the previous three years, using the annual period of June 1 to May 31. OCC supports the customer-generator three-year consumption averaging proposal to dampen any precipitous change in annual consumption that may impact the regulatory status of the customer-generator (becoming an "excessive-generator") during the initial net-metering application process. However, in cases of new construction or vacant properties where a consumption history does not exist, the Company should also be allowed to use household consumption models to estimate

usage.⁵⁰ After a year of actual usage, a weather-normalized usage should be determined and used to establish a baseline using actual data. Accordingly, OCC proposes the following amendment to Ohio Adm.Code 4901:1-10-28(B)(7):

A customer-generator's requirements for electricity is the average amount of electricity consumed annually by the customer-generator over the previous three years, using the annual period of June 1 to May 31. If the electric utility does not have the data or cannot calculate the average amount of electricity consumed annually over the previous three years, such as in instances of new construction or vacant properties, the electric utility shall use any available consumption data (OR ENERGY CONSUMPTION MODEL GENERATED DATA) to estimate the customer-generator's annual electricity consumption and provide the estimation data to the customer-generator.

The Commission seeks comments on the proposed revision to clarify the calculation of the credit for monthly excess generation and net excess generation. Under the proposed revisions, excess generation would be credited to the next month's bill. If the credit is not used in the next month, it is credited to a net excess generation account. That net excess generation account would then credit any months in which the generation from the prior month was insufficient. Net excess generation would accumulate for the twelve-month period beginning on June 1 of each year and ending on the following May 31. If there exists net excess generation at the end of the twelve-month period, the electric utility must issue a refund to the customer-generator for the net excess generation, calculated at the rate the customer generator pays for generation and regardless of whether the customer-generator purchases generation from the electric utility or a competitive retail electric service provider.

⁵⁰ Lutzenhiser et al, "Sticky Points in Modeling Household Energy Consumption," 2010 ACEEE Summer Study on Energy Efficiency in Buildings.
<http://www.aceee.org/files/proceedings/2010/data/papers/2144.pdf>.

The Commission requests comments on whether these proposed revisions will bring consistency among the net metering tariffs offered by electric utilities and more consistent application of those tariffs to customers. The Commission also seeks comments on the proposed revision to clarify the definition of the customer generator's premises. The clarified definition would recognize that a customer-generator's premises includes lots or areas contiguous to the lots or areas owned, operated, leased, or otherwise controlled by the customer-generator.

OCC supports the clarified definition that a customer-generator's premises includes lots or areas contiguous to the lots or areas owned. Again, this provides more opportunity for distributed generation growth in support of State energy policy. OCC also supports the proposed revision concerning the crediting of net excess generation. However, an additional sentence should identify the "rate the customer-generator pays for generation" (and consequently what is remunerated in cases of net excess generation). It should be clear that the customer generator will receive payment for all energy, capacity, and ancillary generation charges.

Ohio Adm. Code 4901:1-10-28(B)(10) should be modified as follows:

The electric utility shall issue a refund to the customer-generator for the amount of the credit remaining in the net excess generation account at the end of the twelve month period of June 1 to May 31, regardless of whether the customer-generator is receiving generation from the electric utility or a competitive retail electric service provider. This refund shall be equivalent to an annual true-up of net excess generation and should be calculated at the rate the customer-generator pays for generation, INCLUDING ALL ENERGY, CAPACITY AND ANCILLARY SERVICES CHARGES, WHETHER THAT BE THE ELECTRIC SECURITY PLAN APPROVED GENERATION RATE INCLUDING ALL GENERATION RIDERS AND SURCHARGES OR INCLUDING ALL GENERATION

RIDERS AND SURCHARGES APPROVED AS PART OF A MARKET RATE OFFER. FOR SERVICE TAKEN FROM A CRES PROVIDER, THE FULL GENERATION RATE WILL BE CREDITED. The refund should be issued to customer-generators by July 1 of each year.

The Commission further seeks comments on (1) whether virtual net metering and aggregate net metering could be implemented in Ohio without violating R.C. 4928.01 or R.C. 4928.67 and (2) whether virtual net metering and aggregate net metering would promote Ohio's public policy. Aggregate net metering is when a customer-generator with multiple meters in different locations can aggregate their total usage for net metering purposes. Virtual net metering is when a shopping mall owner with multiple tenants, each with their own meter, or people who rent in a multi-tenant complex are allowed to net meter. Expanding net metering—under headings of 'virtual' or 'aggregate' net metering or community solar—have been undertaken in several states to share benefits of clean energy production with a broader base.

OCC maintains that if additional rules are adopted, aggregate and virtual net-metering support Ohio's public policy including R.C. 4928.64(B)(1) and 4928.02(C) and (K). OCC is confident that an aggregate and virtual net metering policy and rules can be crafted that do not violate R.C. 4928.01 or R.C. 4928.67. In fact, the definition of "self-generator" in R.C. 4928.01(A)(32) supports an aggregate net metering situation.

The availability and workings of virtual net metering programs in states vary. Pennsylvania's rules allow meter aggregation on properties owned or leased and operated by a customer. This tends to benefit farms that are commonly owned and operated. Aggregation is limited to meters (in a single utility's service territory) that are located on properties within two miles of the boundaries of the customer's property. The utility

must provide the necessary equipment for physical meter aggregation, but the customer must pay the costs. In addition, "virtual meter aggregation" is allowed for properties owned or leased and operated by a customer and located within two miles of the boundaries of the customer's property and within a single utility's service territory. For virtual meter aggregation, the customer is responsible only for any incremental expense involved in processing the account on a virtual meter aggregation basis.⁵¹

In Colorado, the Solar Community program allows individuals to build systems in a single location and then market system production to others, who receive net metering benefits on a subscription basis. Massachusetts and Washington already have similar programs in place. In California, policies are being developed to expand virtual net metering opportunities for a variety of customer types.⁵² The Commission should therefore consider extending the rulemaking and develop proposed regulations to accommodate aggregate and virtual net-metering.

Finally, concerning the net-metering reporting to the Commission proposed in 4901:1-10-28(B)(14), OCC advocates that this report should instead be filed as part of the electric utility's annual long term forecast report. The amount of net-metered electricity produced in a utility's service territory can be an important source of information for the utility to know in preparing its load forecast. In this way, the report will be directly accessible to all parties and eliminates the additional filing for the utility.

4901:1-10-33 Consolidated Billing Requirements.

The consolidated billing requirements apply to bills that are rendered by an electric utility for both electric distribution service and CRES charges. In large part, the

⁵¹ http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=PA03R.

⁵² <http://www.recsolar.com/net-metering>.

rules that govern the terms and conditions of an electric utility bill and the informational content of an electric utility bill also apply to consolidated bills. Therefore, specific comments that OCC made concerning electric utility billing requirements in section 4901:1-10-22 apply in this section as well. OCC will only comment where additional changes are needed in these rules.

The current rule in Ohio Adm. Code 4901:1-10-33(C)(17) requires consolidated bills to include definitions for shopping incentives or shopping credits and transition charges. These are vestige terms and charges from the early Electric Transition Plan (ETP) cases and are no longer needed on the bill. Accordingly, the PUCO should make the following deletion from the rule:

(C)(17) At a minimum, definitions for the following terms, or like terms used by the company, if applicable: customer charge, delivery charge, estimated reading, generation charge, kilowatt hour (kWh), ~~shopping incentive or shopping credit, AND late payment charge, and transition charge.~~

4901:1-10-34 Compliance with the Public Utility Regulatory Policies Act of 1978, as amended by the Energy Policy Act of 2005.

The Commission is requesting comments on the new proposed Rule 4901:1-10-34. In its Entry, the Commission indicates that this rule was added for compliance with the Public Utility Regulatory Policies Act of 1978, as amended by the Energy Policy Act of 2005. The Commission states that the purpose of the rule is to “provide a standard market-based rate for electricity and capacity transactions between EDUs and small power producing or cogeneration qualifying facilities of 20 megawatts.”⁵³

Paragraphs (H) and (J) of Ohio Adm. Code 4901:1-10-34 address the compensation options for the Qualifying Facility (“QF”):

⁵³ *In the Matter of the Commission’s Review of Chapter 4901:1-10, Ohio Administrative Code, Regarding Electric Companies*, Case No. 12-2050-EL-ORD, Entry at page 5 (November 7, 2012).

- (H) A qualifying facility may elect to execute a negotiated contract with the EDU instead of selling the electrical output of the qualifying facility at the standard market-based rate.
- (J) Energy payments shall, at the option of the qualifying facility, be based on either of the following:
 - (1) The day-ahead energy market as cleared at the applicable locational marginal price at a liquid trading hub.
 - (2) The monthly simple swap price.

OCC maintains that Paragraph (H) is too vague and without modification and expansion can lead to higher priced negotiated contracts than Paragraph (J), without commensurate value, potentially harming the EDU customers who will pay for these contracts. The PUCO should adopt the following modification to Paragraph (H) of the proposed rules.

- (H) A qualifying facility may elect to execute a negotiated contract with the EDU instead of selling the electrical output of the qualifying facility at the standard market-based rate. THE TERMS OF THE CONTRACT MAY TAKE INTO ACCOUNT THE FOLLOWING FACTORS IN DETERMINING THE QUALIFYING FACILITY PRICE CALCULATION, (1) A UTILITY'S SYSTEM COSTS, (2) CONTRACT DURATION, (3) QF AVAILABILITY DURING DAILY OR SYSTEM PEAKS, (4) WHETHER THE UTILITY AVOIDS COSTS FROM THE DAILY OR SYSTEM PEAKS, AND (5) COSTS OR SAVINGS OF LINE LOSSES. ANY SUCH CONTRACT SHALL BE SUBJECT TO APPROVAL BY THE COMMISSION WITHIN ONE HUNDRED AND TWENTY DAYS OF ITS FILING WITH THE COMMISSION.

Furthermore, the language above comports with the FERC Order in the California “feed in tariff” case that appears to allow pricing differentiation QFs using various technologies on the basis of the supply characteristics of the different technologies.⁵⁴

Finally, in regards to Paragraph (K) that proposes that each EDUs be required to bi-annually file a QF activity report, OCC advocates that this report should instead be filed once as part of the electric utility’s annual long term forecast report. In this way, the report will be directly accessible to all parties and eliminates the additional filing for the utility.

III. CONCLUSION

OCC appreciates the opportunity to provide these initial comments regarding the proposed changes to the rules about electric service in Ohio Adm. Code Chapter 4901:1-10. The Commission’s adoption of OCC’s recommendations in these initial comments will help to 1) ensure more reliable electric service being provided to residential consumers, 2) ensure that necessary consumer protections are defined to protect customer privacy as more advanced metering data becomes available, and 3) ensure that net metering is implemented in a fair and reasonable manner in Ohio.

⁵⁴ Federal Energy Regulatory Commission (FERC). “Order Granting Clarification and Dismissing Rehearing.” 133 FERC ¶ 61,059, Docket EL10-64-001 (California Public Utility Commission) and Docket EL10-66-001 (Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric Company), Issued October 21, 2010.
<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=12468361>.

Respectfully submitted,

BRUCE J. WESTON
OHIO CONSUMERS' COUNSEL

/s/ *Melissa R. Yost*

Melissa R. Yost

Assistant Consumers' Counsel

Office of the Ohio Consumers' Counsel

10 West Broad Street, Suite 1800

Columbus, Ohio 43215-3485

(614) 466-1291 – Telephone

yost@occ.state.oh.us

CERTIFICATE OF SERVICE

I hereby certify that I served a true copy of the foregoing Comments upon the following via electric transmission, this 7th day of January 2013.

/s/ *Melissa R. Yost*

Melissa R. Yost

Assistant Consumers' Counsel

SERVICE LIST

William Wright
Chief, Public Utilities Section
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215
William.wright@puc.state.oh.us

Bryce.mckenney@puc.state.oh.us

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

1/7/2013 4:52:55 PM

in

Case No(s). 12-2050-EL-ORD

Summary: Comments Comments by the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Yost, Melissa R. Ms.