

**PC44 TOU Rate Design Workgroup**

**TOU NEM Issue – COMAR Revisions**

**05/08/2023**

**COMAR 20.50.01.03: Service Supplied by Electric Companies – General: Definitions**

**.03 Definitions.**

A. In this subtitle, the following terms have the meanings indicated:

B. Terms Defined.

(1) “Abandoned call” means a telephone call in which the customer has elected to speak to a customer service representative but the call is terminated before the customer service representative answers.

(2) Answer.

(a) “Answer” means rendering assistance to a telephone caller or accepting information necessary to process a telephone call by a customer service representative or an automated voice response system.

(b) “Answer” does not include an acknowledgement that a telephone caller is waiting on the line.

(3) “Baseline annual usage” means:

(a) The total of an eligible customer-generator’s previous 12 months of electric energy use in kilowatt hours at the time of the installation or upgrade of an eligible customer-generator’s generating system; or

(b) An estimate of 12 months electric use in kilowatt hours based on a methodology approved by the Commission for an eligible customer-generator that does not have 12 months of electric energy use in kilowatt hours at the time of the installation or upgrade of an eligible customer-generator’s generating system.

(4) “Billing period” means the period of time covered by a bill issued by an electric company.

(5) “Bordering jurisdiction” means the District of Columbia, Delaware, Pennsylvania, Virginia, and West Virginia.

(6) “Commission” means the Public Service Commission of Maryland.

(7) “Contact voltage” means a voltage condition that may result in an object or surface being inadvertently energized.

(8) “Contact voltage risk zone (CVRZ)” means the portions of each electric company’s service territory that:

(a) Are served by an underground electric distribution plant; and

(b) Have substantial pedestrian traffic or population density, whether permanent, seasonal or varying by time of day.

(9) “Contact voltage survey” means a survey performed by an electric company to detect contact voltage consistent with the company’s Commission-approved voltage survey plan.

(10) “Cultural control practices” means control of vegetation through the establishment of compatible stable plant communities or the use of crops, pastures, mulching, or other managed landscapes.

(11) “Customer” means a person, partnership, association, corporation, or governmental agency being supplied with electric service by a utility.

(12) “Customer average interruption duration index (CAIDI)” means the system average interruption duration index (SAIDI) divided by the system average interruption frequency index (SAIFI).

(13) “Customers experiencing multiple interruptions (CEMI<sub>n</sub>)” means the ratio of the total number of customers experiencing more than “n” sustained interruptions divided by the total number of customers served.

(14) “Customer interruption hours” means an amount of time calculated by multiplying a sustained interruption duration by the total number of customers affected by the sustained interruption.

(15) “Distribution transformer” has the meaning stated in 10 CFR §431.192, as amended, which is incorporated by reference.

(16) “Electric company” has the meaning stated in Public Utilities Article, §1-101, Annotated Code of Maryland.

(17) “Electric distribution plant” means all electric company plant used to distribute electricity to its customers, including covers and protective structures and excluding customer meters and meter enclosures.

(18) “Electric plant” means a plant and property owned by an electric utility, used in its business operations of providing electric service to its customers.

(19) “Eligible customer-generator” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(20) “Environmental surcharge” means the charge in dollars and cents billed by an electric company under Public Utilities Article, §7-203, Annotated Code of Maryland.

(21) “Excess generation” means the amount of electricity produced by an eligible customer-generator that exceeds the electricity used by the eligible customer-generator in a monthly billing period.

(22) “Feeder” means an electric plant that emanates from a substation, serves customers, and is normally electrically isolated at all endpoints.

(23) “Government emergency responder” means fire and police personnel and government employees who:

(a) Are working at the direction of fire, police, or 911 emergency dispatcher personnel to respond to an emergency; or

(b) Have been identified by fire, police, or 911 dispatcher personnel as responding to an emergency.

(24) “Hazard tree” means a structurally unsound tree or tree limb that could strike poles, substations, or energized overhead electric plant when it falls.

(25) “Institute of Electrical and Electronics Engineers’ (IEEE) major event day” means a day determined to be a major event day using the IEEE method of determining excludable data for calculation of reliability indices under IEEE Std 1366TM — 2003.

(26) “Interruption duration” means the period of time, truncated or rounded to the nearest minute, during which a sustained interruption occurs.

(27) “Major outage event” means an event when the following occurs:

(a) Before January 1, 2020:

(i) More than 10 percent or 100,000, whichever is less, of the electric utility’s Maryland customers experience a sustained interruption of electric service and restoration of electric service to any of these customers takes more than 24 hours; or

(ii) The federal, State, or local government declares an official state of emergency in the utility’s service territory and the emergency involves interruption of electric service; or

(b) Beginning January 1, 2020:

(i) More than 10 percent or 100,000, whichever is less, of the electric utility’s Maryland customers experience a sustained interruption of electric service; and

(ii) Restoration of electric service to any of these customers takes more than 24 hours.

(28) “Major outage event interruption data” means all electric customer interruption occurrence and duration information collected by the utility during a major outage event.

(29) “Mature tree” means a tree, whether or not previously pruned by the utility, that is well-established with a defined crown and that is at least 20 feet tall or 6 inches in diameter at breast height. Mature tree does not include a hazard tree.

(30) “Meter” means unless otherwise qualified, a device of the utility used in measuring watts, watt-hours, vars, var-hours, volt-amperes, or volt-ampere-hours.

(31) “Micro combined heat and power” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(32) “Momentary average interruption frequency index (MAIFIE)” means the ratio of the total number of customer momentary interruption events divided by the total number of customers served.

(33) Momentary Interruption.

(a) “Momentary interruption” means the loss of electric service of a duration limited to the time required to restore electric service by:

(i) Automatic or supervisory-controlled switching operations; or

(ii) Manual switching at locations where an operator is immediately available.

(b) “Momentary interruption” does not include a loss of electric service which takes more than 5 minutes to restore.

(34) “Net energy metering” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(35) “Net Excess Generation” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(36) “Normal conditions” means conditions other than a major outage event.

(37) “Number of customer interruptions” means the number of customers without electric service during a sustained interruption.

(38) “Operating district” means a distinct geographic area for which a cooperatively owned electric utility provides customer services from a decentralized office.

(39) Outside Assistance.

(a) “Outside assistance” means resources not routinely used by a utility for service restoration.

(b) “Outside assistance” does not include resources transferred among utility operating areas.

(40) “PJM” has the meaning stated in COMAR 20.52.01.02B.

(41) “Premises” means a tract of land or real estate, including buildings and other appurtenances on it.

(42) “Primary distribution system” means the alternating current distribution lines supplying the primaries of distribution transformers.

(43) “Protective devices” means substation breakers and reclosers, line reclosers, line sectionalizing equipment, and line fuses.

(44) “Secondary distribution system” means the alternating current system which connects the secondaries of distribution transformers to the customers' services.

(45) “Sustained interruption” means the loss of electric service that is not classified as a momentary interruption.

(46) “System average interruption duration index (SAIDI)” has the meaning stated in Public Utilities Article, §7-213(a)(2), Annotated Code of Maryland.

(47) “System average interruption frequency index (SAIFI)” has the meaning stated in Public Utilities Article, §7-213(a)(3), Annotated Code of Maryland.

(48) “Test current” means the current marked on the nameplate of a watt-hour meter by the manufacturer (identified as "TA" on meters manufactured since 1960). This is the current in amperes which is used as the base for adjusting and determining the accuracy of a watt-hour meter at heavy and light loads.

(49) “Time-Varying Rate” means a rate structure that an electric company may offer to its customers which that includes more than one rate, each of which is applicable to a different time periods during the billing cycle.

(50)49) “Total number of customers served” means the number of customers provided with electric service by the distribution facility on the last day of the time period for which a reliability index is being calculated.

(51)50) “Utility” means an “electric company” as defined in Public Utilities Article, §1-101, Annotated Code of Maryland.

(52)4) “Utility crew” means personnel and equipment routinely used by a utility for service restoration.

(53)2) “Voltage survey plan” means an electric company plan approved by the Commission governing the electric company’s contact voltage detection and testing equipment and voltage detection and testing procedures to be used when conducting contact voltage surveys.

## **COMAR 20.50.10: Service Supplied by Electric Companies – Net Metering**

### **.01 General.**

A. Net Energy Metering. An electric company shall provide net metering of electric service to eligible customer-generators using a meter capable of net energy metering until the rated generating capacity of all eligible customer-generators in the State reaches 1,500 megawatts.

B. Maximum Size of Electric Generating System — Net Metering. An electric company may not provide net energy metering to an eligible customer-generator operating an electric generating system that has a rated capacity of more than 2 megawatts.

C. Micro Combined Heat and Power Electric Generating System. An electric company may not provide net energy metering to an eligible customer-generator operating a micro combined heat and power electric generating system that has a rated capacity of more than 30 kilowatts.

D. Qualifying for Net Energy Metering.

(1) In order to initially qualify for net energy metering:

(a) An eligible customer-generator shall comply with the provisions of COMAR 20.50.09; and

(b) The eligible customer-generator's proposed electric generating system may not exceed 200 percent of the eligible customer-generator's baseline annual usage.

(2) Upgraded Electric Generating Systems.

(a) When an eligible customer-generator receiving net energy metering proposes an upgrade to an existing electric generating system, an electric company shall re-evaluate the baseline annual usage to determine whether the electric generating system continues to meet the requirements of §D(1)(b) of this regulation.

(b) If the eligible customer-generator's upgraded electric generating system does not meet the requirements of §D(1)(b) of this regulation, an electric company may discontinue net energy metering.

### **.02 Metering.**

An electric company shall ensure that a meter installed for net energy metering is capable of measuring the flow of electricity in two directions.

### **.03 Tariffs and Contracts.**

A. An electric company shall offer net energy metering service to an eligible customer-generator under a Commission-approved standard contract or tariff.

B. An electric company's tariff or contract for net metering shall contain an energy rate, a rate structure, and any monthly charge identical to the monthly contract or tariff charge paid by a customer of the rate class in which the eligible customer-generator would be a member if they were not receiving net energy metering service.

C. An electric company may not include in an eligible customer-generator's bill rates, charges or fees that raise the eligible customer-generator's minimum monthly charge above that of customers of the same rate class to which the eligible customer-generator would otherwise be assigned.

D. An electric company may not charge to an eligible customer-generator new or additional demand charges, standby charges, customer charges, or minimum monthly charges.

E. An electric company may not require an eligible customer-generator whose electric generating system meets the requirements of this chapter to:

- (1) Install additional controls;
- (2) Perform or pay for additional tests; or
- (3) Purchase additional liability insurance.

#### **.04 Calculation of Net Energy.**

A. Net Energy Calculation. An electric company shall calculate net energy in accordance with this regulation.

B. Metering Net Energy — The electric company shall meter net energy produced or consumed on a regular basis in accordance with standard metering practice under this subtitle.

C. ~~C. Time Varying Rates - For eligible customer-generators whose applicable tariff includes more than one rate applied to different time periods during the billing cycle~~ time varying rates, net generation may ~~will~~ be calculated separately for each applicable variable rate ~~rate or period~~ during a billing cycle. A utility shall apply 04.D and 04.E separately for each variable rate period for an eligible customer-generator whose applicable tariff includes time varying rates. An eligible customer-generator on a time varying rate may be billed pursuant to both 04.D and 04.E in a single billing period.

D. ~~D. Energy Usage Exceeds Generation~~ — Billing. If the electricity used by an eligible customer-generator exceeds the electricity generated by the eligible customer-generator in a billing month, an electric company shall bill the eligible customer-generator for usage under the terms of Regulation .03 of this chapter.

E. ~~E. Generation Exceeds Usage~~ — Billing. If the electricity generated by an eligible customer-generator exceeds the customer's usage, an electric company shall only bill the eligible customer-generator a customer charge.

F. ~~F. Conversion of Excess Generation~~ — Billing. An electric company shall convert any excess electric generation described in §D of this regulation into generation credits upon billing, consistent with the provisions of Regulation .05 of this chapter.

G. ~~G. Commercial Customers.~~

(1) An electric company shall use the net hourly energy consumed or produced to assign the energy requirement for commercial eligible customer-generators with interval metering equipment.

(2) PJM shall use the net energy metered each hour, positive or negative, for the settlement process, even in cases when the total usage by the customer in a month exceeds the electricity generated by a commercial eligible customer-generator with interval metering equipment.

G. Time Of Use Customers — For customers on a Time Of Use Rate, net generation will be calculated separately for the on- and off-peak periods, on a monthly basis, so that on-peak generation will offset on-

~~peak consumption and off-peak generation will offset off-peak consumption. The Time-Of-Use Rate customers will be charged monthly for any net consumption in each period (on- or off-peak) individually.~~

#### **.05 Net Excess Generation.**

A. Generation Conversion — Dollar Amount. An electric utility shall convert an eligible customer-generator's net excess generation to a dollar amount according to this regulation.

##### B. Conversion Calculation.

(1) Except as provided in §C of this regulation, an electric company shall convert net excess generation from kilowatt-hours to dollars by multiplying the net excess generation by the generation or commodity portion of the rate that the eligible customer-generator would have been charged by the electric company averaged over the previous 12-month period ending with the billing cycle that is complete immediately prior to the end of April.

(2) For customers served by an electricity supplier, the utility shall convert net excess generation in the same manner as described in §B(1) of this regulation except that the dollar value of the net excess generation shall be equal to the generation or commodity rate that the customer would have been charged by the electricity supplier multiplied by the number of kilowatt-hours of net excess generation.

~~(3) For customers on a Time-Of-Use Rate time varying rate, net generation will~~ **shall** ~~be calculated separately for each applicable rate or period during a billing cycle~~ **net excess generation will be calculated separately for the on- and off-peak periods on a monthly basis, so that on-peak generation will offset on-peak consumption and off-peak generation will offset off-peak consumption. Any net excess generation credits may be carried forward individually for each period (e.g., on-peak, off-peak, or otherwise), and any net balances for these periods will be payable in April**

##### C. Cooperative Electric Company — Conversion Calculation.

(1) When net energy metering is provided by a cooperative electric company that serves a population of less than 250,000 in its distribution territory, the eligible customer-generator may choose to be paid for the dollar value of net excess generation remaining at the end of each month instead of at the end of the accrual period specified in §E of this regulation.

(2) If an eligible customer-generator chooses to be paid for the dollar value of net excess generation remaining at the end of each month:

(a) The customer-generator may accrue net excess generation on a monthly basis;

(b) The dollar value of the net excess generation shall be equal to the generation or commodity portion of the rate that the eligible customer-generator would have been charged by the electric company for the previous month multiplied by the number of kilowatt-hours of excess generation; and

(c) On or before 30 days after the end of each month, the electric cooperative shall pay the eligible customer-generator for the dollar value of net excess generation remaining at the end of the previous month.

D. Net Excess Generation — Carry Forward. An electric company shall carry forward accrued net excess generation on a customer's bill until the net excess generation has been used by the customer or the electric company has paid the customer for the credit under §E of this regulation.

##### E. Payment for Generator Credits.

(1) On or before 30 days after the billing cycle that is complete immediately prior to the end of April of each year, the electric company shall pay each eligible customer-generator for the dollar value of any accrued net excess generation remaining at the end of previous 12-month period ending with the billing cycle that is complete immediately prior to the end of April.

(2) On the closure of a net energy metering account of an eligible customer-generator, an electric company shall pay an eligible customer-generator the dollar value of the net excess generation on their account within 15 days.

#### **.06 Safety Standards and Controls for Net Energy Metering.**

An electric generating system used by an eligible customer-generator for net energy metering shall meet all applicable safety and performance standards incorporated by reference in COMAR 20.50.02.02.

#### **.07 Meter Aggregation.**

A. When requested in writing by a qualified eligible customer-generator under §B of this regulation, an electric utility shall provide meter aggregation.

B. Customers Qualifying for Aggregation. The following electric utility eligible customer-generators are qualified to request meter aggregation under §A of this regulation:

(1) An eligible customer-generator using electrical service for agriculture;

(2) An eligible customer-generator who is a not-for-profit organization or a not-for-profit business; or

(3) An eligible customer-generator who is a municipal or county government or its affiliated organizations.

C. An electric company shall require that an eligible customer-generator requesting meter aggregation under this regulation provide written allocation instructions detailing how to distribute its excess generation credits to each account prior to the commencement of any meter aggregation.

#### **.08 Meter Aggregation Method.**

A. This regulation applies to an eligible customer-generator qualifying for meter aggregation under Regulation .07 of this chapter.

B. Virtual Meter Aggregation.

(1) If an aggregation qualified eligible customer-generator's electrical services are not located close enough to physically interconnect metered service, the electric company shall sum the usage and excess generation of all applicable accounts on a kilowatt-hour basis over each billing period prior to calculating the customer's excess generation for that billing period.

(2) The electric company shall allocate generated electricity to each account per the instructions of the eligible customer-generator.

C. Physical Meter Aggregation.

(1) For an aggregation qualified eligible customer-generator whose electrical services are located close enough to physically interconnect and meter at a single point, the electric company shall allow the customer to make physical electrical connections and re-establish metering at a single location.



(2) Physically aggregated services must meet all applicable requirements of COMAR 20.50.01 and 20.50.02.

(3) The electric company shall allocate the net-energy used each billing period and the excess generation credit calculated each billing period to each account per the instructions of the customer.