

STATE OF NEW YORK

6700

2017-2018 Regular Sessions

IN ASSEMBLY

March 15, 2017

Introduced by M. of A. ENGLEBRIGHT, BENEDETTO, RIVERA, GALEF, CAHILL, GUNTHER, LUPARDO, MAGNARELLI, SCHIMMINGER, HOOPER, O'DONNELL, ROSENTHAL, TITONE, JAFFEE, KAVANAGH, SKARTADOS, BRINDISI, BARRETT, SANTA-BARBARA -- Multi-Sponsored by -- M. of A. COLTON, COOK, GIGLIO, GOTTFRIED, KOLB, LOPEZ, MAGEE, PAULIN, STIRPE -- read once and referred to the Committee on Energy

AN ACT to amend the public service law and the public authorities law, in relation to net energy metering for solar, wind, fuel cell and farm waste electric generating systems; and to repeal sections 66-j and 66-l of the public service law relating to net energy metering

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Sections 66-j and 66-l of the public service law are REPEALED and a new section 66-j is added to read as follows:

§ 66-j. Net energy metering for solar, wind, fuel cell or farm waste electric generating systems, or micro-combined heat and power generating equipment, and micro-hydroelectric generating equipment. 1. Definitions. As used in this section, the following terms shall have the following meanings:

(a) "Customer-generator" means: (i) any customer of an electric corporation, who owns or operates solar, wind or fuel cell electric generating equipment, or any hybrid equipment of these three technologies located and used at his or her premises; (ii) a customer of an electric corporation, who owns or operates farm waste electric generating equipment located and used at his or her "farm operation," as such term is defined in subdivision eleven of section three hundred one of the agriculture and markets law; (iii) a residential customer of an electric corporation who owns, leases or operates micro-combined heat and power generating equipment located on the customer's premises; (iv) a residential customer of an electric corporation, who owns or operates micro-hydroelectric generating equipment located and used at his or her resi-

EXPLANATION--Matter in italics (underscored) is new; matter in brackets [-] is old law to be omitted.

LBD03510-01-7

1 dence; and (v) a non-residential customer of an electric corporation
2 which owns or operates micro-hydroelectric generating equipment located
3 and used at its premises.

4 (b) "Net energy meter" means a meter that measures the reverse flow of
5 electricity to register the difference between the electricity supplied
6 by an electric corporation to the customer-generator and the electricity
7 provided to the corporation by that customer-generator.

8 (c) "Net energy metering" means the use of a net energy meter to meas-
9 ure, during the billing period applicable to a customer-generator, the
10 net amount of electricity supplied by an electric corporation and
11 provided to the corporation by a customer-generator.

12 (d) "Solar electric generating equipment" means a photovoltaic system
13 (i) with a rated capacity of not more than two thousand kilowatts; and
14 (ii) that is manufactured, installed, and operated in accordance with
15 applicable government and industry standards, that is connected to the
16 electric system and operated in parallel with an electric corporation's
17 transmission and distribution facilities, and that is operated in
18 compliance with any standards and requirements established under this
19 section.

20 (e) "Farm waste electric generating equipment" means equipment that
21 generates electric energy from biogas produced by the anaerobic
22 digestion of agricultural waste, such as livestock manure, farming
23 wastes and food processing wastes with a rated capacity of not more than
24 two thousand kilowatts, that is:

25 (i) manufactured, installed, and operated in accordance with applica-
26 ble government and industry standards;

27 (ii) connected to the electric system and operated in conjunction with
28 an electric corporation's transmission and distribution facilities;

29 (iii) operated in compliance with any standards and requirements
30 established under this section;

31 (iv) fueled at a minimum of ninety percent on an annual basis by
32 biogas produced from the anaerobic digestion of agricultural waste such
33 as livestock manure materials, crop residues, and food processing waste;
34 and

35 (v) fueled by biogas generated by anaerobic digestion with at least
36 fifty percent by weight of its feedstock being livestock manure materi-
37 als on an annual basis.

38 (f) "Micro-combined heat and power generating equipment" means an
39 integrated, cogenerating building heating and electrical power gener-
40 ation system, operating on any fuel and of any applicable engine, fuel
41 cell, or other technology, with a rated capacity of at least one kilo-
42 watt and not more than ten kilowatts electric and any thermal output
43 that at full load has a design total fuel use efficiency in the
44 production of heat and electricity of not less than eighty percent, and
45 annually produces at least two thousand kilowatt hours of useful energy
46 in the form of electricity that may work in combination with supple-
47 mental or parallel conventional heating systems, that is manufactured,
48 installed and operated in accordance with applicable government and
49 industry standards, that is connected to the electric system and oper-
50 ated in conjunction with an electric corporation's transmission and
51 distribution facilities.

52 (g) "Fuel cell electric generating equipment" means:

53 (i) a solid oxide, molten carbonate, proton exchange membrane or phos-
54 phoric acid fuel cell with a combined rated capacity of not more than
55 two thousand kilowatts; and

(ii) that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in parallel with an electric corporation's transmission and distribution facilities, and that is operated in compliance with any standards and requirements established under this section.

(h) "Micro-hydroelectric generating equipment" means a hydroelectric system (i) (A) in the case of a residential customer, with a rated capacity of not more than twenty-five kilowatts; and (B) in the case of a non-residential customer, with a rated capacity of not more than two thousand kilowatts; and (ii) that is manufactured, installed, and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in conjunction with an electric corporation's transmission and distribution facilities, and that is operated in compliance with any standards and requirements established under this section.

(i) "Wind electric generating equipment" means a wind generator or generators with a combined rated capacity of not more than two thousand kilowatts that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in parallel with an electric corporation's transmission and distribution facilities, and that is operated in compliance with any standards and requirements established under this section.

(j) "Electric corporation" means any public or privately owned entity that offers retail electrical service to end-use electric consumers.

(k) "Eligible technologies" means the solar, wind, fuel cell or farm waste electric generating equipment.

2. Interconnection and net energy metering. An electric corporation shall provide for the interconnection of eligible technologies, micro-combined heat and power generating equipment, and micro-hydroelectric generating equipment owned or operated by a customer-generator and for net energy metering, provided that the customer-generator enters into a net energy metering contract with the corporation or complies with the corporation's net energy metering schedule and complies with standards and requirements established under this section.

3. Conditions of service. (a) On or before three months after the effective date of this section, each electric corporation shall develop a model contract and file a schedule that establishes consistent and reasonable rates, terms and conditions for net energy metering to customer-generators, according to the requirements of this section. The commission shall render a decision within three months from the date on which the schedule is filed.

(b) An electric corporation shall impose no other charge or fee, including, but not limited to, back-up, stand by and demand charges, for the provision of net energy metering to a customer-generator, except as provided in paragraph (d) of subdivision four of this section.

(c) A customer who owns or operates a farm operation as such term is defined in subdivision eleven of section three hundred one of the agriculture and markets law, or a residential customer-generator as defined by subparagraph (iii) of paragraph (a) of subdivision one of this section that locates solar electric generating equipment or farm waste electric generating equipment with a net energy meter on property owned or leased by such customer-generator may designate all or a portion of the net metering credits generated by such equipment to meters at any property owned or leased by such customer-generator within the service

territory of the same electric corporation to which the customer-generator's net energy meters are interconnected and being within the same load zone as determined by the location based marginal price as of the date of initial request by the customer-generator to conduct net metering. The electric corporation will credit the accounts of the customer by applying any credits to the highest use meter first, then subsequent highest use meters until all such credits are attributed to the customer. Any excess credits shall be carried over to the following month.

(d) A customer who owns or operates a farm operation as such term is defined in subdivision eleven of section three hundred one of the agriculture and markets law, or a non-residential customer-generator as defined by subparagraph (v) of paragraph (a) of subdivision one of this section that locates micro-hydroelectric generating equipment with a net energy meter on property owned or leased by such customer-generator may designate all or a portion of the net metering credits generated by such equipment to meters at any property owned or leased by such customer-generator within the service territory of the same electric corporation to which the customer-generator's net energy meters are interconnected and being within the same load zone as determined by the location based marginal price as of the date of initial request by the customer-generator to conduct net metering. The electric corporation will credit the accounts of the customer by applying any credits to the highest use meter first, then subsequent highest use meters until all such credits are attributed to the customer. Any excess credits shall be carried over to the following month.

4. Rates. An electric corporation shall use net energy metering to measure and charge for the net electricity supplied by the corporation and provided to the corporation by a customer-generator, according to these requirements:

(a) In the event that the amount of electricity supplied by the corporation during the billing period exceeds the amount of electricity provided by a customer-generator, the corporation shall charge the customer-generator for the net electricity supplied at the same rate per kilowatt hour applicable to service provided to other customers in the same service class which do not generate electricity onsite.

(b) In the event that the amount of electricity produced by a customer-generator during the billing period exceeds the amount of electricity used by the customer-generator, the corporation shall apply a credit to the next bill for service to the customer-generator for the net electricity provided at the same rate per kilowatt hour applicable to service provided to other customers in the same service class which do not generate electricity onsite, except for micro-combined heat and power or fuel cell customer-generators, who will be credited at the corporation's avoided costs. The avoided cost credit provided to micro-combined heat and power or fuel cell customer-generators shall be treated for ratemaking purposes as a purchase of electricity in the market that is includable in commodity costs.

(c) At the end of the year or annualized over the period that service is supplied by means of net energy metering, the corporation shall promptly issue payment at its avoided cost to the customer-generator, as defined in subparagraph (i) or (ii) of paragraph (a) of subdivision one of this section, for the value of any remaining credit for the excess electricity produced during the year or over the annualized period by the customer-generator.

1 (d) In the event that the corporation imposes charges based on kilo-
2 watt demand on customers who are in the same service class as the
3 customer-generator but which do not generate electricity on site, the
4 corporation may impose the same charges at the same rates to the custom-
5 er-generator, provided, however, that the kilowatt demand for such
6 demand charges is determined by the maximum measured kilowatt demand
7 actually supplied by the corporation to the customer-generator during
8 the billing period.

9 (e) Net energy metering shall be accomplished using a single meter
10 capable of registering the flow of electricity in two directions. An
11 additional meter or meters to monitor the flow of electricity in each
12 direction may be installed with the consent of the customer-generator,
13 at the expense of the electric corporation, and the additional metering
14 shall be used only to provide the information necessary to accurately
15 bill or credit the customer-generator pursuant to paragraph (f) of this
16 subdivision, or to collect system performance information on the eligi-
17 ble technology for research purposes. If the existing electrical meter
18 of an eligible customer-generator is not capable of measuring the flow
19 of electricity in two directions and provided the reason the meter is
20 not capable of measuring the flow in two directions is not related
21 either to a mechanical device installed by an electric corporation or
22 such corporation's selection of a meter without this capability when
23 other meters capable of measuring the flow of electricity in two
24 directions were available to the electric corporation, the customer-gen-
25 erator shall be responsible for all expenses involved in purchasing and
26 installing a meter that is able to measure the flow of electricity in
27 two directions. If an additional meter or meters are installed, the net
28 energy metering calculation shall yield a result identical to that of a
29 single meter.

30 (f) Every electric corporation shall develop a standard contract or
31 tariff providing for net energy metering, and shall make this contract
32 available to eligible customer-generators, upon request. Every electric
33 corporation shall ensure that requests for establishment of net energy
34 metering are processed in a time period not exceeding that for similarly
35 situated customers requesting new electric service, but not to exceed
36 one month from the date the electric corporation receives a completed
37 application form from an eligible customer-generator. If an electric
38 corporation is unable to process the request within the allowable time-
39 frame, the electric corporation shall notify the customer-generator of
40 the reason for its inability to process the request and the date the
41 request will be completed. Every electric corporation shall make all
42 necessary forms and contracts for net energy metering available for
43 download from the internet.

44 (g) Each net energy metering contract or tariff shall be identical,
45 with respect to rate structure, all retail rate components and any
46 monthly charges, to the contract or tariff to which the same customer
47 would be assigned if such customer was not an eligible customer-genera-
48 tor, except that eligible customer-generators shall not be assessed
49 standby charges on the electrical generating capacity or the kilowatt-
50 hour production of an eligible technology. The charges for all retail
51 rate components for eligible customer-generators shall be based exclu-
52 sively on the customer-generator's net kilowatt-hour consumption over a
53 twelve month period, without regard to the customer-generator's choice
54 of electric corporation. Any new or additional demand charge, standby
55 charge, customer charge, minimum monthly charge, interconnection charge
56 or other charge that would increase an eligible customer-generator's

1 costs beyond those of other customers in the rate class to which the
2 eligible customer-generator would otherwise be assigned are contrary to
3 the intent of this section, and shall not form a part of net energy
4 metering contracts or tariffs.

5 (h) For all eligible customer-generators taking service under tariffs
6 employing "time of use" rates, any net monthly consumption of electric-
7 ity shall be calculated according to the terms of the contract or tariff
8 which the same customer would be assigned to or be eligible for if the
9 customer was not an eligible customer-generator. When those same custom-
10 er-generators are net generators during any discrete time of use period,
11 the net kilowatt-hours produced shall be valued at the same price per
12 kilowatt-hour as the electric corporation would charge for retail kilo-
13 watt-hour sales during that same time of use period and that value shall
14 be applied as a credit to any of the discrete time of use periods under
15 the tariff. If the eligible customer-generator's time of use electrical
16 meter is unable to measure the flow of electricity in two directions,
17 the provisions of paragraph (d) of this subdivision shall apply.

18 5. Safety standards. (a) On or before three months after the effective
19 date of paragraph (b) of this subdivision, the commission shall estab-
20 lish standards for interconnection of generators, taking into account
21 applicable industry standards including IEEE 1541, and best practices
22 included in the Interstate Renewable Energy Council's model intercon-
23 nection rules MR-12005. Such standards shall not be more restrictive of
24 interconnection than standards established in FERC Orders 2006 and 2006a
25 as of the effective date of paragraph (b) of this subdivision.

26 (b) The commission shall promulgate regulations ensuring that simpli-
27 fied contracts will be used for the interconnection of generators that
28 have a production capacity not exceeding two thousand kilowatts and
29 shall consider the best practices for consumer friendly contracts
30 adopted by national associations of state utility regulators. Such
31 contracts shall not require liability or other insurance in excess of
32 what is typically carried by customer-generators for general liability.

33 6. Safety standards; non-residential solar electric generating equip-
34 ment and micro-hydroelectric generating equipment. (a) On or before
35 three months after the effective date of this subdivision, each electric
36 corporation shall establish standards that are necessary for net energy
37 metering and the interconnection of non-residential solar electric
38 generating equipment or micro-hydroelectric generating equipment to its
39 system and that the commission shall determine are necessary for safe
40 and adequate service and further the public policy set forth in this
41 section. Such standards may include but shall not be limited to:

42 (i) equipment necessary to isolate automatically the solar generating
43 system or micro-hydroelectric generating equipment from the utility
44 system for voltage and frequency deviations; and

45 (ii) a manual lockable disconnect switch provided by the customer-gen-
46 erator which shall be located on the outside of the customer-generator's
47 premises and externally accessible for the purpose of isolating the
48 solar electric generating equipment or micro-hydroelectric generating
49 equipment.

50 (b) In the event that the total rated generating capacity of solar
51 electric generating equipment or micro-hydroelectric generating equip-
52 ment that provides electricity to the electric corporation through the
53 same local feeder line exceeds twenty percent of the rated capacity of
54 the local feeder line, the electric corporation may require the custom-
55 er-generator to comply with reasonable measures to ensure safety of the
56 local feeder line.

1 (c) Unless otherwise determined to be necessary by the commission, an
2 electric corporation may not require a customer-generator to comply with
3 additional safety or performance standards, perform or pay for addi-
4 tional tests, or purchase additional liability insurance provided that
5 the solar electric generating equipment or micro-hydroelectric generat-
6 ing equipment meets the safety standards established pursuant to this
7 subdivision.

8 (d) Upon its own motion or upon a complaint, the commission, or its
9 designated representative, may investigate and make a determination as
10 to the reasonableness and necessity of the standards or responsibility
11 for compliance with the standards.

12 7. Electric restructuring. Notwithstanding the provisions of this
13 section, a customer-generator shall comply with any applicable determi-
14 nations of the commission relating to restructuring of the electric
15 industry.

16 8. Severability of provisions. The provisions of this section shall be
17 severable and if the application of any clause, sentence, paragraph,
18 subdivision, section, or part thereof to any person or circumstance
19 shall be adjudged by any court of competent jurisdiction to be invalid,
20 such judgment shall not necessarily affect, impair, or invalidate the
21 application of any such clause, sentence, paragraph, subdivision,
22 section, part or remainder thereof, as the case may be, to any other
23 person or circumstance, but shall be confined in its operation to the
24 clause, sentence, paragraph, subdivision, section or part thereof
25 directly involved in the controversy in which such judgment shall have
26 been rendered.

27 § 2. Subdivision (h) of section 1020-g of the public authorities law,
28 as amended by chapter 546 of the laws of 2011, is amended to read as
29 follows:

30 (h) To implement programs and policies designed to provide for the
31 interconnection of: (i) [~~(A)~~] solar, wind, fuel cell or farm waste elec-
32 tric generating equipment owned or operated by [~~residential customers,~~
33 ~~(B) farm waste electric generating equipment owned or operated by~~
34 ~~customer-generators,~~ (C) ~~solar electric generating equipment owned or~~
35 ~~operated by non-residential customers,~~ (D)] customer-generators, (ii)
36 micro-combined heat and power generating equipment owned, leased or
37 operated by residential customers, [~~(E)~~] (iii) fuel cell electric gener-
38 ating equipment owned, leased or operated by residential customers, and
39 [~~(F)~~] (iv) micro-hydroelectric generating equipment owned, leased or
40 operated by customer-generators and for net energy metering consistent
41 with section sixty-six-j of the public service law, to increase the
42 efficiency of energy end use, to shift demand from periods of high
43 demand to periods of low demand and to facilitate the development of
44 cogeneration [~~, and (ii) wind electric generating equipment owned or~~
45 ~~operated by customer-generators and for net energy metering consistent~~
46 ~~with section sixty-six-l of the public service law].~~

47 § 3. This act shall take effect immediately.