

4993

2011-2012 Regular Sessions

I N S E N A T E

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Introduced by Sen. BALL -- read twice and ordered printed, and when printed to be committed to the Committee on Energy and Telecommunications

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 section 66-1 of the public service law relating to net energy metering for residential and/or farm service wind electric generating systems

THE PEOPLE OF THE STATE OF NEW YORK, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

1 Section 1. The section heading and subdivisions 1, 2, 3, 4 and 5 of
2 section 66-j of the public service law, as amended by chapter 355 of the
3 laws of 2009, paragraph (d) of subdivision 1 and subparagraphs (i) and
4 (iii) of paragraph (c) of subdivision 3 as amended by chapter 7 of the
5 laws of 2010, and the opening paragraph of paragraph (e) of subdivision
6 1 as amended by chapter 336 of the laws of 2010, are amended to read as
7 follows:
8 Net energy metering for [residential] solar, WIND, FUEL CELL OR farm
9 waste[, non-residential solar] electric generating systems, OR micro-
10 combined heat and power generating equipment[, or fuel cell electric
11 generating equipment]. 1. Definitions. As used in this section, the
12 following terms shall have the following meanings:
13 (a) "Customer-generator" means: (i) [a residential] ANY customer of an
14 electric corporation, who owns or operates solar, WIND OR FUEL CELL
15 electric generating equipment, OR ANY HYBRID EQUIPMENT COMPOSED OF THESE
16 THREE TECHNOLOGIES located and used at his or her [residence] PREMISES;
17 (ii) a customer of an electric corporation, who owns or operates farm
18 waste electric generating equipment located and used at his or her "farm
19 operation," as such term is defined in subdivision eleven of section
20 three hundred one of the agriculture and markets law; AND (iii) [a non-
21 residential customer of an electric corporation which owns or operates

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

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1 solar electric generating equipment located and used at its premises;
2 (iv)] a residential customer of an electric corporation who owns, leases
3 or operates micro-combined heat and power generating equipment located
4 on the customer's premises[; and (v) a residential customer of an elec-
5 tric corporation who owns, leases or operates fuel cell generating
6 equipment located on the customer's premises].

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

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

15 (d) "Solar electric generating equipment" means a photovoltaic system
16 (i) [(A) in the case of a residential customer, with a rated capacity of
17 not more than twenty-five kilowatts; and (B) in the case of a non-resi-
18 dential customer,] with a rated capacity of not more than two thousand
19 kilowatts; and (ii) that is manufactured, installed, and operated in
20 accordance with applicable government and industry standards, that is
21 connected to the electric system and operated in [conjunction] PARALLEL
22 with an electric corporation's transmission and distribution facilities,
23 and that is operated in compliance with any standards and requirements
24 established under this section.

25 (e) "Farm waste electric generating equipment" means equipment that
26 generates electric energy from biogas produced by the anaerobic
27 digestion of agricultural waste, such as livestock manure, farming
28 wastes and food processing wastes with a rated capacity of not more than
29 [one] TWO thousand kilowatts, that is:

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

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

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

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

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

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

(g) "Fuel cell electric generating equipment" means a solid oxide, molten carbonate, proton exchange membrane or phosphoric acid fuel cell with a combined rated capacity of not more than [ten] 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.

(H) "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.

(I) "ELECTRIC CORPORATION" MEANS ANY PUBLIC OR PRIVATELY OWNED ENTITY THAT OFFERS RETAIL ELECTRICAL SERVICE TO END-USE ELECTRIC CONSUMERS.

(J) "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 [solar and farm waste electric generating equipment] ELIGIBLE TECHNOLOGIES, AND micro-combined heat and power generating equipment [and fuel cell electric 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) [(i)] 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.

[(ii)] On or before three months after the effective date of this subparagraph, 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 non-residential customer generators, according to the requirements of this section. The commission shall render a decision within three months of the date on which the schedule is filed.

(iii) Each electric corporation shall make such contract and schedule available to customer-generators on a first come, first served basis, until the total rated generating capacity for solar and farm waste electric generating equipment, micro-combined heat and power generating equipment and fuel cell electric generating equipment owned, leased or operated by customer-generators in the corporation's service area is equivalent to one percent of the corporation's electric demand for the year two thousand five, as determined by the department.]

(b) [Nothing in this subdivision shall prohibit a corporation from providing net energy metering to additional customer-generators. The commission shall have the authority, after January first, two thousand

twelve, to increase the percent limits if it determines that additional net energy metering is in the public interest.

(c) In the event that the electric corporation determines that it is necessary to install a dedicated transformer or transformers, or other equipment to protect the safety and adequacy of electric service provided to other customers, a customer-generator shall pay the electric corporation's actual costs of installing the transformer or transformers, or other equipment:

(i) In the case of a customer-generator who owns or operates solar electric generating equipment, micro-combined heat and power generating equipment or fuel cell electric generating equipment located and used at his or her residence, or a non-residential customer-generator who owns or operates solar electric generating equipment with a rated capacity of not more than twenty-five kilowatts, up to a maximum amount of three hundred fifty dollars;

(ii) In the case of a customer-generator who owns or operates farm waste electric generating equipment located and used at his or her "farm operation," up to a total amount of five thousand dollars per "farm operation"; and

(iii) In the case of a non-residential customer-generator who owns or operates solar electric generating equipment with a rated capacity of more than twenty-five kilowatts located and used at its premises, such cost shall be as determined by the electric corporation subject to review, upon the request of such customer-generator, by the department.

(d) 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.

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

1 electricity produced during the year or over the annualized period by
2 the customer-generator.

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

11 (E) NET ENERGY METERING SHALL BE ACCOMPLISHED USING A SINGLE METER
12 CAPABLE OF REGISTERING THE FLOW OF ELECTRICITY IN TWO DIRECTIONS. AN
13 ADDITIONAL METER OR METERS TO MONITOR THE FLOW OF ELECTRICITY IN EACH
14 DIRECTION MAY BE INSTALLED WITH THE CONSENT OF THE CUSTOMER-GENERATOR,
15 AT THE EXPENSE OF THE ELECTRIC CORPORATION, AND THE ADDITIONAL METERING
16 SHALL BE USED ONLY TO PROVIDE THE INFORMATION NECESSARY TO ACCURATELY
17 BILL OR CREDIT THE CUSTOMER-GENERATOR PURSUANT TO PARAGRAPH (F) OF THIS
18 SUBDIVISION, OR TO COLLECT SYSTEM PERFORMANCE INFORMATION ON THE ELIGI-
19 BLE TECHNOLOGY FOR RESEARCH PURPOSES. IF THE EXISTING ELECTRICAL METER
20 OF AN ELIGIBLE CUSTOMER-GENERATOR IS NOT CAPABLE OF MEASURING THE FLOW
21 OF ELECTRICITY IN TWO DIRECTIONS AND PROVIDED THE REASON THE METER IS
22 NOT CAPABLE OF MEASURING THE FLOW IN TWO DIRECTIONS IS NOT RELATED
23 EITHER TO A MECHANICAL DEVICE INSTALLED BY AN ELECTRIC CORPORATION OR
24 SUCH CORPORATION'S SELECTION OF A METER WITHOUT THIS CAPABILITY WHEN
25 OTHER METERS CAPABLE OF MEASURING THE FLOW OF ELECTRICITY IN TWO
26 DIRECTIONS WERE AVAILABLE TO THE ELECTRIC CORPORATION, THE CUSTOMER-GEN-
27 ERATOR SHALL BE RESPONSIBLE FOR ALL EXPENSES INVOLVED IN PURCHASING AND
28 INSTALLING A METER THAT IS ABLE TO MEASURE THE FLOW OF ELECTRICITY IN
29 TWO DIRECTIONS. IF AN ADDITIONAL METER OR METERS ARE INSTALLED, THE NET
30 ENERGY METERING CALCULATION SHALL YIELD A RESULT IDENTICAL TO THAT OF A
31 SINGLE METER.

32 (F) EVERY ELECTRIC CORPORATION SHALL DEVELOP A STANDARD CONTRACT OR
33 TARIFF PROVIDING FOR NET ENERGY METERING, AND SHALL MAKE THIS CONTRACT
34 AVAILABLE TO ELIGIBLE CUSTOMER-GENERATORS, UPON REQUEST. EVERY ELECTRIC
35 CORPORATION SHALL ENSURE THAT REQUESTS FOR ESTABLISHMENT OF NET ENERGY
36 METERING ARE PROCESSED IN A TIME PERIOD NOT EXCEEDING THAT FOR SIMILARLY
37 SITUATED CUSTOMERS REQUESTING NEW ELECTRIC SERVICE, BUT NOT TO EXCEED
38 ONE MONTH FROM THE DATE THE ELECTRIC CORPORATION RECEIVES A COMPLETED
39 APPLICATION FORM FROM AN ELIGIBLE CUSTOMER-GENERATOR. IF AN ELECTRIC
40 CORPORATION IS UNABLE TO PROCESS THE REQUEST WITHIN THE ALLOWABLE TIME-
41 FRAME, THE ELECTRIC CORPORATION SHALL NOTIFY THE CUSTOMER-GENERATOR OF
42 THE REASON FOR ITS INABILITY TO PROCESS THE REQUEST AND THE DATE THE
43 REQUEST WILL BE COMPLETED. EVERY ELECTRIC CORPORATION SHALL MAKE ALL
44 NECESSARY FORMS AND CONTRACTS FOR NET ENERGY METERING AVAILABLE FOR
45 DOWNLOAD FROM THE INTERNET.

46 (G) EACH NET ENERGY METERING CONTRACT OR TARIFF SHALL BE IDENTICAL,
47 WITH RESPECT TO RATE STRUCTURE, ALL RETAIL RATE COMPONENTS AND ANY
48 MONTHLY CHARGES, TO THE CONTRACT OR TARIFF TO WHICH THE SAME CUSTOMER
49 WOULD BE ASSIGNED IF SUCH CUSTOMER WAS NOT AN ELIGIBLE CUSTOMER-GENERA-
50 TOR, EXCEPT THAT ELIGIBLE CUSTOMER-GENERATORS SHALL NOT BE ASSESSED
51 STANDBY CHARGES ON THE ELECTRICAL GENERATING CAPACITY OR THE
52 KILOWATT-HOUR PRODUCTION OF AN ELIGIBLE TECHNOLOGY. THE CHARGES FOR ALL
53 RETAIL RATE COMPONENTS FOR ELIGIBLE CUSTOMER-GENERATORS SHALL BE BASED
54 EXCLUSIVELY ON THE CUSTOMER-GENERATOR'S NET KILOWATT-HOUR CONSUMPTION
55 OVER A TWELVE MONTH PERIOD, WITHOUT REGARD TO THE CUSTOMER-GENERATOR'S
56 CHOICE OF ELECTRIC CORPORATION. ANY NEW OR ADDITIONAL DEMAND CHARGE,

1 STANDBY CHARGE, CUSTOMER CHARGE, MINIMUM MONTHLY CHARGE, INTERCONNECTION
2 CHARGE OR OTHER CHARGE THAT WOULD INCREASE AN ELIGIBLE
3 CUSTOMER-GENERATOR'S COSTS BEYOND THOSE OF OTHER CUSTOMERS IN THE RATE
4 CLASS TO WHICH THE ELIGIBLE CUSTOMER-GENERATOR WOULD OTHERWISE BE
5 ASSIGNED ARE CONTRARY TO THE INTENT OF THIS SECTION, AND SHALL NOT FORM
6 A PART OF NET ENERGY METERING CONTRACTS OR TARIFFS.

7 (H) FOR ALL ELIGIBLE CUSTOMER-GENERATORS TAKING SERVICE UNDER TARIFFS
8 EMPLOYING "TIME OF USE" RATES, ANY NET MONTHLY CONSUMPTION OF ELECTRIC-
9 ITY SHALL BE CALCULATED ACCORDING TO THE TERMS OF THE CONTRACT OR TARIFF
10 TO WHICH THE SAME CUSTOMER WOULD BE ASSIGNED TO OR BE ELIGIBLE FOR IF
11 THE CUSTOMER WAS NOT AN ELIGIBLE CUSTOMER-GENERATOR. WHEN THOSE SAME
12 CUSTOMER-GENERATORS ARE NET GENERATORS DURING ANY DISCRETE TIME OF USE
13 PERIOD, THE NET KILOWATT-HOURS PRODUCED SHALL BE VALUED AT THE SAME
14 PRICE PER KILOWATT-HOUR AS THE ELECTRIC CORPORATION WOULD CHARGE FOR
15 RETAIL KILOWATT-HOUR SALES DURING THAT SAME TIME OF USE PERIOD AND THAT
16 VALUE SHALL BE APPLIED AS A CREDIT TO ANY OF THE DISCRETE TIME OF USE
17 PERIODS UNDER THE TARIFF. IF THE ELIGIBLE CUSTOMER-GENERATOR'S TIME OF
18 USE ELECTRICAL METER IS UNABLE TO MEASURE THE FLOW OF ELECTRICITY IN TWO
19 DIRECTIONS, THE PROVISIONS OF PARAGRAPH (D) OF THIS SUBDIVISION SHALL
20 APPLY.

21 5. Safety standards. (a) On or before three months after the effective
22 date of [this section, each electric corporation shall establish stand-
23 ards that are necessary for net energy metering and the interconnection
24 of residential solar or farm waste electric generating equipment,
25 micro-combined heat and power generating equipment and fuel cell elec-
26 tric generating equipment to its system and that the commission shall
27 determine are necessary for safe and adequate service and further the
28 public policy set forth in this section. Such standards may include but
29 shall not be limited to:

30 (i) equipment necessary to isolate automatically the residential
31 solar, farm waste, micro-combined heat and power and fuel cell electric
32 generating system from the utility system for voltage and frequency
33 deviations; and

34 (ii) a manual lockable disconnect switch provided by the customer-gen-
35 erator which shall be located on the outside of the customer's premises
36 and externally accessible for the purpose of isolating the residential
37 solar and farm waste electric generating equipment.

38 (b) Upon its own motion or upon a complaint, the commission, or its
39 designated representative, may investigate and make a determination as
40 to the reasonableness and necessity of the standards or responsibility
41 for compliance with the standards.

42 (i) In the case of a customer-generator who owns or operates solar
43 electric generating equipment located and used at his or her residence;
44 an electric corporation may not require a customer-generator to comply
45 with additional safety or performance standards, perform or pay for
46 additional tests, or purchase additional liability insurance provided
47 that the residential solar or farm waste electric generating equipment,
48 micro-combined heat and power generating equipment or fuel cell electric
49 generating equipment meets the safety standards established pursuant to
50 this paragraph.

51 (ii) In the case of a customer-generator who owns or operates farm
52 waste electric generating equipment located and used at his or her "farm
53 operation," an electric corporation may not require a customer-generator
54 to comply with additional safety or performance standards, perform or
55 pay for additional tests, or purchase additional liability insurance
56 provided that:

1 1. the electric generating equipment meets the safety standards estab-
2 lished pursuant to this paragraph; and

3 2. the total rated generating capacity (measured in kW) of farm waste
4 electric generating equipment that provides electricity to the electric
5 corporation through the same local feeder line, does not exceed twenty
6 percent of the rated capacity of that local feeder line.

7 (iii) In the event that the total rated generating capacity of farm
8 waste electric generating equipment that provides electricity to the
9 electric corporation through the same local feeder line exceeds twenty
10 percent of the rated capacity of the local feeder line, the electric
11 corporation may require the customer-generator to comply with reasonable
12 measures to ensure safety of that local feeder line.] PARAGRAPH (B) OF
13 THIS SUBDIVISION, THE COMMISSION SHALL ESTABLISH STANDARDS FOR INTERCON-
14 NECTION OF GENERATORS, TAKING INTO ACCOUNT APPLICABLE INDUSTRY STANDARDS
15 INCLUDING IEEE 1541, AND BEST PRACTICES INCLUDED IN THE INTERSTATE
16 RENEWABLE ENERGY COUNCIL'S MODEL INTERCONNECTION RULES MR-12005. SUCH
17 STANDARDS SHALL NOT BE MORE RESTRICTIVE OF INTERCONNECTION THAN STAND-
18 ARDS ESTABLISHED IN FERC ORDERS 2006 AND 2006A AS OF THE EFFECTIVE DATE
19 OF PARAGRAPH (B) OF THIS SUBDIVISION.

20 (B) THE COMMISSION SHALL PROMULGATE REGULATIONS ENSURING THAT SIMPLI-
21 FIED CONTRACTS WILL BE USED FOR THE INTERCONNECTION OF GENERATORS THAT
22 HAVE A PRODUCTION CAPACITY NOT EXCEEDING TWO THOUSAND KILOWATTS AND
23 SHALL CONSIDER THE BEST PRACTICES FOR CONSUMER FRIENDLY CONTRACTS
24 ADOPTED BY NATIONAL ASSOCIATIONS OF STATE UTILITY REGULATORS. SUCH
25 CONTRACTS SHALL NOT REQUIRE LIABILITY OR OTHER INSURANCE IN EXCESS OF
26 WHAT IS TYPICALLY CARRIED BY CUSTOMER-GENERATORS FOR GENERAL LIABILITY.

27 S 2. Section 66-1 of the public service law is REPEALED.

28 S 3. Subdivision (h) of section 1020-g of the public authorities law,
29 as amended by chapter 355 of the laws of 2009, is amended to read as
30 follows:

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

47 S 4. This act shall take effect immediately.