

**APPENDIX D**

(RESERVED)

**APPENDIX E****Definitions of Fuel Types**

Coal	Coal—Steam Turbine Pumped Storage Hydro Powered by Coal
Gas	Natural Gas—Steam Turbine Natural Gas—Simple Combustion Turbine Natural Gas—Combined Cycle Combustion Turbine LPG Pumped Storage Hydro Powered by Gas
Hydro	Pondage Hydro Run-of-River Hydro
Nuclear	Boiling and Pressurized Water Reactors Pumped Storage Hydro Powered by Nuclear
Oil	Oil—Steam Turbine Oil—Simple Combustion Turbine Oil—Combined Cycle Combustion Turbine Diesel No. 2 Heating Oil Jet Fuel Gasoline Kerosene Pumped Storage Hydro Powered by Oil
Solar	Photovoltaics Fuel Cells Powered by Photovoltaics
Wind	Wind Turbines
Captured Methane Gas	Landfill Gas Sewage Gas Agricultural Waste Digesters Fuel Cells Powered by Methane
Biomass	Urban Wood Waste Pallet Waste Construction and Demolition Municipal Solid Waste Wood Mill Residue Wood Primary Wood Products Industries Secondary Wood Products Industries

	Harvested Wood Site Conversion Waste Wood Sivicultural Waste Wood Agricultural Residue Sustainable Yield Wood
Geothermal	Geothermal
Solid Waste Incineration	Municipal Solid Waste Tire Waste
Wave/Tidal Action	Wave/Tidal Action

**APPENDIX F****Benchmark and default values****I. Default values for the “Energy Source” section of the label**

Coal	49 percent
Gas	7 percent
Hydroelectric (large)	2 percent
Nuclear	34 percent
Oil	6 percent
Renewable Energy Sources:	
Captured methane gas	0 percent
Fuel Cells	0 percent
Geothermal	0 percent
Hydroelectric (small)	0 percent
Solar	0 percent
Solid waste	2 percent
Wind	0 percent
Wood or other biomass	0 percent
<b>TOTAL</b>	<b>100 percent</b>

**II. Benchmarks and defaults for “Air Emissions” section of the label**

	Benchmarks (pounds per <u>megawatt-hour</u> )	Defaults (pounds per <u>megawatt-hour</u> )
CO <sub>2</sub>	1,213	1,525
NO <sub>x</sub>	3.0	4.6
SO <sub>2</sub>	2.5	9.9

## SUBCHAPTER 4. NET METERING FOR CLASS I RENEWABLE ENERGY SYSTEMS

### 14:8-4.1 Scope

This subchapter sets forth net metering requirements that apply to electric power suppliers, basic generation service providers and electric distribution companies, as defined at N.J.A.C. 14:4-1.2, which have customers who generate class I renewable energy, as defined at N.J.A.C. 14:8-1.2, on the customer's side of the meter.

Amended by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Rewrote the section.

### 14:8-4.2 Net metering definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions that apply to this subchapter can be found at N.J.A.C. 14:3-1.1 and 14:8-1.2.

"Annualized period" means a period of 12 consecutive monthly billing periods. A customer-generator's first annualized period begins on the first day of any single monthly billing period, at the customer's choice.

"Avoided cost of wholesale power" means the average locational marginal price of energy in the applicable utility's transmission zone. This cost can be obtained through the website maintained by PJM Interconnection at [www.pjm.com](http://www.pjm.com).

"Customer-generator" means an electricity customer, such as an industrial, large commercial, residential or small commercial customer that generates electricity on the customer's side of the meter, using a class I renewable energy source.

"Customer-generator facility" means the equipment used by a customer-generator to generate, manage and/or monitor electricity. A customer-generator facility typically includes an electric generator and/or interconnection equipment.

Petition for Rulemaking.

See: 40 N.J.R. 5878(a).

Amended by R.2009 d.68, effective March 2, 2009.

See: 40 N.J.R. 5531(a), 41 N.J.R. 1094(a).

In definition "Annualized period", substituted "any single" for "the first full" and "at the customer's choice" for "after which the customer-generator's facility is interconnected and is generating electricity"; and in definition "Customer-generator facility", inserted "or".

Amended by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Definitions". Deleted definitions "Applicant", "Area network", "Equipment package", "Fault current", "Good utility practice", "IEEE standards", "Interconnection agreement", "Point of common coupling", "Small commercial customer" and "Spot network"; rewrote definition "Customer-generator"; and in definition "Customer-generator facility", deleted a comma following "manage", deleted "package" following the second occurrence of "equipment", and substituted "interconnection" for the second occurrence of "an".

### 14:8-4.3 Net metering general provisions, annualized period selection

(a) All electric distribution companies (EDCs) and supplier/providers, as defined at N.J.A.C. 14:4-1.2 and 14:8-1.2 respectively, shall offer net metering to their customers that generate electricity on the customer's side of the meter, using class I renewable energy sources, provided that the generating capacity of the customer-generator's facility does not exceed the lower of the following:

1. Two megawatts alternating current; or
2. The amount of electricity supplied by the electric power supplier or basic generation service provider to the customer over an annualized period.

(b) The EDC shall develop a tariff providing for net metering. Each supplier/provider and EDC shall make net metering available to eligible customer-generators on a first-come, first-served basis.

(c) If, in a given monthly billing period, a customer-generator supplies more electricity to the electric distribution system than the EDC or supplier/provider delivers to the customer-generator, the EDC or supplier/provider shall credit the customer-generator for the excess. To do this, the EDC or supplier/provider shall reduce the customer-generator's bill for the next monthly billing period to compensate for the excess electricity from the customer-generator in the previous billing period.

(d) The EDC and supplier/provider shall carry over credit earned under (c) above from monthly billing period to monthly billing period, and the credit shall accumulate until the end of the annualized period, as defined at N.J.A.C. 14:8-4.2.

(e) At the end of each annualized period, the supplier/provider shall compensate the customer-generator for any excess kilowatt hours generated, at the electric power supplier's or basic generation service provider's avoided cost of wholesale power, as defined at N.J.A.C. 14:8-4.2.

(f) The EDC or supplier/provider shall offer each customer-generator one opportunity to select a monthly billing period as the start of the customer-generator's annualized period. This shall apply to all customer-generators, whether they began net metering prior to March 2, 2009, or after that date.

(g) A customer-generator may submit its annualized period selection to the EDC or supplier/provider at any time. However, an EDC or supplier/provider is not required to accept a customer-generator selection of an annualized period that begins before the first full day of the first monthly billing period after the submittal of the selection.

(h) If a customer-generator begins net metering after March 2, 2009, and does not submit an annualized period selection, the EDC or supplier/provider shall assign the

customer-generator a default annualized period until such time as the customer-generator may choose to submit an annualized period selection. The default annualized period shall begin on the first full day of the first monthly billing period after the customer-generator's facility is interconnected and generating electricity.

(i) If any customer-generator has been net metering for one monthly billing period or more before it submits its annualized period selection, the following shall apply:

1. If the customer-generator has been net metering for more than 12 monthly billing periods, the time between the selection submittal and the end of the customer-generator's most recently ended annualized period shall be treated as one annualized period; and

2. If the customer-generator has been net metering for fewer than 12 monthly billing periods, the time between the selection submittal and the first day of the first full monthly billing period after the customer-generator's facility is interconnected and generating electricity shall be treated as one annualized period.

(j) A customer-generator shall retain its chosen annualized period permanently unless either of the following occurs:

1. The customer-generator switches electric suppliers. In such a case, the electric power supplier or basic generation service provider with whom service is terminating shall treat the end of the service period as if it were the end of the annualized period; or

2. The EDC or supplier/provider, at its discretion, chooses to accept a customer-generator request for a new annualized period.

(k) A customer-generator that is eligible for net metering owns the renewable attributes of the electricity it generates unless there is a contract with an express provision that assigns ownership of the renewable attributes. The customer-generator may trade or sell the attributes to another person, or may use the attributes as the basis for an application for one or more RECs.

(l) A supplier/provider or EDC shall provide net metering at non-discriminatory rates that are identical, with respect to rate structure, retail rate components, and any monthly charges, to the rates that a customer-generator would be charged if not a customer-generator, except that a supplier/provider or EDC may use a special load profile for the customer-generator, which incorporates the customer-generator's real time generation, provided the special load profile is approved by the Board.

(m) A supplier/provider or EDC shall not charge a customer-generator any fee or charge, or require additional equipment, insurance or any other requirement, unless the fee, charge, or other requirement is specifically authorized under this subchapter, or the fee would apply to other customers that are not customer-generators.

(n) Nothing in this subchapter shall abrogate any person's obligation to comply with all applicable Federal or State laws, rules or regulations.

Amended by R.2009 d.68, effective March 2, 2009.

See: 40 N.J.R. 5531(a), 41 N.J.R. 1094(a).

Added (f) through the introductory paragraph of (j); recodified former (f) as (j)1; in (j)1, substituted "The" for "If a" at the beginning, inserted ". In such a case" and substituted "; or" for a period at the end; added (j)2; and recodified former (g) through (l) as (k) through (p).

Amended by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Net metering general provisions". Rewrote the section.

#### 14:8-4.4 Meters and metering

(a) A customer-generator facility used for net metering shall be equipped with metering equipment that can measure the flow of electricity in both directions at the same rate. This is typically accomplished through use of a single bi-directional meter.

(b) A customer-generator may choose to use an existing electric revenue meter if the following criteria are met:

1. The meter is capable of measuring the flow of electricity both into and out of the customer-generator's facility at the same rate; and

2. The meter is accurate to within plus or minus five percent when measuring electricity flowing from the customer-generator facility to the electric distribution system.

(c) If the customer-generator's existing electric revenue meter does not meet the requirements in (b) above, the EDC shall install a new revenue meter for the customer-generator, at the company's expense within 10 business days after the interconnection is approved in accordance with N.J.A.C. 14:8-5.4 or (n), 5.5 or 5.6, as applicable. Any subsequent revenue meter change necessitated by the customer-generator, whether because of a decision to stop net metering or for any other reason, shall be paid for by the customer-generator.

(d) The electric distribution company shall not require more than one meter per customer-generator. However, an additional meter may be installed under either of the following circumstances:

1. The electric distribution company may install an additional meter at its own expense if the customer-generator consents; or

2. The customer-generator may request that the EDC install a meter, in addition to the revenue meter addressed in (c) above, at the customer-generator's expense. In such a case, the EDC shall charge the customer-generator no more than the actual cost of the meter and its installation.

Amended by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

In (c), inserted "within 10 business days after the interconnection is approved in accordance with N.J.A.C. 14:8-5.4 or (n), 5.5 or 5.6, as applicable".

**14:8-4.5 Net metering reporting requirements for EDCs**

(a) Each EDC with one or more customer-generators connected to its distribution system shall submit two net metering reports per year, one covering January 1 through June 30 and one covering July 1 through December 31. The EDC shall submit the reports by August 1 and February 1, respectively.

(b) The EDC shall submit the reports required by this section electronically, in PDF format, to [oce@bpu.state.nj.us](mailto:oce@bpu.state.nj.us). In addition, the EDC may, at its discretion, submit a paper copy of the reports by hand delivery or regular mail to the Secretary, Board of Public Utilities, Two Gateway Center, Newark, New Jersey 07102. The EDC may, at its discretion, submit the net metering report together with the interconnection report required under N.J.A.C. 14:8-5.9.

(c) Each report required in (a) above shall include the following information regarding customer-generator energy input and output during the reporting period:

1. The estimated total kilowatt hours supplied to the distribution system by customer-generators and a description of the estimation methodology used; and
2. The estimated total kilowatt hours that were delivered to customer-generators through the distribution system.

(d) The report required in (a) above shall include the following information regarding credits and payments to customer-generators during the reporting period:

1. The total number of customer-generators that were paid for excess generation at the end of the customer-generators' annualized periods; and
2. The total dollar amount that the utility paid to customer-generators for excess generation at the end of the customer-generators annualized periods, separated by month.

(e) For purposes of the reporting required under this section, any estimates shall be made using Board-approved protocols unless no such protocol is available, in which case the estimates shall be accompanied by detailed calculations demonstrating how the estimates were made.

New Rule, R.2010 d.010, effective January 4, 2010.  
See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Former N.J.A.C. 14:8-4.5, General interconnection provisions, was recodified to N.J.A.C. 14:8-5.2.

**14:8-4.6 (Reserved)**

Recodified to N.J.A.C. 14:8-5.3 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Certification of customer-generator facilities".

**14:8-4.7 (Reserved)**

Recodified to N.J.A.C. 14:8-5.4 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Level 1 interconnection review".

**14:8-4.8 (Reserved)**

Recodified to N.J.A.C. 14:8-5.5 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Level 2 interconnection review".

**14:8-4.9 (Reserved)**

Recodified to N.J.A.C. 14:8-5.6 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Level 3 interconnection review".

**14:8-4.10 (Reserved)**

Recodified to N.J.A.C. 14:8-5.7 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Interconnection fees".

**14:8-4.11 (Reserved)**

Recodified to N.J.A.C. 14:8-5.8 by R.2010 d.010, effective January 4, 2010.

See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Section was "Requirements after approval of an interconnection".

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## SUBCHAPTER 5. INTERCONNECTION OF CLASS I RENEWABLE ENERGY SYSTEMS

**14:8-5.1 Interconnection definitions**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions that apply to this subchapter can be found at N.J.A.C. 14:3-1.1 and 14:8-1.2.

"Applicant" means a person who has filed an application to interconnect a customer-generator facility to an electric distribution system.

"Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated, in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE standard 1547 Section 4.1.4, which is incorporated herein by reference as amended and supplemented. IEEE standard 1547 can be obtained through the IEEE website at [www.ieee.org](http://www.ieee.org).