CHAPTER 8

RENEWABLE ENERGY AND ENERGY EFFICIENCY

Authority

N.J.S.A. 48:2-13, 48:3-48 et seq., 48:3-78 et seq. and 48:3-99 to 106.

Source and Effective Date

R.2006 d.178, effective May 15, 2006. See: 37 N.J.R. 3911(a), 38 N.J.R. 2176(a).

Chapter Expiration Date

Chapter 8, Renewable Energy and Energy Efficiency, expires on April 18, 2011.

Chapter Historical Note

Chapter 8, Railroads, was recodified as 16:23 by R.1995 d.278, effective June 5, 1995. See: 27 N.J.R. 1155(a), 27 N.J.R. 2247(a).

Chapter 8, Renewable Energy and Energy Efficiency, was adopted as new rules by R.2006 d.178, effective May 15, 2006. Subchapter 2, Interim Renewable Energy Portfolio Standards, was recodified from N.J.A.C. 14:4-8 and renamed Subchapter 2, Renewable Portfolio Standards. See: Source and Effective Date. See, also, section annotations.

Subchapter 8, Standard Offer Contracts, was adopted as new rules by R.2007 d.215, effective July 16, 2007. See: 39 N.J.R. 158(a), 39 N.J.R. 2652(a).

Subchapter 5, Appliance Efficiency, Certification, and Testing Standards, was adopted as new rules by R.2008 d.4, effective January 7, 2008. See: 39 N.J.R. 349(a), 40 N.J.R. 187(a).

Subchapter 3, Environmental Information Disclosure, and Subchapter 4, Net Metering and Interconnection Standards For Class I Renewable Energy Systems, were adopted as new rules by R.2008 d.130, effective May 19, 2008. See: 39 N.J.R. 1405(a), 40 N.J.R. 2526(a).

Subchapter 4, Net Metering and Interconnection Standards for Class I Renewable Energy Systems, was renamed Net Metering for Class I Renewable Energy Systems; Subchapter 5, Appliance Efficiency, Certification, and Testing Standards was recodified to Subchapter 7 and renamed Appliance Efficiency, Certification and Testing Standards, and Subchapter 5, Interconnection of Class I Renewable Energy Systems, was adopted as new rules by R.2010 d.010, effective January 4, 2010. See: 41 N.J.R. 2215(a), 42 N.J.R. 78(a).

Appendix H of Subchapter 3, Label Update and Distribution Timing Requirements, was repealed by R.2010 d.011, effective January 4, 2010. See: 41 N.J.R. 2212(a), 42 N.J.R. 76(a).

CHAPTER TABLE OF CONTENTS

SUBCHAPTER 1. RENEWABLE ENERGY GENERAL PROVISIONS AND DEFINITIONS

- 14:8-1.1 Applicability
- 14:8-1.2 Definitions

SUBCHAPTER 2. RENEWABLE PORTFOLIO STANDARDS

- 14:8-2.1 Purpose and scope
- 14:8-2.2 Definitions
- 14:8-2.3 Minimum percentage of renewable energy required
- 14:8-2.4 Compliance with solar electric generation requirements
- 14:8-2.5 Compliance with class I renewable energy requirements Compliance with class II renewable energy requirements
- 14:8-2.7 Requirements that apply to both class I and class II renewable energy

- 14:8-2.8 Renewable Energy Certificates (RECs)
- 14:8-2.9 Board issuance of RECs
- 14:8-2.10 Alternative compliance payments (ACPs and SACPs)
- 14:8-2.11 Demonstrating compliance, reporting and recordkeeping
- 14:8-2.12 Enforcement

SUBCHAPTER 3. ENVIRONMENTAL INFORMATION DISCLOSURE

- 14:8-3.1 Scope
- 14:8-3.2 (Reserved)
- 14:8-3.3 Definitions
- 14:8-3.4 Environmental information required
- 14:8-3.5 Determining the fuel and emissions characteristics
- 14:8-3.6 Methodology for developing a disclosure label
- 14:8-3.7 Disclosure information updating and reporting requirements
- 14:8-3.8 Environmental disclosure distribution
- 14:8-3.9 (Reserved)
- 14:8-3.10 Verification and penalties

APPENDIX A. LABEL BASED ON ACTUAL GENERATION DATA

APPENDIX B. LABEL FOR NEW PRODUCT BASED ON AN ENVIRONMENTAL CLAIM

APPENDIX C. LABEL FOR NEW PRODUCT BASED ON DEFAULT INFORMATION

APPENDIX D. (RESERVED)

APPENDIX E. DEFINITIONS OF FUEL TYPES

APPENDIX F. BENCHMARK AND DEFAULT VALUES

SUBCHAPTER 4. NET METERING FOR CLASS I RENEWABLE ENERGY SYSTEMS

- 14:8-4.1 Scop
- 14:8-4.2 Net metering definitions
- 14:8-4.3 Net metering general provisions, annualized period selection
- 14:8-4.4 Meters and metering
- 14:8-4.5 Net metering reporting requirements for EDCs
- 14:8-4.6 through 14:8-4.11 (Reserved)

SUBCHAPTER 5. INTERCONNECTION OF CLASS I RENEWABLE ENERGY SYSTEMS

- 14:8-5.1 Interconnection definitions
- 14:8-5.2 General interconnection provisions
- 14:8-5.3 Certification of customer-generator interconnection equipment
- 14:8-5.4 Level 1 interconnection review
- 14:8-5.5 Level 2 interconnection review
- 14:8-5.6 Level 3 interconnection review
- 14:8-5.7 Interconnection fees
- 14:8-5.8 Requirements after approval of an interconnection
- 14:8-5.9 Interconnection reporting requirements for EDCs

SUBCHAPTER 6. (RESERVED)

SUBCHAPTER 7. APPLIANCE EFFICIENCY, CERTIFICATION AND TESTING STANDARDS

- 14:8-7.1 Definitions
- 14:8-7.2 Purpose and scope
- 14:8-7.3 Standards and testing for commercial clothes washers
- 14:8-7.4 Standards and testing for commercial refrigerator, freezer and refrigerator-freezer equipment
- 14:8-7.5 Standards and testing for air-cooled central air conditioners and air-cooled central air conditioning heat pumps

- 14:8-7.6 Standards and testing for low-voltage dry type distribution transformers
- 14:8-7.7 Standards and testing for exit signs, torchieres, traffic signals, and unit heaters
- 14:8-7.8 Certification
- 14:8-7.9 Enforcement

SUBCHAPTER 8. STANDARD OFFER CONTRACTS

- 14:8-8.1 Applicability
- 14:8-8.2 Definitions
- 14:8-8.3 Term of existing Standard Offer contracts

SUBCHAPTER 1. RENEWABLE ENERGY GENERAL PROVISIONS AND DEFINITIONS

14:8-1.1 Applicability

- (a) This chapter applies to the following, as these terms are defined at N.J.A.C. 14:4-1.2 and 14:8-1.2:
 - 1. Electric public utilities, also known as EDCs;
 - 2. Electric power suppliers;
 - 3. BGS providers;
 - 4. Renewable energy customer-generators; and
 - 5. Clean power marketers.

14:8-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional definitions that apply to this chapter can be found at N.J.A.C. 14:3-1.1 and 14:4-1.2.

"Class I renewable energy" means electric energy produced from solar technologies, photovoltaic technologies, wind energy, fuel cells powered by renewable fuels, geothermal technologies, wave or tidal action, and/or methane gas from landfills or a biomass facility, provided that the biomass is cultivated and harvested in a sustainable manner. Types of class I renewable energy that qualify for use in meeting the requirements of this subchapter are set forth at N.J.A.C. 14:8-2.5.

"Class II renewable energy" means electric energy produced at a resource recovery facility or hydro power facility, provided that such facility is located where retail competition is permitted and provided further that the Commissioner of Environmental Protection has determined that such facility meets the highest environmental standards and minimizes any impacts to the environment and local communities. Types of class II renewable energy that qualify for use in meeting the requirements of this subchapter are set forth at N.J.A.C. 14:8-2.6.

"Fossil fuel" means natural gas, petroleum, coal, or any form, of solid, liquid, or gaseous fuel derived from such material. "Net metering" means a system of metering electricity in which the EDC:

- 1. Credits a customer-generator at the full retail rate for each kilowatt-hour produced by a class I renewable energy system installed on the customer-generator's side of the electric revenue meter, up to the total amount of electricity used by that customer during an annualized period; and
- 2. Compensates the customer-generator at the end of the annualized period for any remaining credits, at a rate equal to the supplier/provider's avoided cost of wholesale power.

"NJDEP" means the New Jersey Department of Environmental Protection.

"Renewable energy" means class I renewable energy or class II renewable energy, as those terms are defined in this section.

"Societal benefits charge" or "SBC" means a charge imposed by an electric public utility, at a level determined by the Board, in accordance with N.J.S.A. 48:3-60.

"Solar electric generation" means creation of electricity using a system that employs solar radiation to produce energy that powers an electric generator. Solar electric generation includes technologies that utilize the photovoltaic effect. Solar electric generation is a type of class I renewable energy.

"Supplier/provider" means an electric power supplier or a basic generation service provider, as these terms are defined at N.J.A.C. 14:4-1.2.

SUBCHAPTER 2. RENEWABLE PORTFOLIO STANDARDS

14:8-2.1 Purpose and scope

- (a) Each supplier/provider, as defined at N.J.A.C. 14:8-1.2, that sells electricity to retail customers in New Jersey, shall include in its electric energy portfolio electricity generated from renewable energy sources. This subchapter is designed to encourage the development of renewable sources of electricity and new, cleaner generation technology; minimize the environmental impact of air pollutant emissions from electric generation; reduce possible transport of emissions and minimize any adverse environmental impact from deregulation of energy generation; and support the reliability of the supply of electricity in New Jersey.
- (b) This subchapter governs the retail electricity sales of each supplier/provider, as defined in N.J.A.C. 14:8-1.2. This subchapter does not govern installed capacity obligations, as defined at N.J.A.C. 14:8-2.2.
- (c) This subchapter does not apply to a private or government aggregator that contracts for electric generation service

or electric related services, either separately or bundled, for its own facilities or on behalf of other business and residential customers in this State. This subchapter does not apply to an energy agent, as defined at N.J.A.C. 14:8-1.2. A supplier/provider that is contractually obligated to sell electricity to an

aggregator shall comply with this subchapter by including the amount sold to the aggregator as part of its energy portfolio.

Amended by R.2004 d.151, effective April 19, 2004. See: 35 N.J.R. 4445(a), 36 N.J.R. 2053(b). Rewrote the section. EDC shall inspect the customer-generator facility and shall arrange to witness any commissioning tests required under IEEE Standard 1547. The EDC and the applicant shall select a date by mutual agreement for the EDC to witness commissioning tests.

- (j) Provided that the customer-generator facility passes any required commissioning tests satisfactorily, the EDC shall notify the applicant in writing, within three business days after the tests, of one of the following:
 - 1. The interconnection is approved and the customergenerator facility may begin operation; or
 - 2. The facilities study identified necessary construction that has not been completed, the date upon which the construction will be completed and the date when the customer-generator facility may begin operation.
- (k) If the commissioning tests are not satisfactory, the customer-generator shall repair or replace the unsatisfactory equipment and reschedule a commissioning test pursuant to (i) above.
- (1) Each EDC shall include in any tariff or published procedures for level 3 interconnection review each element of an impact study, including a description of the review the EDC will undertake for each element. An impact study shall include the following elements, as applicable:
 - 1. A load flow study;
 - 2. A short-circuit study;
 - 3. A circuit protection and coordination study;
 - 4. The impact on the operation of the electric distribution system;
 - 5. A stability study (and the conditions that would justify including this element in the impact study);
 - 6. A voltage collapse study (and the conditions that would justify including this element in the impact study); and
 - 7. Additional elements, if approved in writing by Board staff prior to the impact study.

Recodified from N.J.A.C. 14:8-4.9 and amended by R.2010 d.010, effective January 4, 2010.

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

In (a), deleted "has a capacity less than two megawatts and" preceding "does", and updated the N.J.A.C. references; and in the introductory paragraph of (c), updated the N.J.A.C. reference. Former N.J.A.C. 14:8-5.6, Standards and testing for low-voltage dry type distribution transformers, recodified to N.J.A.C. 14:8-7.6.

14:8-5.7 Interconnection fees

(a) An EDC or supplier/provider shall not charge an application or other fee to an applicant that requests level 1 interconnection review. However, if an application for level 1 interconnection review is denied because it does not meet the requirements for level 1 interconnection review and the ap-

plicant resubmits the application under another review procedure in accordance with N.J.A.C. 14:8-5.4(p), the EDC may impose a fee for the resubmitted application, consistent with this section.

- (b) For a level 2 interconnection review, the EDC may charge fees of up to \$50.00 plus \$1.00 per kilowatt of the customer-generator facility's capacity, plus the cost of any minor modifications to the electric distribution system or additional review, if required under N.J.A.C. 14:8-5.5(o)3 or 4. Costs for such minor modifications or additional review shall be based on EDC estimates and shall be subject to case-by-case review by the Board or its designee. Costs for engineering work done as part of any additional review shall not exceed \$100.00 per hour.
- (c) For a level 3 interconnection review, the EDC may charge fees of up to \$100.00 plus \$2.00 per kilowatt of the customer-generator facility's capacity, as well as charges for actual time spent on any impact and/or facilities studies required under N.J.A.C. 14:8-5.6. Costs for engineering work done as part of an impact study or facilities study shall not exceed \$100.00 per hour. If the EDC must install facilities in order to accommodate the interconnection of the customergenerator facility, the cost of such facilities shall be the responsibility of the applicant.

Recodified from N.J.A.C. 14:8-4.10 and amended by R.2010 d.010, effective January 4, 2010.

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

Updated the N.J.A.C. references throughout; and in (a), deleted a comma preceding "and the applicant". Former N.J.A.C. 14:8-5.7, Standards and testing for exit signs, torchieres, traffic signals, and unit heaters, recodified to N.J.A.C. 14:8-7.7.

14:8-5.8 Requirements after approval of an interconnection

- (a) Once the customer-generator has met all requirements for interconnection approval under N.J.A.C. 14:8-5.4, 5.5 or 5.6, the EDC shall notify the customer-generator in writing that the customer-generator is authorized to energize the customer-generator facility.
- (b) An EDC shall not require an applicant whose facility meets the criteria for interconnection approval under the level 1 or level 2 interconnection review procedure required pursuant to N.J.A.C. 14:8-5.4 and 5.5 to install additional controls or external disconnect switches not included in the interconnection equipment, to perform or pay for additional tests, or to purchase additional liability insurance, except if agreed to by the applicant.
- (c) An EDC shall not charge any fee or other charge for connecting to the EDC's equipment or for operation of a customer-generator facility for the purposes of net metering, except for the fees provided for under this subchapter.
- (d) Once a net metering interconnection has been approved under this subchapter, the EDC shall not require a customer-

8-21 Supp. 1-4-10

14:8-5.8 PUBLIC UTILITIES

generator to test or perform maintenance on its facility except for the following:

- 1. An annual test in which the customer-generator's facility is disconnected from the electric distribution company's equipment to ensure that the facility stops delivering power to the grid;
- 2. Any manufacturer-recommended testing or maintenance; and
- 3. Any post-installation testing necessary to ensure compliance with IEEE 1547 or to ensure safety.
- (e) When a customer-generator facility approved through a level 2 or level 3 review undergoes maintenance or testing in accordance with the requirements of this subchapter, the customer-generator shall retain written records documenting the maintenance and the results of testing. No recordkeeping is required for maintenance or testing performed on a customer-generator facility approved through a level 1 review.
- (f) An EDC shall have the right to inspect a customer-generator's facility after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the customer-generator. If the EDC discovers that the customer-generator's facility is not in compliance with the requirements of this subchapter, and the noncompliance adversely affects the safety or reliability of the electric distribution system, the EDC may require the customer-generator to disconnect the customer-generator facility until compliance is achieved.

Recodified from N.J.A.C. 14:8-4.11 and amended by R.2010 d.010, effective January 4, 2010.

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

Added new (a); recodified former (a) through (e) as (b) through (f); in (b), updated the N.J.A.C. references, and substituted "interconnection equipment" for "equipment package"; and in (d)1, substituted the second occurrence of "facility" for "inverter". Former N.J.A.C. 14:8-5.8, Certification, recodified to N.J.A.C. 14:8-7.8.

14:8-5.9 Interconnection reporting requirements for EDCs

- (a) Each EDC with one or more customer-generators connected to its distribution system shall submit two interconnection 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. 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 interconnection report together with the net metering report required under N.J.A.C. 14:8-4.5.
- (c) Each report shall contain the following information regarding customer-generator facilities that interconnected

with the EDC's distribution system for the first time during the reporting period, listed by type of renewable energy technology:

- 1. The number of customer-generators that interconnected;
- 2. The estimated total rated generating capacity of all customer-generator facilities that interconnected; and
- 3. The total cumulative number of customer-generators that interconnected between June 15, 2001 and the end of the reporting period, including the customer-generators in (c)1 above.
- (d) The information required under (c) above shall be listed by type of class I renewable energy, as set forth at N.J.A.C. 14:8-2.5(b), as follows:
 - 1. Solar PV technology;
 - 2. Wind technology;
 - 3. Biomass; or
 - 4. A renewable energy technology not listed at (d)1 through 3 above. In such a case, the report shall include a description of the renewable energy technology.

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. 14:8-5.9, Enforcement, recodified to N.J.A.C. 14:8-7.9.

SUBCHAPTER 6. (RESERVED)

SUBCHAPTER 7. APPLIANCE EFFICIENCY, CERTIFICATION AND TESTING STANDARDS

14:8-7.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise. In addition, definitions that apply to this subchapter can be found at N.J.A.C. 14:4-1.2, and at N.J.A.C. 14:3-1.1.

"Air-cooled air conditioner" means an air conditioner for commercial application that is rated at or above 240,000 Btu per hour and below 760,000 Btu per hour in cooling capacity that uses an air-cooled condenser.

"Air-cooled central air conditioning heat pump" means a type of "air-cooled very large commercial package air conditioning and heating equipment," as that term is defined at N.J.S.A. 48:3-99.

"Btu" means British thermal unit, a standard unit of energy. One Btu is equal to the amount of heat required to raise the temperature of one pound of liquid water by one

Supp. 1-4-10 8-22