

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

220 CMR 8.00: SALES OF ELECTRICITY BY QUALIFYING FACILITIES AND ON-SITE GENERATING FACILITIES TO DISTRIBUTION COMPANIES, AND SALES OF ELECTRICITY BY DISTRIBUTION COMPANIES TO QUALIFYING FACILITIES AND ON-SITE GENERATING FACILITIES

Section

- 8.01: Purpose and Scope
- 8.02: Definitions
- 8.03: General Terms and Conditions
- 8.04: Interconnection, Metering, and Payment
- 8.05: Terms and Conditions for Sales of Electricity by Qualifying Facilities and On-site Generating Facilities to Distribution Companies
- 8.06: Terms and Conditions for Sales of Electricity by Distribution Companies to Qualifying Facilities and On-site Generating Facilities
- 8.07: Reporting Requirements
- 8.08: Miscellaneous

8.01: Purpose and Scope

(1) Purpose. 220 CMR 8.00 establishes regulations governing the rates, terms, and conditions of sales of electricity by qualifying facilities and on-site generating facilities to distribution companies. Similarly, 220 CMR 8.00 establishes regulations governing the rates, terms, and conditions of sales of electricity by distribution companies to qualifying facilities and on-site generating facilities. 220 CMR 8.00 also establishes regulations:

- (a) for the interconnection of qualifying facilities and on-site generating facilities to distribution company systems;
- (b) for the metering of qualifying facilities and on-site generating facilities; and
- (c) regarding payment to qualifying facilities and on-site generating facilities.

220 CMR 8.00 implements the provisions of the Public Utility Regulatory Policies Act of 1978 (PURPA), Title II, Sections 201 and 210, and regulations promulgated by the Federal Energy Regulatory Commission (FERC) in 18 C.F.R. 292 (Section 292).

(2) Scope.

- (a) 220 CMR 8.00 applies to sales and purchases between qualifying facilities, on-site generating facilities, and distribution companies. Nothing in 220 CMR 8.00 limits the ability of any party to agree to rates, terms, or conditions of purchase which differ from the rates, terms, or conditions which would otherwise be required by 220 CMR 8.00.

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

- (b) 220 CMR 8.00 addresses the distribution company's obligation to interconnect qualifying facilities and on-site generating facilities. 220 CMR 8.00 prescribes interconnection standards and assign cost responsibilities.
- (c) 220 CMR 8.00 addresses metering requirements for qualifying facilities and on-site generating facilities.
- (d) 220 CMR 8.00 addresses the payment method for qualifying facilities.
- (e) 220 CMR 8.00 prescribes reporting requirements for distribution companies with respect to interconnected qualifying facilities and on-site generating facilities.

8.02: Definitions

Distribution Company means an electric utility company engaging in the distribution of electricity owning, operating, or controlling distribution facilities and subject to the ratemaking authority of the Department of Public Utilities (Department); provided, however, a distribution company shall not include any entity that owns or operates plant or equipment used to produce electricity, steam, and chilled water, or any affiliate engaged solely in the provision of such electricity, steam, and chilled water, where the electricity produced by such entity or its affiliate is primarily for the benefit of hospitals and non-profit educational institutions, and where such plant and equipment was in operation prior to January 1, 1986.

Distribution means the delivery of electricity over lines which operate at a voltage level typically equal to or greater than 110 volts and less than 69,000 volts to an end-use customer within the commonwealth.

Distribution Facility means plant or equipment used for the distribution of electricity and which is not a transmission facility, a cogeneration facility, or a small power production facility.

Independent System Operator or ISO means ISO New England, Inc. authorized by the Federal Energy Regulatory Commission to operate the New England bulk power system and administer New England's organized wholesale electricity market pursuant to the ISO Tariff and operation agreements with transmission owners.

NEPOOL means the New England Power Pool, and its successors.

On-site Generating Facility means any plant or equipment that is used to produce, manufacture, or otherwise generate electricity and that is not a transmission facility and that has a design capacity of 60 KW or less.

Qualifying Facility means small power producers and cogenerators that meet the

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

criteria specified by FERC in 18 C.F.R. §§ 292.203(a) and (b).

Short-run Rate means the hourly market clearing price for energy and the monthly market clearing price for capacity, as determined by the ISO and its successors.

Transmission means the delivery of power over lines that operate at a voltage level typically equal to or greater than 69,000 volts from generating facilities across interconnected high voltage lines to where it enters a distribution system.

Transmission Facility means plant or equipment used for the transmission of electricity, as determined by the FERC pursuant to federal law and regulation.

8.03: General Terms and Conditions

(1) Power Purchase Contracts.

(a) Nothing in 220 CMR 8.00 shall be construed to affect, modify or amend terms and conditions of any existing Qualifying Facility's contract.

(b) A Qualifying Facility may sell its generation output to a Distribution Company under one of the following arrangements:

1. A standard contract available to all Qualifying Facilities for sales at the Short-run Rate only; or
2. A negotiated contract executed by a Qualifying Facility and a Distribution Company.

(c) When a Qualifying Facility submits an offer to sell generation output to a Distribution Company, the Distribution Company must respond to the offer within 30 days of receipt of the offer. If, within 90 days of a Qualifying Facility submitting an offer to a Distribution Company, there is a failure to agree to terms, the Qualifying Facility may petition the Department to investigate the reasonableness of the Distribution Company's actions.

(2) Other General Terms and Conditions.

(a) Information, Rules, and Requirements. A Qualifying Facility shall comply with any and all applicable NEPOOL and ISO information requests, rules, and requirements that are necessary for a Qualifying Facility's generation output to be sold to the ISO power exchange by a Distribution Company. The Qualifying Facility shall provide such information to the Distribution Company in a timely manner.

(b) Fines, Penalties, and Sanctions. In the event that a fine, penalty, or sanction is levied on a Distribution Company by NEPOOL or the ISO as a result of a Qualifying Facility's failure to comply with a NEPOOL or ISO information request, rule, or requirement, then the Qualifying Facility shall be responsible for the costs of such fines, penalties, or

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

sanctions imposed by NEPOOL or the ISO on the Distribution Company.

8.04: Interconnection, Metering, and Payment

(1) Distribution Company Procedures for Interconnection, Metering, and Payment. Each Distribution Company shall file with the Department written procedures addressing provisions 220 CMR 8.04(2) through (9), within 60 days of the effective date of 220 CMR 8.00.

(2) Inspection. At the request of a Qualifying Facility or an On-site Generating Facility, a Distribution Company shall conduct an initial site inspection of the proposed Qualifying Facility or On-site Generating Facility to determine the equipment necessary for protecting the Distribution Company's system, and, where necessary to estimate the cost of additional engineering studies that will be used to provide a more accurate assessment of interconnection costs. Such initial inspection shall be made within 45 days of the request by the Qualifying Facility or On-site Generating Facility at the Distribution Company's expense.

(3) Interconnection Cost Estimate. If a thorough estimate of interconnection costs cannot be determined after the initial site inspection, the Distribution Company shall provide a complete estimate of interconnection costs upon request by the Qualifying Facility or On-site Generating Facility. The cost of providing this estimate, including engineering studies where necessary, shall be paid by the Qualifying Facility or On-site Generating Facility to the Distribution Company. Each Distribution Company shall develop, for public review, written procedures for estimating interconnection costs. If the parties cannot reach an agreement on interconnection costs within 90 days of the Qualifying Facility's or the On-site Generating Facility's request for an estimate, the parties may petition the Department to review the reasonableness of the Distribution Company's interconnection cost estimate.

(4) Standards for Interconnection.

- (a) All Qualifying Facility and On-site Generating Facility interconnections shall provide protection against the following:
 - 1. Inadvertent and unwanted reenergization of a Distribution Company dead line or bus;
 - 2. Interconnection while out of synchronization;
 - 3. Ground faults and phase faults;
 - 4. Frequency outside permissible limits; and
 - 5. Voltage generated outside permissible limits.
- (b) Protections proposed for implementation, in addition to those listed in 220 CMR 8.04(4)(a), require a thorough explanation,

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

particularly if applicable to On-site Generating Facilities.

(c) The Qualifying Facility or On-site Generating Facility equipment must be compatible with the character of service supplied by the Distribution Company at the location of the Qualifying Facility or On-site Generating Facility.

(d) Prior to delivering power to a Distribution Company, the Qualifying Facility or On-site Generating Facility shall provide the Distribution Company with written certification by qualified personnel or from a qualified testing agency that protective devices and related equipment are installed and have been successfully tested.

(5) Distribution Company Right to Inspect. The Distribution Company has the right to periodically inspect, test, and certify in writing the accuracy of any metering equipment owned by the Qualifying Facility or the On-site Generating Facility. The Distribution Company has the right to periodically inspect, test, and certify in writing the Qualifying Facility's or the On-site Generating Facility's compliance with the protection standards described in 220 CMR 8.04(4)(a). The Distribution Company has the right to inspect and test the electrical interface at any time to certify its proper operation. There will be no charge to the Qualifying Facility or On-site Generating Facility for such inspections, tests, or certifications by the Distribution Company.

(6) Conditions for Interconnection.

(a) Distribution Company's Obligation to Interconnect. A Distribution Company is not required to interconnect with a Qualifying Facility or On-site Generating Facility until 90 days after the Qualifying Facility or On-site Generating Facility has notified the Distribution Company in writing that it intends to interconnect with the Distribution Company's system. Upon notice to the Qualifying Facility or On-site Generating Facility and the Department, the Distribution Company may petition the Department for additional time when extensive modifications or additions to the Distribution Company transmission or distribution system are required to accommodate an interconnection. Additional time may also be granted by the Department if a petition under 220 CMR 8.03(1)(c) or 220 CMR 8.04(3) is before the Department. The Department, upon a petition by a Qualifying Facility or On-site Generating Facility, or on its own motion, may, after notice and public hearing, order a Distribution Company to interconnect with a Qualifying Facility or On-site Generating Facility in a timely manner.

(b) Notice of Intent to Interconnect. A Qualifying Facility or On-site Generating Facility shall provide the following information, in writing, to the Distribution Company at the time it files its notice of intent to interconnect:

1. The name and address of the applicant and location of the

Qualifying Facility or On-site Generating Facility;

2. A brief description of the type of Qualifying Facility or On-site Generating Facility, including a statement indicating whether such Qualifying Facility or On-site Generating Facility is a small power production facility or a cogeneration facility;

3. The primary energy source used or to be used by the Qualifying Facility or On-site Generating Facility;

4. The power production capacity of the Qualifying Facility or On-site Generating Facility and the maximum net energy that may be delivered to the Distribution Company's system;

5. The owners of the Qualifying Facility or On-site Generating Facility, including the percentage ownership by any electric utility or by any public utility holding company, or by any entity owned by either;

6. The expected date of installation and the anticipated on-line date;

7. The anticipated purchase and sale of power to the Distribution Company (simultaneous purchase and sale, net purchase and sale, net metering, or other method);

8. A description of any power conditioning equipment to be located between the Qualifying Facility or On-site Generating Facility and the Distribution Company's system; and

9. A description of the type of generator used in the Qualifying Facility or On-site Generating Facility installation (synchronous, induction, photovoltaic, or other).

(7) Interconnection Costs. The Qualifying Facility or On-site Generating Facility shall reimburse the Distribution Company for the incremental cost, *i.e.*, the costs resulting solely from interconnecting the power production equipment with the Distribution Company's system, including meter installation where applicable. Such costs are to be calculated as follows:

(a) The incremental cost of interconnection shall be the sum of all costs incurred by the Distribution Company that are a direct result of connecting the Qualifying Facility or On-site Generating Facility power production equipment to the Distribution company's system. This sum includes the costs of installation, the operations and maintenance expense, property taxes, and all incremental modifications to the distribution and transmission system to the extent that such incremental modifications are for the sole benefit of the Qualifying Facility or On-site Generating Facility and are necessary to incorporate its generation into the Distribution Company's system. Costs of system improvements and equipment installed to provide retail service to the Qualifying Facility or On-site Generating Facility consistent with each Distribution Company's Terms and Conditions for Distribution Service shall be excluded from

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

the incremental cost of interconnection.

(b) In the case where, during the term of a contract, a Qualifying Facility or On-site Generating Facility will purchase electricity from the interconnecting Distribution Company under a standard rate tariff or special contract that includes interconnection costs, the incremental costs of interconnection shall be the difference between the interconnection cost of the Qualifying Facility or On-site Generating Facility and the customer interconnection costs recovered through the tariff or special contract.

(c) For Qualifying Facilities selling electricity to the Distribution Company under Short-run Rates pursuant to 220 CMR 8.05, interconnection costs may be amortized over a period of up to three years, with the period of amortization chosen by the Qualifying Facility. If the charges are amortized, the Qualifying Facility will pay a monthly charge designed to recover the interconnection costs plus interest computed at the Distribution Company's average weighted cost of capital. The Qualifying Facility may instead elect to pay all interconnection costs at the time of interconnection.

(8) Metering. The Qualifying Facility or On-site Generating Facility shall furnish and install the necessary meter socket and wiring in accordance with accepted electrical standards. The Distribution Company shall furnish, read, and maintain the metering equipment.

(a) Qualifying Facilities with a design capacity of one megawatt (MW) or greater shall use bidirectional, interval recording metering with remote access capability. Such remote access capability may include telemetering to the extent required by NEPOOL standards. Such meter shall be in compliance with NEPOOL standards and requirements for meters on generation resources. The interval recording metering will be controlled, tested, maintained, and read by the Distribution Company.

(b) Qualifying Facilities with a design capacity greater than 60 KW but less than one MW shall use a metering system that can record sales to the Distribution Company.

(c) Qualifying Facilities with a design capacity of 60 KW or less shall use a metering system that can record sales to the Distribution Company.

(d) On-site Generating Facilities with a design capacity of 60 KW or less that net meter shall use a standard service meter capable of running backwards.

(e) Where the Qualifying Facility or On-site Generating Facility chooses to own the meter, the Qualifying Facility or On-site Generating Facility shall pay to the Distribution Company a monthly charge to cover meter maintenance and incremental reading and billing costs.

(f) Where the Qualifying Facility or On-site Generating Facility

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

chooses to have the Distribution Company own the meter, the Qualifying Facility or On-site Generating Facility shall pay to the Distribution Company a monthly charge which covers taxes, meter maintenance, incremental reading and billing costs, the allowable return on the invoice cost of the meter, and the depreciation of the meter.

(9) Payment.

(a) A Qualifying Facility or On-site Generating Facility selling power to a Distribution Company may choose to receive a check from the Distribution Company as payment for power supplied or may have payment credited towards its bill from the Distribution Company.

(b) Costs charged to a Qualifying Facility or On-site Generating Facility for interconnection equipment, meters, and meter reading shall be the standard charges approved by the Department in a tariff filed by the Distribution Company. Where standard charges are not applicable, the Distribution Company shall charge the Qualifying Facility or On-site Generating Facility the Distribution Company's invoice cost of such equipment. Interconnection costs which are not standardized or invoiced shall be estimated on a case-by-case basis.

8.05: Terms and Conditions for Sales of Electricity by Qualifying Facilities and On-site Generating Facilities to Distribution Companies

(1) Eligibility. All Qualifying Facilities, regardless of size, are eligible to receive Short-run Rates.

(2) Standard Terms of Purchase.

(a) Qualifying Facilities that have a design capacity of one MW or greater shall have their output metered and purchased at rates equal to the payments received by the Distribution Company from the ISO power exchange for such output for the hours in which the Qualifying Facility generated electricity in excess of its requirements.

(b) Qualifying Facilities with a design capacity greater than 60 KW but less than one MW shall have their output metered and purchased at rates equal to the arithmetic average of the Short-run Energy rate in the prior calendar month for the KWH which the Qualifying Facility generated electricity in excess of its requirements

(c) Qualifying Facilities with a design capacity of 60 KW or less shall have the option to have their output metered and purchased at rates equal to the arithmetic average of the Short-run Energy rate in the prior calendar month for the KWH which the Qualifying Facility generated electricity in excess of its requirements. Qualifying Facilities with a design capacity of 60 KW or less shall have the option to run their meters backward and may choose to receive a credit from the

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

Distribution Company equal to the arithmetic average of the Short-run Energy rate in the prior calendar month for any month during which there was a positive net difference between KWH generated and consumed. Such credit shall appear on the following month's bill. Distribution Companies shall be prohibited from imposing special fees on these customers, such as backup charges and demand charges, or additional controls, or liability insurance, as long as the facility meets the Interconnection Standards and all relevant safety and power quality standards. These customers must still pay the minimum charge for Distribution Service (as shown in an appropriate rate schedule on file with the Department) and all other charges for each net KWH delivered by the Distribution Company in each billing period.

- (3) Net Metering. Certain On-site Generating Facilities may elect net metering consistent with 220 CMR 18.00.
- (4) Standard Contracts. Each Distribution Company must offer a Standard Contract providing for payment at the Short-run Rate to any Qualifying Facility making a request for such a contract.
- (5) Effective Date for Short-run Energy and Capacity Rates. Payment of ISO power exchange Short-run energy and capacity rates shall take effect on the first day of the month immediately following the effective date of 220 CMR 8.00. For the period prior to such effective date, Distribution Companies shall pay Qualifying Facility rates currently approved by the Department.
- (6) Line-Loss Factors. Energy for purchases shall be adjusted to reflect the costs or savings in line losses that result from purchases from the Qualifying Facility. Each Distribution Company shall file with the Department its line loss factors. Line loss factors shall be in accordance with the NEPOOL Market Rules and Procedures.
- (7) Short-run Capacity or Reserves Payments. A Distribution Company shall make payments to a Qualifying Facility for capacity and/or reserves-related products if the sale is recognized by NEPOOL as a capacity and/or reserves-related product sale. The Distribution Company shall pay rates equal to the payments received for the sale of any capacity and/or reserves-related products associated with such Qualifying Facility output to the ISO power exchange.

8.06: Terms and Conditions for Sales of Electricity by Distribution Companies to Qualifying Facilities and On-site Generating Facilities

- (1) Each Distribution Company shall, upon request by a Qualifying Facility or On-site Generating Facility, supply to a Qualifying Facility or On-site

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

Generating Facility supplementary, back-up, maintenance, and interruptible power pursuant to 18 C.F.R. 292.305(b) under rate schedules applicable to all customers, regardless of whether they generate their own power.

(2) Where it is possible for a Qualifying Facility or On-site Generating Facility to receive power under the applicability clauses of more than one rate schedule, the Qualifying Facility or On-site Generating Facility may choose the rate schedule under which it will be served.

8.07: Reporting Requirements

(1) Each Distribution Company shall file with the Department a report of new Qualifying Facility and On-site Generating Facility activity in a calendar year, by April 1st of the subsequent year. Such filing shall include:

- (a) The name and address of the owner, and the address where the Qualifying Facility or On-site Generating Facility is located;
- (b) A brief description of the type of Qualifying Facility or On-site Generating Facility;
- (c) The primary energy source used by the Qualifying Facility or On-site Generating Facility;
- (d) The date of installation and the on-line date;
- (e) The method of delivering power to the Distribution Company (contract or net metering);
- (f) The design capacity of the Qualifying Facility or On-site Generating Facility;
- (g) A brief discussion identifying any Qualifying Facility or On-site Generating Facility that was denied interconnection by the Distribution Company, including a statement of reasons for such denial.

(2) Each Distribution Company shall file with the Department a report describing the incremental reductions in the purchases of electricity during a calendar year due to customer operations of, or purchases from, on-site renewable energy technologies; fuel cells; cogeneration equipment; On-site Generating Facilities eligible for net metering; or cogeneration facilities eligible for net metering. Such filing shall be submitted to the Department by April 1st of the subsequent year, and it shall include:

- (a) A brief discussion of the incremental reductions in purchases of electricity during the calendar year due to customer operations of, or purchases from:
 - 1. on-site renewable energy technologies;
 - 2. fuel cells;
 - 3. cogeneration equipment with a combined heat and power system efficiency of at least 50% based upon the higher heating value of the fuel used in the system;

220 CMR: DEPARTMENT OF PUBLIC UTILITIES

4. On-site Generation Facilities eligible for net metering; or
5. cogeneration facilities eligible for net metering;
- (b) A brief discussion of the effect of 220 CMR 8.07(2)(a) on the Distribution Company's transition charge, including a quantitative estimate of the lost dollar contribution to the Distribution Company's transition charge during the calendar year;
- (c) A brief discussion of the effect of 220 CMR 8.07(2)(a) on the Distribution Company's kilowatt hour sales during the calendar year;
- (d) An estimate of the percent of the Distribution Company's gross annual revenues that have been lost during the calendar year due to 220 CMR 8.07(2)(a);
- (e) A brief narrative identifying all customers that have given notice to the Distribution Company of their plans to reduce electricity purchases due to operations of, or purchases from a facility described in 220 CMR 8.07(2)(a).

8.08: Miscellaneous

- (1) Each Distribution Company shall file with the Department and maintain on file for inspection at its place of business the current rates, prices, charges, and terms and conditions established pursuant to 220 CMR 8.00 *et seq.*
- (2) If, at any time, a Qualifying Facility or On-site Generating Facility is aggrieved by an action of a Distribution Company pursuant to 220 CMR 8.00, the Qualifying Facility or On-site Generating Facility may petition the Department to investigate such action. The Department may, at its discretion, open an investigation and, if it deems necessary, hold public hearings regarding any such petition.
- (3) The Department may, where appropriate, grant an exception from any provision of 220 CMR 8.00.

REGULATORY AUTHORITY

220 CMR 8.00: M.G.L. c. 25, § 5; c. 164, § 76C.