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January 20, 2009

Office of Legislative Services Division of Administrative Rules 25 Capitol Street State House Annex, Room 219 Concord, N.H. 03301-6312

Re: Doc. # 9353 (Interim)

Puc 900

Dear Ms. Holahan:

Pursuant to RSA 541-A:15, I-a, I hereby certify that the enclosed rules are the same in substance as the rules originally filed with the Office of Legislative Services, Division of Administrative Rules.

I further certify that the enclosed rules, as edited for format by the Division of Administrative Rules, is the official version of these rules which this agency is required to publish in an 8 ½ X 11 inch loose-leaf format as part of the New Hampshire Code of Administrative Rules, under Chapter 5 of the New Hampshire Drafting and Procedure Manual for Administrative Rules and RSA 541-A:15, I.

Sincerely,

Thomas B. Getz

Chairman

Encl.

TABLE OF CONTENTS

CHAPTER Puc 900 NET METERING FOR CUSTOMER-OWNED RENEWABLE ENERGY GENERATION RESOURCES OF 25 KILOWATT OR LESS

PART Puc 901 PURPOSE

Section Puc 901.01 Purpose

PART Puc 902 DEFINITIONS

Section Puc 902.01 Distribution Utility

Section Puc 902.02 Electric Utility Customer

Section Puc 902.03 Electricity Suppliers

Section Puc 902.04 Eligible Customer-Generator (ECG)

Section Puc 902.05 Generation Capacity

Section Puc 902.06 Islanding

Section Puc 902.07 Net Energy Metering

PART Puc 903 GENERAL RULES, RIGHTS AND OBLIGATIONS

Section Puc 903.01 General Rules, Rights and Obligations

Section Puc 903.02 Statutory and Other Requirements

PART Puc 904 INTERCONNECTION APPLICATION PROCESS

Section Puc 904.01 Pre-application Review

Section Puc 904.02 Interconnection Application

Section Puc 904.03 Mutual Indemnity Agreement

Section Puc 904.04 Interconnection Process

Section Puc 904.05 Upgrades or Changes in the Net Metering System

Section Puc 904.06 Insurance

PART Puc 905 TECHNICAL REQUIREMENTS FOR INTERCONNECTION FOR ALL UNITS

Section Puc 905.01 Units 10 kW or Less May Opt for No Disconnect Switch

Section Puc 905.02 Disconnect Switch

Section Puc 905.03 Configuration of the Transformer Serving the Customer's Generation Site

Section Puc 905.04 Initial Testing

Section Puc 905.05 Periodic Testing

Section Puc 905.06 Studies and Analysis

Section Puc 905.07 Payment for Upgrades or Improvements to the Electric Grid

PART Puc 906 COMPLIANCE PATH FOR INVERTER UNITS

Section Puc 906.01 Inverter Requirements

PART Puc 907 COMPLIANCE PATH FOR GENERATION UNITS NOT USING AN INVERTER

Section Puc 907.01 Interconnection Requirements

PART Puc 908 PROCEDURAL REQUIREMENTS FOR INTERCONNECTED UNITS

Section Puc 908.01 Emergencies, Maintenance

Section Puc 908.02 Procedures for Disconnection

Section Puc 908.03 Distribution Utility Access to Net Metered System

Section Puc 908.04 Complaints and Investigations

Section Puc 908.05 Notifying Public of Net Energy Metering

Section Puc 908.06 Violations of Authorization to Interconnect

Section Puc 908.07 Utilities Shall Report Number and Size of Net Energy Metered Units

xxiv Puc

Section Puc 908.08 Existing Systems Grandfathered

Section Puc 908.09 Grace Period for Inverter Units and Surge Protection

Section Puc 908.10 Relationship to Other Commission Rules

Section Puc 908.11 Transferability

xxv Puc

CHAPTER Puc 900 NET METERING FOR CUSTOMER-OWNED RENEWABLE ENERGY GENERATION RESOURCES OF 25 KILOWATT OR LESS

PART Puc 901 PURPOSE

Puc 901.01 <u>Purpose</u>. The purpose of Puc 900, pursuant to the mandate of RSA 362-A:9, is to establish reasonable interconnection requirements for safety, reliability and power quality for net energy metering as the public interest requires, and consistent with the legislative declaration of purpose set forth in RSA 362-A:1, in which the legislature found:

- (1) It to be in the public interest to provide for small scale and diversified sources of supplemental electrical power to lessen the state's dependence upon other sources which may, from time to time, be uncertain;
- (2) It to be in the public interest to encourage and support diversified electrical production that uses indigenous and renewable fuels and has beneficial impacts on the environment and public health; and
- (3) That net energy metering for eligible customer-generators may be one way to provide a reasonable opportunity for small customers to choose interconnected self generation, encourage private investment in renewable energy resources, stimulate in-state commercialization of innovative and beneficial new technology, enhance the future diversification of the state's energy resource mix, and reduce interconnection and administrative costs.

Source. #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 902 DEFINITIONS

Puc 902.01 "Distribution utility" means the company that owns and/or operates the distribution facilities delivering electricity to the eligible customer-generator's premises.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.02 "Electric utility customer" as used in the definition of "eligible customer-generator" means any residential, commercial or industrial ratepayer of a distribution utility.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.03 "Electricity suppliers" means "electricity suppliers" as defined in RSA 374-F:2, II, namely "suppliers of electricity generation services and includes actual electricity generators and brokers, aggregators, and pools that arrange for the supply of electricity generation to meet retail customer demand, which may be municipal or county entities."

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.04 "Eligible customer-generator (ECG)" means "eligible customer-generator" as defined in RSA 362-A:1, II-b, namely, "an electric utility customer who owns and operates electrical generating facilities powered by solar, wind or hydro energy with a total peak generating capacity of not more than 25 kilowatts that is located on the customer's premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electricity requirements."

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.05 "Generation capacity" means, for solar units, the kilowatt rating of the solar power array, and for other than solar units, the kilowatt rating of the generation unit.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.06 "Islanding" means a condition in which a portion of the utility system that contains both load and dispersed generation is isolated from the remainder of the utility system.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 902.07 "Net energy metering" means "net energy metering" as defined in RSA 362-A:1, III-a, namely, "measuring the difference between the electricity supplied over the electric distribution system and the electricity generated by an eligible customer-generator which is fed back into the electric distribution system over a billing period.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 903 GENERAL RULES, RIGHTS AND OBLIGATIONS

Puc 903.01 General Rules, Rights and Obligations.

- (a) Any distribution utility and any electricity supplier operating within the state of New Hampshire shall, upon request, provide net energy metering to ECGs pursuant to Puc 900 and RSA 362-A:9.
- (b) A distribution utility shall comply with Puc 900 in a non-discriminatory manner and shall not unreasonably withhold its permission to interconnect an ECG's generating facility.
- (c) Any electricity supplier operating within New Hampshire that is not the default service or transition service provider shall offer net metering pursuant to Puc 900 but may provide for rates and terms as provided in RSA 362-A:9, III and Puc 903.02(h),
 - (d) Any ECG who engages in net energy metering in New Hampshire shall comply with Puc 900.
- (e) An ECG which owns multiple premises in New Hampshire may apply to and may site a net metered facility pursuant to Puc 900, at each such separate premises that it owns.
 - (f) An ECG shall comply with:
 - (1) Applicable commission-approved rules, tariffs and terms and conditions of the distribution utility not in conflict with Puc 900; and
 - (2) Any local, state or federal law, statute or regulation which applies to the design, siting, construction, installation, operation, or any other aspect of the ECG's generating and interconnection facility.

- (g) Interconnection with the distribution utility under Puc 900 shall not provide an ECG any rights to utilize the distribution utility's electric distribution system for the transmission or distribution of electric power, nor does it limit those rights.
- (h) The distribution utility shall have the right to review the design of an ECG's generating and interconnection system and to inspect these facilities prior to the commencement of operation.
- (i) The distribution utility may require an ECG to make modifications as necessary to comply with the requirements of Puc 900.
- (j) The distribution utility's review and authorization for operation shall not be construed as confirming or endorsing the ECG's design or as warranting the generating and/or interconnection facility's safety, durability or reliability.
- (k) The distribution utility shall not, by reason of such review or lack of review, be responsible for the strength, adequacy, or capacity of such equipment.
- (I) An ECG's generating and interconnection facilities shall be reasonably accessible to the distribution utility personnel as necessary for the distribution utility to perform its duties and exercise its rights under its tariffs and terms and conditions filed with and approved by the commission, and Puc 900.
- (m) Any information pertaining to generating and/or interconnection facilities provided to a distribution utility by an ECG shall be treated by the distribution utility in a confidential manner.
- (n) An ECG shall operate and maintain its generating and interconnection facilities in a manner that is as safe, dependable and efficient as practicable.

<u>Source.</u> #2050, eff 6-13-82; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 903.02 Statutory and Other Requirements.

- (a) Electric distribution utilities shall make net energy metering available to eligible customergenerators, pursuant to RSA 362-A:9 and Puc 900.
- (b) Eligibility for net energy metering shall be available on a first-come, first-served basis within each distribution utility service area under the jurisdiction of the commission until such time as the total rated generating capacity owned and operated by ECGs totals 0.05 percent of the annual peak energy demand distributed by each such distribution utility as determined by the commission from time to time, pursuant to RSA 362-A:9.
- (c) Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions, pursuant to RSA 362-A:9.
- (d) Notwithstanding (c) above, an additional meter or meters to monitor the flow of electricity in each direction may be installed, provided that it is not at the expense of the customer-generator unless requested by the customer-generator.

- (e) If an additional meter or meters are installed, as described in (d) above, the net energy metering calculation shall yield the same result as when a single meter is used, pursuant to RSA 362-A:9.
- (f) The net energy metering calculation shall be made by taking the difference between the electricity supplied over the electric distribution system and the electricity generated by the ECG and fed back into the electric distribution system over the billing period, pursuant to RSA 362-A:9.
- (g) Each electric distribution utility shall, pursuant to RSA 362-A:9, offer net energy metering to each ECG on terms which shall be identical, with respect to rates, rate structure, and periodic charges, to the contract or tariff to which the same customer would be assigned if such customer was not an ECG.
- (h) Electricity suppliers may voluntarily determine the terms, conditions, and prices under which they will agree to provide generation supply to and purchase net generation output from ECGs, however, electricity suppliers who provide default service or transition service to such a customer shall only bill for the net energy supplied as calculated in accordance with (g) above, pursuant to RSA 362-A:9.
 - (i) Pursuant to RSA 362-A:9, the following shall apply to net energy measurement:
 - (1) The net energy produced or consumed on a monthly basis shall be measured in accordance with normal metering practices;
 - (2) Where the electricity supplied to the customer-generator over the electric distribution system exceeds the electricity generated by the customer-generator during the billing period, the customer-generator shall be billed based on the net energy supplied for distribution services and other charges in accordance with this section and standard applicable rates; and
 - (3) Where the electricity generated by the customer-generator exceeds the electricity supplied by the electric grid, the customer-generator shall be credited during the next billing period for the excess kilowatt hours generated in accordance with this section.
- (j) Upon exit from the net energy metering system, there shall be no payment or credit to an ECG for any remaining excess generation.
- (k) The commission shall waive any provision of Puc 900 and/or RSA 362-A after notice and an opportunity for a hearing, if it determines that waiver of the applicable statute or rule section is part of a targeted net energy metering arrangement that is part of a utility strategy to minimize distribution costs, pursuant to RSA 362-A:9.
- (1) The commission shall consider any request for a waiver, whether filed pursuant to (k) above or otherwise, pursuant to Puc 201.05, titled waiver of rules.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 904 INTERCONNECTION APPLICATION PROCESS

Puc 904.01 Pre-application Review.

- (a) Before purchasing and/or installing net energy metering equipment a customer may request that his or her distribution utility informally review the proposed project and provide information on:
 - (1) Whether the applicant's distribution utility is under the cap established by RSA 362-A:9,I;

- (2) Whether the customer's generation equipment and electric grid interface unit, in the opinion of the distribution utility, is likely to comply with the requirements of Puc 900; and
- (3) Whether the customer is in an area or service location which is likely to require any upgrade or study.
- (b) At the pre-application stage the distribution utility shall provide the customer its best evaluation, given the information it has available, but shall not be required to conduct a study or elaborate review of the project.

<u>Source.</u> #2050, eff 6-13-82; ss by #2404, eff 6-28-83; ss by #2912, eff 11-26-84; EXPIRED 11-26-90

New. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 904.02 Interconnection Application.

- (a) To initiate the process to engage in net energy metering, an applicant shall file with its distribution utility and, if applicable, its electricity supplier, an interconnection application form.
- (b) When filing a completed application with the distribution utility, to obtain evidence of the filing and the date of filing, the applicant shall:
 - (1) File the application by certified mail; or
 - (2) Obtain a dated acknowledgment of receipt from the distribution utility; or
 - (3) Obtain written or electronic verification of receipt from the distribution utility by other means consistent with (1) and (2) above.
 - (c) The interconnection application form shall include the following:
 - (1) Applicant information which shall include:
 - a. The applicant's name;
 - b. The applicant's full mailing address
 - c. The facility location, if different from above;
 - d. The applicant's daytime telephone number;
 - e. The name of the local distribution utility and the applicant's account number; and
 - f. If different than the distribution utility, the name of the applicant's electricity supplier and the applicant's account number;
 - (2) Generating facility information, which shall include:
 - a. The generator type, whether solar, wind or hydro;
 - b. The generator manufacturer, model name and number;

- c. The number of phases of the unit, whether single or three phase;
- d. The power rating of the generation output of the system in kilowatts;
- e. If applicable, the inverter manufacturer, model name and number;
- f. Whether a battery backup will be used or not; and
- g. Whether an exterior manual disconnect switch for utility use shall be installed, if the generation output of the unit is less than or equal to 10 kilowatts in size;
- (3) Installation information and certification, which shall include:
 - a. Whether the generator shall be owner installed;
 - b. The installation date;
 - c. The anticipated interconnection date;
 - d. The name, complete address, telephone number and license number of the installing electrician, if applicable;
 - e. The name and company affiliation of the vendor selling the generator to the applicant;
 - f. The signature, with the date of signature, of the vendor, certifying that the system hardware is in compliance with Puc 900;
 - g. Certification, if applicable, that the system has been installed in compliance with the local municipal building and/or electrical code in the form of:
 - 1. A signed and dated certificate by the applicable local code official; or
 - 2. A copy of a signed and dated final inspection certificate from the municipality; and
 - h. A signed and dated certification by the applicant that:
 - 1. The applicant has installed and shall operate the system in compliance with Puc 900;
 - 2. The initial start-up test required by Puc 905.04 has been successfully completed; and
 - 3. To the best of the applicant's knowledge, all of the information contained in the interconnection notice is true and correct
 - i. Responses to the questions posed in Puc 904.01.
- (d) An applicant may submit an interconnection application to its distribution utility when the applicant's system has not been fully installed and tested, but shall:
 - (1) Provide in writing in connection with the interconnection application a description of any manner in which the system is not fully connected, tested or is not yet otherwise in compliance;
 - (2) Complete any such uncompleted requirements prior to interconnecting; and

- (3) Upon completion of unmet interconnection requirements, provide the distribution utility with any necessary updated written certifications required by this part.
- (e) If any requirements not completed as of the filing date of the interconnection application, as referred to in (d) above, necessitate further action by the distribution utility to verify compliance, the 30 day period prior to approval and operation referred to in Puc 904.04(a), shall be extended from the date such item(s) are completed, accordingly.
- (f) Upon request, the distribution utility shall provide the applicant written confirmation that the interconnection application has been received and the date of receipt as follows:
 - (1) When the application is filed in person, immediately; or
 - (2) When the application is filed by mail or other means, within 2 business days of receipt.
- (g) When the distribution utility provides a receipt for an application it may clarify that the receipt acknowledges the date and fact of a filing, but not the approval of the filing.
 - (h) A sample interconnection application form is set forth in appendix I to Puc 900.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 904.03 Mutual Indemnity Agreement.

- (a) Unless both parties to the agreement have agreed, pursuant to (g) below, to not enter into or maintain the mutual indemnity agreement, prior to interconnection, the applicant/ECG, his or her distribution utility, and, if applicable, the customer's electricity supplier shall:
 - (1) Execute the mutual indemnity agreement described in (b) below; and
 - (2) Maintain the terms of the agreement while the net energy metered unit is interconnected.
- (b) With regard to the mutual indemnity agreement, each party to the agreement shall provide as follows:
 - (1) Each party shall hold harmless, and indemnify the other party and its directors, officers, agents and employees against any and all loss, liability, damage, or expense, including any direct, indirect or consequential loss, liability, damage, or expense, but not including attorneys' fees unless awarded by a court of competent jurisdiction, for injury or death to persons, including employees of either party, and damage to property, including property of either party, arising out of or in connection with intentional, willful, wanton, reckless or negligent conduct regarding:
 - a. The engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the party's facilities; or
 - b. The making of replacements, additions, or improvements to, or reconstruction of, the party's facilities;
 - (2) Neither party shall be indemnified by the agreement for any loss, liability, damage, or expense resulting from its sole negligence or willful misconduct; and

- (3) Notwithstanding the indemnity provisions contained in the agreement, except for a party's willful misconduct or sole negligence, each party shall be responsible for damage to its own facilities resulting from electrical disturbances or faults.
- (c) The mutual indemnity agreement shall become effective as between the respective parties executing and exchanging the document, upon interconnection of the applicant/ECG to the electric grid and mutual execution and exchange of the document by the distribution utility, the ECG and, if applicable, the electricity supplier.
- (d) The distribution utility shall also execute the mutual indemnity agreement described in this section.
- (e) The applicant/ECG, distribution utility, and, if applicable, the electricity supplier, shall each execute duplicate originals of the mutual indemnity agreement set forth in (b) above and each party to the agreement shall retain one executed original of the agreement.
- (f) If an electricity supplier sells electric power to the ECG, it may require that the ECG enter into a mutual indemnity agreement with it, as described in this section.
- (g) Notwithstanding (c) through (f) above, the customer-applicant/ECG and the distribution utility with whom he or she interconnects and/or the electricity supplier and the applicant/ECG, separately or together, may at any time, by mutual agreement, elect not to enter into or to void the indemnity agreement set forth in (b) above.
- (h) The provisions of the indemnity agreement described in this section shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.
 - (i) A sample mutual indemnity agreement is set forth in appendix II to Puc 900.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 904.04 Interconnection Process.

- (a) Except as provided in (b) below, within 30 days of the filing of a completed interconnection application by the applicant, the distribution utility shall:
 - (1) Notify the applicant in writing that the applicant may interconnect with the electric grid and commence generation; or
 - (2) Provide the applicant in writing an itemization with description of the specific issue(s) which the utility regards place the net energy metered project not in compliance with Puc 900, RSA 362-A, or any other specific applicable regulatory requirement, including a reference to the regulatory requirement not met.
- (b) As to a generating facility that does not interface with the electric grid by means of an inverter, the distribution utility shall have a period of 75 days from the initial filing of the interconnection application to:
 - (1) Assess the proposed system and the applicant's site characteristics;
 - (2) Communicate with the applicant regarding adequate protective interface devices; and

- (3) Allow the applicant to interconnect or provide the applicant specific written reasons for objecting to interconnection.
- (c) If the applicant and the distribution utility agree that the application reasonably requires more time before the distribution utility responds as provided in (a) or (b) above, as applicable, they may agree to extend the deadline for response.
- (d) Except as provided in (c) above, if the distribution utility is not able to respond to the applicant within the 30 day review period for inverter based systems or 75 day review period for non-inverter based systems and the applicant does not agree to an extension of the response time, the distribution utility shall:
 - (1) Notify the commission and the applicant in writing no later than the expiration of the relevant period;
 - (2) Petition the commission for an extension of a specified length; and
 - (3) Cite the specific reasons why the deadline was not met and the basis for the length of the requested extension.
- (e) The commission shall grant an extension for review of the application for the shortest time reasonable, if any, if it determines that it is necessary to provide the distribution utility additional time to assess the effect of the proposal on safety and/or reliability or power quality of the electric distribution system in light of:
 - (1) The complexity of the characteristics of the site;
 - (2) The complexity of the proposed generation and interconnection facilities; and/or
 - (3) Delay occasioned by:
 - a. Failure of the applicant to timely provide the distribution utility information necessary to assess the potential impact of the system on safety, reliability or power quality of the electric grid;
 - b. Untimely response by the applicant to the distribution utility in response to a distribution utility request for information; or
 - c. Circumstances beyond the control of the distribution utility that prevent the utility from responding within the time limits established by this section.
- (f) The distribution utility shall notify the applicant as soon as reasonably possible of any required information not included in the applicant's interconnection application filing, but not later than 30 days following filing of an application that the applicant indicates is complete.
- (g) If the distribution utility has not met the applicable deadline for responding to a completed application pursuant to (a) or (b) above and has not petitioned for an extension pursuant to (d) and (e) above, the applicant may:
 - (1) Contact the distribution utility and commission and request resolution; and/or
 - (2) File a complaint with the commission.
 - (h) Prior to operation, during normal business hours, the applicant shall:

- (1) Provide the distribution utility the opportunity to inspect the unit; and
- (2) Upon request, demonstrate to the distribution utility the operation of the unit.
- (i) The distribution utility shall interconnect with any ECG which:
 - (1) Receives electric service from the distribution utility;
 - (2) Has completed the application process required by this section; and
 - (3) Has installed a net energy metering system that complies with the interconnection and technical specification requirements of Puc 900.
- (j) Facilities that meet the interconnection requirements of Puc 900 shall not be required by the distribution utility to meet additional requirements, perform or pay for additional tests, or pay additional interconnection-related charges, unless as otherwise provided.
- (k) Nothing in (j) above shall prohibit a party from petitioning the commission, pursuant to Puc 201.05, as to any net energy metered facility, to require additional interconnection requirements, performance of or payment for additional tests, or payment of additional interconnection-related charges.
- (1) A net metered customer, a distribution company or an electricity supplier may install additional controls or meters or conduct additional tests, beyond those required by Puc 900, but if entry to the applicant/ECG's premises is necessary, shall first obtain consent to access the premises pursuant to Puc 908.03.
- (m) The expenses associated with the additional tests, meters, and/or equipment described in (l) above shall be borne by the party desiring the additional tests, meters and/or equipment.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 904.05 Upgrades or Changes in the Net Metering System.

- (a) The ECG shall provide the distribution utility with a written update of any of the information required to be provided on the interconnection application as any changes occur.
- (b) The ECG shall re-certify to his or her distribution utility the applicable certifications required by Puc 904.02(c), when any of the following occurs:
 - (1) The generation capacity is increased or its source is changed;
 - (2) Any key component of the system, such as the inverter, is replaced or upgraded; or
 - (3) The relays for a non-inverter system, are replaced, rewired or upgraded.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 904.06 Insurance.

(a) The ECG shall not be required by the distribution utility or electricity supplier to purchase or maintain property insurance and/or comprehensive personal liability insurance to protect against potential liability resulting from the installation, operation and/or ownership of the generation and interconnection facility.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 905 TECHNICAL REQUIREMENTS FOR INTERCONNECTION FOR ALL UNITS

Puc 905.01 Units 10 kW or Less May Opt for No Disconnect Switch.

- (a) Except as provided in Puc 905.02, each unit with a generation output rating of 10 kilowatts or less shall not be required to install and maintain a manual disconnect switch for utility use.
- (b) If the distribution utility finds it necessary for scheduled maintenance of which the ECG has received reasonable notice or in an emergency situation, to disconnect from the electric grid an ECG who does not maintain a manual disconnect switch for utility use, the utility may do so by:
 - (1) Pulling the customer's meter;
 - (2) Disconnecting the customer's service at the site transformer; or
 - (3) Executing any other reasonable method of disconnection.
- (c) If the ECG has been notified of a scheduled maintenance or other event requiring disrupting generation or service, as an alternative to having his or her service disconnected, and upon agreement of the distribution utility, the ECG or their representative may be present at the scheduled time of disruption of service and demonstrate to the utility representative that generation has been isolated from the utility grid and remains isolated for the duration of the required period.
- (d) If the ECG schedules a meeting with the distribution utility for disconnection of the system, as described in (c) above, and the ECG does not meet at the scheduled time, the distribution utility may disconnect the service as provided in (b) above.
 - (e) If the ECG does not install a manual disconnect device accessible to the utility, the ECG:
 - (1) Shall assume all risks and consequences associated with the loss of power to the ECG's premises during any period when the distribution utility is required to disconnect the electric service of the ECG; and
 - (2) Acknowledges that the service disconnection shall interrupt all electric service to the ECG site.
 - (f) Any ECG may agree to install a manual disconnect device accessible to the distribution utility.

(g) If the ECG elects not to install a disconnect switch for use by the distribution utility, he or she shall install a warning label, to be provided by their distribution utility, on or near their service meter location.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.02 Disconnect Switch.

- (a) Any net metered facility shall install and maintain a manual disconnect switch accessible to and for the use of the distribution utility if:
 - (1) The facility is larger than 10 kW in cumulative generation capacity; or
 - (2) The facility is on a service that is metered utilizing instrument transformers.
- (b) Any generating unit that is required to install a manual disconnect switch for utility use shall meet the following requirements:
 - (1) The disconnect switch shall be an external, manual, visible, gang-operated, load break disconnecting switch;
 - (2) The ECG shall purchase, install, own, and maintain the disconnect switch;
 - (3) The disconnect switch shall be located between the power producing equipment and its interconnection point with the distribution utility system;
 - (4) The disconnect switch shall meet applicable standards established by Underwriters Laboratories, American National Standards Institute, the National Electrical Code and Institute of Electrical and Electronic Engineers;
 - (5) The disconnect switch shall be clearly marked, "Generator Disconnect Switch", with permanent letters 3/8 inch or larger;
 - (6) The disconnect switch shall be located at a location on the property of the ECG mutually agreeable to the ECG and the distribution utility;
 - (7) The disconnect switch shall be readily accessible for operation and locking by distribution utility personnel; and
 - (8) The disconnect switch shall be lockable in the open position with a standard padlock with a 3/8 inch shank.
- (c) A "gang operated" switch, for purposes of this section, means a switch in which the separate switches for each phase are operated as a group from a single control.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

New. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.03 Configuration of the Transformer Serving the Customer's Generation Site.

- (a) The existing site transformer serving the ECG load may be used if its use will not significantly degrade the power quality or voltage regulation on the secondary distribution system and if such usage will not create problems for distribution utility system relaying.
- (b) For single phase distributed generators connected to 4-wire multi-grounded neutral systems, the high side of the step-up transformer shall be connected phase to neutral.
- (c) A phase to phase high side connection shall be allowed if it does not degrade power quality or voltage regulation on the distribution system.
- (d) For single phase distributed generators connected to 3 wire or 4 wire impedance grounded systems, the step-up transformer high-side winding shall be connected phase to phase.
- (e) For 3 phase distributed generators connected to 4-wire multi-grounded distribution systems, the step-up transformer may be an existing grounded-wye to grounded-wye transformer.
- (f) In cases as described in the paragraph above, the generator shall be impedance grounded as necessary to achieve effective grounding but limit the desensitization of the distribution utility system ground fault relaying.
- (g) The generation system site shall be impedance grounded, as described in (f) above, if necessary, in a manner adequate to assure that the unit does not:
 - (1) Significantly degrade the power quality or voltage regulation on the distribution system;
 - (2) Create significant safety problems; or
 - (3) Create problems for distribution utility system relaying.
- (h) To guard against over voltages on the unfaulted phases of a three-phase utility primary, if the transformer serving the ECG site is ungrounded, over voltage protection shall be used which is designed to detect a situation where the utility has tripped due to a phase to ground fault, and the connected ungrounded generator may not yet have tripped, and to trip the generator at high speed.
- (i) "Wye" as used in this section, means the configuration in which one end of each transformer winding is connected to a common point and the other to its appropriate line terminal, resembling the letter "Y".
- (j) The cost of any improvements necessary to the site transformer serving the net metered facility shall be borne according to the distribution utility's approved tariff on file with the commission.

Source. INTERIM #5921, eff 11-7-94, EXPIRED 3-7-95

<u>New.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.04 Initial Testing.

(a) After installation of the system and before final approval and interconnection to the electric grid, the ECG shall, in addition to the certifications required in connection with the interconnection application, conduct a load-break test on the generator, as described in (b) below, to confirm that the anti-islanding controls are functioning.

- (b) When conducting a load-break test, the ECG shall demonstrate that after the main disconnect switch or circuit breaker of the residence or building is opened, the generation unit shuts down within 2 seconds.
- (c) If the generation unit fails to shut down within 2 seconds after conducting the test as provided in (b) above, the ECG shall inform its distribution utility.
 - (d) The ECG shall provide an initial test on a non-inverter interfaced system, by demonstrating that:
 - (1) The relays function as designed;
 - (2) The relays have been calibrated to settings as provided by the distribution utility pursuant to Puc 907.01(f);
 - (3) All key components of the system function as designed; and
 - (4) The anti-islanding function of the unit works properly.
- (e) The testing of the relays of a non-inverter interfaced system shall be conducted by an individual that:
 - (1) Utilizes test equipment:
 - a. Necessary to adequately test the key components of the system;
 - b. That is calibrated within tolerances sufficient to assure accurate testing; and
 - c. That is calibrated with a frequency consistent with industry standards;
 - (2) Has received the education and training necessary to conduct the sophisticated testing of relays and other components of a non-inverter based generator; and
 - (3) Maintains any professional accreditation or certification necessary for the testing of this nature.
- (f) The individual conducting the testing of a non-inverter based system required by this section shall, upon request, provide the distribution utility information on his or her background and credentials and equipment and maintenance and calibration of the equipment sufficient to allow the utility to assess their competence to undertake the required testing.
- (g) Upon request, the ECG shall allow the distribution utility to have a representative present for the initial or periodic testing required by this part.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.05 Periodic Testing.

- (a) As to a generator which interfaces with the electric grid by an inverter, the ECG shall if requested to do so by its distribution utility, conduct a load-break test, as described in Puc 905.04(b), once per year after installation.
 - (b) As to a generator that interfaces with the electric grid by a non-inverter, the ECG shall:

- (1) Conduct a load-break test, as described in Puc 905.04(b), once per year after installation; and
- (2) Verify the proper calibration and protective function of the components and systems of the generation unit, which shall include the testing prescribed by the unit manufacturer, once every 4 years or according to the schedule recommended by the manufacturer, whichever is shorter.
- (c) The testing of the calibration and protective function of the components and systems of a non-inverter interfaced system shall be conducted by an entity qualified as provided in Puc 905.04(e) and (f).

(d) The ECG shall:

- (1) Create a written record of the dates and procedures for tests conducted pursuant to this section; and
- (2) Maintain the written record of verification testing for inspection by the distribution utility for a period of 4 years from the date of the respective test.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.06 Studies and Analysis.

- (a) A distribution utility may conduct detailed load flow, voltage regulation, or short circuit coordination studies of the primary feeder if it determines that the addition of a net metered generation unit will push the aggregate capacity of distributed generation on the feeder to the threshold level, described in (b) and (c) below.
- (b) The distribution utility may deem the threshold of concern for aggregate distributed generation as reached if:
 - (1) The lower of 10% of the peak feeder demand as measured at the substation or 20% of the peak feeder demand downstream of the point of interconnection is reached;
 - (2) More than one net metered unit is proposed to be installed on the same secondary shared by many customers; or
 - (3) Any other reasonable means, consistent with (1) or (2) above, of determining that a study is necessary.
- (c) The distribution utility shall deem the threshold of concern for aggregate distributed generation as reached if it determines that the addition of the proposed generation unit poses a reasonable threat to the continued safety, reliability or power quality to any significant portion of the electric grid.
- (d) The distribution utility shall absorb the cost within its rate base for any studies or analyses which it deems necessary to evaluate a proposed net energy metered system and/or the electric grid relative to such a system.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 905.07 Payment for Upgrades or Improvements to the Electric Grid.

(a) If an upgrade or an improvement to the electric grid up to the customer's meter is necessary for the distribution utility to interconnect to the ECG's net energy metered system, the expense shall be borne according to the utility's approved tariff on file with the commission.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 906 COMPLIANCE PATH FOR INVERTER UNITS

Puc 906.01 Inverter Requirements.

- (a) A net energy metered project which connects to the electric grid by means of a single-phase or three-phase inverter shall be deemed to be compliant with the technical specifications for the generation unit itself, as established by Puc 900, if the unit complies with the minimum requirements set forth in the following national standards:
 - (1) The "IEEE Recommended Practice for Utility Interface of Residential and Intermediate Photovoltaic (PV) Systems, ANSI/IEEE STD 929-2000" issued by the Institute of Electrical and Electronic Engineers, Inc., Piscataway, New Jersey, May, 2000; and
 - (2) The "UL 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems", issued by Underwriters Laboratories, Inc., of 333 Pfingsten Road, Northbrook, Illinois 60062, May, 1999; and
 - (3) The surge testing requirements, specified in (b) below.
- (b) The surge testing standard referred to in (a)(3) above that shall be applicable to inverter interfaced systems, as follows:
 - (1) Location category B;
 - (2) Exposure level, medium;
 - (3) Test waveforms, 100 kHz ring wave, peak amplitude 4kV and 0.33kA;
 - (4) Test waveforms, combination wave, peak amplitude 4kV and 2 kA;
 - (5) Coupling modes shall be line to neutral, and line and neutral to ground;
 - (6) Test modes shall be as follows:
 - a. In mode 1, the unit connected, delivers rated output power;
 - b. In mode 2, the unit connected, delivers zero output power;
 - (7) Repetition, three applications of each surge condition with one minute between surges and both polarities tested for the combination wave;
 - (8) Pass criteria shall conform to the following:
 - a. Test mode one, in which:

- 1. The unit continues to run normally with no alteration in running or protection function;
- 2. The unit shuts down but can restart and run normally with no alteration in running or protection function; or
- 3. The unit cannot restart; and
- b. Test mode two, in which:
 - 1. The unit can start and run normally with no alteration in running or protection function; or
 - 2. The unit cannot start.
- (c) A net metered system shall be installed in accordance with the National Electrical Code, 1999, issued by the National Fire Protection Association, Quincy, Massachusetts;
- (d) ECGs and manufactures of inverters shall be allowed a 9 month grace period from enforcement of the surge protection requirements of Puc 906.01(b) as provided in Puc 908.09.

Source. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 907 COMPLIANCE PATH FOR GENERATION UNITS NOT USING AN INVERTER

Puc 907.01 Interconnection Requirements.

- (a) Except as provided in (b) below, any net energy metered generation system which interfaces with the electric grid by means other than an inverter shall:
 - (1) Meet the following safety and service quality requirements:
 - a. The system shall not compromise the safety of the distribution utility personnel, the ECG or other customers on the electric grid;
 - b. The system shall have:
 - 1. Adequate non-islanding protection;
 - 2. Utility-grade protective devices to separate the facility from the electric distribution system, including:
 - (i) Time over-frequency protection;
 - (ii) Time under-frequency protection;
 - (iii) Time over-voltage protection; and
 - (iv) Time under-voltage protection;
 - 3. Protection devices at the primary voltage level for ground fault and ground current contribution;
 - 4. Adequate short circuit interrupting devices; and

- 5. Reliable power sources for shunt-tripped short circuit interrupting devices; and
- c. The generation facility shall not reduce the quality of service on the electric distribution system, including voltage fluctuations, excessive voltage and current harmonic content;
- (2) Interface with the electric distribution system according to the following requirements:
 - a. The system shall synchronize with the primary voltage level on the distribution grid;
 - b. The transformer winding connection to be used at the primary voltage interconnecting point shall be adequate to coordinate with the distribution grid;
 - c. The generation facility shall synchronize with the electric grid; and
 - d. The generation facility shall correct the power factor, if necessary;
- (3) Not impair the quality of service standards maintained by the electric distribution system;
- (4) Provide other protections and devices necessary, consistent with the requirements of this section, to assure safety, quality of service, reliability and power quality of the electric distribution system; and
- (5) As to relays, use utility grade relays.
- (b) A non-inverter based system shall be installed in accordance with the National Electrical Code, 1999, issued by the National Fire Protection Association, Quincy, Massachusetts.
- (c) A non-inverter interfacing generation system which is not configured according to each of the specific requirements of (a) above shall be acceptable, provided the system will not significantly negatively impact safety, quality of service, reliability and power quality of the electric distribution system.
- (d) When seeking to interconnect with the distribution utility, the applicant shall provide the distribution utility the following:
 - (1) The interconnection application form required by Puc 904.02;
 - (2) Alternating current (AC) and direct current (DC) elementary and schematic diagrams describing the planned protection package; and
 - (3) A one-line diagram of the net energy metering system showing how the system protection shall be wired.
- (e) The ECG shall provide for testing of the relays of the net energy metering system once the settings have been applied to confirm that they perform the intended function.
 - (f) As to the testing of relays described in (e) above:
 - (1) The testing shall be conducted by a individual qualified for testing as described in Puc 905.04(e) and (f); and
 - (2) The ECG shall provide the distribution utility the opportunity to:
 - a. Be present at and observe the testing; or
 - b. Conduct the testing of the relays by a qualified utility representative.

- (g) If the ECG and the electric distribution utility cannot agree to the interconnection requirements, they shall file with the commission for review and determination.
- (h) In determining interconnection requirements for a non-inverter system, the commission shall consider safety, reliability and power quality in the context of the legislative intent of RSA 362-A:9.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

PART Puc 908 PROCEDURAL REQUIREMENTS FOR INTERCONNECTED UNITS

Puc 908.01 Emergencies, Maintenance.

- (a) The ECG shall, during the period it operates as an ECG, provide the distribution utility a current telephone number(s).
- (b) The distribution utility shall make arrangements for routine utility repairs or inspections that might involve the net energy metered system during normal business hours.
- (c) The ECG shall not supply power to the electric distribution grid during any outages of the distribution system that serves the ECG.
- (d) The ECG's generation may be operated during outages referred to in (c) above only with an open tie to the distribution utility.
 - (e) The ECG shall not:
 - (1) Create an islanding situation on the grid; or
 - (2) Energize a de-energized utility circuit for any reason.

Source. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.02 Procedures for Disconnection.

- (a) When an emergency condition, described in (b) below, exists and when it is necessary under the circumstances to do so, the distribution utility may disconnect the ECG's net energy metered system and electric service.
- (b) An emergency condition shall have occurred when the interconnection represents a condition which:
 - (1) Is likely to result in imminent significant disruption of service to the distribution utility's customers;
 - (2) Is imminently likely to endanger life or property;
 - (3) Constitutes emergency or pre-emergency conditions on the utility system;
 - (4) Constitutes a hazardous condition; or
 - (5) Reveals that a protective device tampering has occurred on the ECG's system.

- (c) The distribution utility may open the disconnect switch or disconnect the ECG's service, as applicable, after notice to the ECG has been delivered and a reasonable time to correct the condition, consistent with the conditions, has elapsed, if:
 - (1) The ECG has failed to make available records of required verification tests and, in the case of a non-inverter interfaced system, maintenance of its protective devices;
 - (2) The ECG's system:
 - a. Impedes the normal use of distribution utility equipment or equipment belonging to other distribution utility customers in a negative manner; or
 - b. Impedes the normal quality of service of adjoining customers in a negative manner; or
 - (3) Has been modified so that it is not in compliance with Puc 900.
- (d) When the ECG has corrected the problem and restored the system to compliance with Puc 900 and notifies the distribution utility of such compliance, the utility shall:
 - (1) Within 2 business days:
 - a. Provide written verification to the ECG of their compliance; or
 - b. Provide written notice to the customer of the specifics of their continued non-compliance; and
 - (2) When the system is in compliance, reconnect or allow re-connection as soon as possible under the circumstances.
- (e) The ECG may reconnect to the electric grid in coordination with the distribution utility, upon receipt of verification as provided in (d) above if the ECG, upon distribution utility request or otherwise, disconnected itself from the grid.
- (f) If the distribution utility disconnects the ECG's net metering system for one of the emergency conditions referred to in (a) above, it shall notify the ECG of the disconnection:
 - (1) Within 24 hours of the disconnection; or
 - (2) As soon as possible in circumstances where a widespread emergency or other significant extenuating circumstances preclude utility personnel contacting the customer within the 24 hour period.
- (g) If the emergency referred to in (a) above was not caused by the net metered system, then the distribution utility shall reconnect the system upon cessation of the emergency.
- (h) Notwithstanding any special notification and re-connection requirements for ECGs established by Puc 908, the distribution utility shall not be required to provide for special notification or re-connection for an ECG that differs from its usual and regular policies and protocol in a disconnection situation, if:
 - (1) The disconnection is not for reasons associated with the net metered system; and
 - (2) The distribution utility does not open the ECG's disconnect switch or pull the ECG's meter.

- (i) If the emergency referred to in (a) above was caused by the net metered system, then the distribution utility shall communicate the nature of the problem to the system owner within 5 days, and attempt to resolve the issue with the ECG.
- (j) Within 30 days of the disconnection referred to in (h) above, the distribution utility shall file a disconnection petition with the commission if the distribution utility and the ECG have not reached a mutually agreed-upon resolution.
- (k) Non-emergency disconnections of the net metered system by a distribution utility shall follow the same process as emergency disconnections of such systems, except that the utility shall:
 - (1) Give the ECG no less than 5 working days' prior notice of the disconnection; and
 - (2) Communicate in the notice to the ECG the reasons for the disconnection.
- (I) If the net metered system is not the reason for the disconnection, the distribution utility shall reconnect the system as soon as the activity, such as line maintenance, necessitating the disconnection, ceases.
- (m) An ECG who has had his or her net metering system disconnected may file a complaint with the commission at any time after disconnection.
- (n) If a disconnection complaint is filed with the commission it shall hold a hearing on the matter within 30 days and rule on whether the net metering system has violated a condition necessary for it to operate.
 - (o) In any hearing as referred to in (m) above, the disconnecting utility shall carry the burden of proof.
- (p) An ECG shall not re-close a disconnect device which has been opened and tagged by its distribution utility or attempt to re-install a pulled meter without the prior permission of the distribution utility, or in the event of a dispute, the commission.
- (q) The ECG may disconnect the net energy metered generation from the distribution utility without prior notice in order to self-generate but shall notify the distribution utility as soon as practical following disconnection.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.03 <u>Distribution Utility Access to Net Metered System.</u>

- (a) The distribution utility may inspect the net energy metered system at its own expense at a time mutually agreeable to the customer upon reasonable notice to the eligible owner-generator.
- (b) Except in emergency circumstances, the distribution utility shall provide not less than 5 business days notice to the ECG to enter the ECG's property to inspect the net metered system, install additional controls or meters or conduct additional tests.
- (c) An ECG shall not withhold allowing access to the distribution utility to inspect the net metered system, install additional controls or meters or conduct additional tests.

Source. #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.04 Complaints and Investigations.

- (a) The procedures set forth in Puc 200 shall be applicable to filing and resolution of any complaint and investigation arising out of Puc 900.
- (b) Any party may file with the commission a complaint or request for resolution of a dispute relating to Puc 900.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.05 Notifying Public of Net Energy Metering.

- (a) When a customer initiates an inquiry and requests information on net energy metering, the distribution utility shall provide a copy of Puc 900 to the customer and the name and telephone number of a contact person(s) at the utility and a description of net energy metering.
- (b) The distribution utility shall provide to each customer in a billing insert a brief description of the availability of net energy metering of one paragraph or more in length.
 - (c) The distribution utility shall provide the information described in (b) above at intervals of:
 - (1) Once each 6 months for the first year following the initial adoption of Puc 900; and
 - (2) Annually thereafter

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.06 Violations of Authorization to Interconnect.

- (a) After notice and an opportunity for a hearing, the commission shall revoke, suspend, or condition the authorization for an ECG to interconnect a net energy metered system, or take such other action consistent with the above that it deems provident if it finds good cause.
- (b) Good cause, as referred to in (a) above shall exist if the commission finds one or more of the following:
 - (1) The ECG was granted authority to operate based on false or misleading information supplied by the applicant which:
 - a. Is material; and
 - b. The applicant knew or should have known was false or misleading;
 - (2) The system was not installed or is not being operated substantially in accordance with the National Electrical Code or applicable interconnection requirements;
 - (3) The ECG has failed to comply with the conditions of approval to operate or representations made in their filing for approval to operate; or
 - (4) Other conditions, consistent with (1) through (3) above, exist which the commission finds necessitates revocation, suspension or placing conditions on the authorization to interconnect.

- (c) In determining the consequences of its finding in (a) above, the commission shall consider the following:
 - (1) The severity of the consequences resulting from the violation such that the more severe the infraction, the more severe the consequence;
 - (2) Mitigating circumstances, such as how quickly the ECG took action to rectify the situation, how much control the ECG had over the situation, and other circumstance which would tend to lessen fault; and
 - (3) Prior violations of Puc 900.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.07 Utilities Shall Report Number and Size of Net Energy Metered Units.

- (a) Each distribution utility shall:
 - (1) Track the number and size of net energy metered systems on their lines;
 - (2) Report to the commission annually by April 1 of each year for the prior year, the following as regards net energy metered units:
 - a. The number of units operating;
 - b. The generation output rating of the units in kilowatts; and
 - c. The total capacity of units' generation output operating on the utility's distribution system relative to the .05% of annual peak energy demand limitation mandated by RSA 362-A:9,I; and
 - (3) Notify the commission within 10 business days when the distribution utility has reached the .05% of its annual peak energy demand limit mandated by RSA 362-A:9,I.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.08 Existing Systems Grandfathered.

- (a) Net energy metering systems that have been interconnected with the distribution utility with the knowledge of the distribution utility as of the initial effective date of Puc 900 shall:
 - (1) Be deemed to be registered; and
 - (2) Not be required, due to the adoption of Puc 900, to:
 - a. Re-apply for interconnection pursuant to Puc 904; or
 - b. Upgrade to meet the applicable requirements for interconnection of Puc 905, the requirements for inverter units of Puc 906, or the requirements for non-inverters of Puc 907.
- (b) The grandfathered systems referred to in (a) above shall comply with the procedural requirements for interconnected units contained in Puc 908.

- (c) An ECG may repair his or her net energy metered system that is grandfathered under (a) above, such as by repairing relays in a non-inverter system, but if the ECG changes the inverter or adds to the generation output or otherwise upgrades or alters the system as provided in Puc 904.05, he or she shall update the qualifications of the system as provided in Puc 904.05.
- (d) The distribution utility and/or electricity supplier may request and the ECG shall provide, as to any system grandfathered under this section, the information required in connection with the interconnection application form set forth in Puc 904.02, and the customer shall, without request, update such information as it may change.
- (e) A generation system that has been interconnected with its distribution utility prior to the initial adoption of Puc 900 without the knowledge of the distribution utility shall not be grandfathered for purposes of this section.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.09 Grace Period for Inverter Units and Surge Protection.

- (a) For a period of 9 months following the initial effective date of Puc 900, applications for systems with current and recent inverter designs that comply with the protection provisions of IEEE 929-2000, referenced in Puc 906.01(a)(1), shall be deemed to meet the approval criteria of Puc 906 unless and until the inverter is replaced or upgraded as described in Puc 904.05, even though the inverter does not meet the surge protection requirements of Puc 906.01(b).
- (b) The approval described in (a) above shall continue beyond the grace period except to the extent the unit is replaced or upgraded as described in Puc 904.05.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.10 Relationship to Other Commission Rules.

(a) Unless otherwise specified, Puc 900 shall not supersede any other rule of the commission but, supplement such rules.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

Puc 908.11 Transferability.

- (a) An ECG's certificate to operate a net metered system shall transfer to the new owner when the property with the net metered system is sold or otherwise conveyed, if the new owner provides the distribution utility in writing:
 - (1) Any changed information provided in connection with the interconnection application described in Puc 904.02; and
 - (2) An agreement to operate and maintain the net metering system according to Puc 900, RSA 362-A and other applicable requirements.

- (b) The distribution utility shall not deny a new owner acquiring a currently duly registered net energy metering facility, which otherwise complies with the requirements of Puc 900, the right to register, as long as the new owner complies with (a) above.
- (c) The new ECG, as described in (a) and (b) above, shall notify the distribution utility of the transfer and of the applicable information required by the interconnection application in Puc 904.02.
- (d) Transfers of a net metered facility as described in the section shall not be construed as exiting from the system and Puc 903.02(j) shall not apply to any such transfer.
- (e) If any change or upgrade in a system would otherwise require new approval pursuant to Puc 904.05, mere ownership transfer shall not relieve the ECG from the requirement.

<u>Source.</u> #7424, eff 1-12-01; ss by #9353, INTERIM, eff 1-12-09, EXPIRES: 7-11-09

APPENDIX

INTERCONNECTION APPLICATION-RENEWABLE GENERATION UP TO 25 KW

PURSUANT TO NEW HAMPSHIRE ADMINISTRATIVE RULE PUC 900, APPLICANT HEREBY GIVES NOTICE OF INTENT TO INSTALL AND OPERATE A GENERATING FACILITY

Section 1. Applicant Information	
Name:	
Mail Address:	
City:	State: Zip Code:
Facility Location (if different from above):	
Daytime Phone #:	
Distribution Utility:	Account #:
Electricity Supplier (ES)	Account #:
(if applic	Account #:
Section 2. Generating Facility Information	•
Generator Type (check one): Solar, Win	ıd , Hydro
Generator Manufacturer, Model Name & Number	r:
Numbe	er of Phases of Unit: Single, Three or Other:
Generation output rating in Kilowatts:	,, , , , , , , , , , , , , , , , , , ,
Inverter Manufacturer, Model Name & Number:	
	Battery Backup? (yes or no)
If \Box 10 kw will a generator Disconnect Switch as	ccessible to the utility be installed? (yes or no)
Proposed location of Disconnect Switch, if	seession to the unity of instanted. (yes of no)
applicable:	
Section 3. Installation Information & Certifica	tion Check if owner-installed
Installation Date:	Interconnection Date:
Installing Electrician:	Interconnection Date: License #:
Mail Address:	Litetise #.
City:	State: Zip Code:
Daytime Phone #:	StateZip Code.
1. The system hardware is listed to Underwriters	Laboratories standards to be in compliance with UL 1741:
Signed (Vender):	Data:
Nome (printed):	Date:Company:
2. The system has been installed in compliance we	ith the local Building/Electrical Code of
,	01. (0
Signed (Ingrestor):	City/County) Date:
In lieu of signature by inspector, a copy of final ir	Date,
	nify only receipt of this form, in compliance with the Commission's ne
metering rules Puc 900.	my only receipt of this form, in comphance with the Commission's no
Signed (Hillian Demographetics).	Data
Signed (Clastricity Sympler Pergeontative):	Date:Date:
The initial start up test required by Due 2005	504 has been successfully completed. Applicant course to install on
4. The initial start-up test required by Fuc 903	0.04 has been successionly completed. Applicant agrees to histan an
operate the system in accordance with Puc 900.	odno oli of the information amounted in this Application is tour on
· · · · · · · · · · · · · · · · · · ·	edge, all of the information provided in this Application is true an
correct.	Data
Signature of Applicant	Date:
THE ELIGIBLE CUSTOMER-GENERA	TOR SHALL PROVIDE THE DISTRIBUTION UTILITY WITH A

WRITTEN UPDATE OF THE INFORMATION ON THIS FORM AS ANY CHANGES OCCUR.

This form may be reproduced allowing for more space between lines.

APPENDIX II

MUTUAL INDEMNITY AGREEMENT

"Each Party shall hold harmless, and indemnify the other Party and its directors, officers, agents and employees against any and all loss, liability, damage, or expense, including any direct, indirect or consequential loss, liability, damage, or expense, but not including attorneys' fees unless awarded by a court of competent jurisdiction, for injury or death to persons, including employees of either Party, and damage to property, including property of either Party, arising out of or in connection with intentional, willful, wanton, reckless or negligent conduct regarding (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the Party's facilities, or (b) the making of replacements, additions, or improvements to, or reconstruction of, the Party's facilities. However, neither Party shall be indemnified hereunder for any loss, liability, damage, or expense resulting from its sole negligence or willful misconduct. Notwithstanding the indemnity provisions contained herein, except for a Party's willful misconduct or sole negligence, each Party shall be responsible for damage to its own facilities resulting from electrical disturbances or faults."

Distribution Utility By its	Name of Utility Title of Authorized Utility Personnel Typed Name of Utility Representative	
	Date Signed	
	Eligible Customer-Generator Date Signed	
Electricity Supplier By its	Signature Name of Electricity Supplier Title of Authorized Personnel Typed Name of Representative Date Signed	

Cianatura

Rule(s)	State Statue (RSA)	Federal Statute	Federal Regulation
Puc 900 (other specific statute provisions implemented by specific rules are listed below)	RSA 362-A:9,V		
Puc 904.02	RSA 541-A:16,(b)		
Puc 908.03	RSA 365:8,I		
Puc 908.05	RSA 541-A:30,II		
Puc 908.06	RSA 374:15		