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NEW JERSEY BOARD OF PUBLIC UTILITIES

Adopted Amendments to the Net Metering and Interconnection Rules

“Phase 1 Amendments”

N.J.A.C. 14:8-4 and 5

Docket No. EX08080637

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PUBLIC UTILITIES

BOARD OF PUBLIC UTILITIES

Renewable Energy And Energy Efficiency

Proposed: June 1, 2009 at 41 N.J.R. 2215(a)

Adopted Amendments: N.J.A.C. 14:8-4.1 through 4.4

Adopted New Rules: N.J.A.C. 14:8-4.5 and 5.1

Adopted Recodification With Amendments: N.J.A.C. 14:8-5 as N.J.A.C. 14:8-7

Adopted: December 1, 2009, by the Board of Public Utilities, Jeanne M. Fox, President; Frederick F. Butler, Joseph L. Fiordaliso, Nicholas Asselta, and Elizabeth Randall, Commissioners.

Filed: December 7, 2009 as R.2009 d. , with changes not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 48:2-13, 48:3-87

BPU Docket Number: EX08080637

Effective Date: January 4, 2010

Expiration Date: April 18, 2011

The New Jersey Board of Public Utilities is herein adopting amendments to its rules regarding Net Metering and Interconnection, found at N.J.A.C. 14:8-4. The Board published these proposed amendments in the New Jersey Register on June 1, 2009 at 41 N.J.R. 2215(a). The primary purpose of the amendments is to carry out certain changes required by recent changes to the rules' authorizing statute, the Electric Discount Energy Competition Act (EDECA), N.J.S.A. 48:3-49 et seq. However, the adoption also incorporates some program improvements that the Board wishes to implement based on its experience administering the net metering and interconnection program. The rules affected by the amendments apply to electric power suppliers, basic generation service (BGS) providers, electric public utilities, and customers that generate class I renewable energy on their own premises.

It should be noted that related amendments to the net metering rules are being proposed in a separate rulemaking published elsewhere in this issue of the New Jersey Register. Those amendments would remove a two megawatt limit on the size of renewable energy generating facilities that are eligible for net metering, which is found at N.J.A.C. 14:8-4.3(a).

Summary of Public Comments and Agency Responses:

The following commenters submitted timely comments:

1. Seth Adler, Adler Development (AD);
2. Michael G. McGuinness, the New Jersey chapter of NAIOP, the Commercial Real Estate Development Association (NAIOPNJ); and
3. Philip J. Passanante, Atlantic City Electric Company; Marc B. Lasky, Jersey Central Power & Light Company; Gregory Eisenstark, Public Service Electric and Gas Company; and John L. Carley, Rockland Electric Company (EDCs).

General Comments:

1. COMMENT: We wish to express support for the amendment to separate the interconnection rules from the net metering rules, because it lends clarity to the overarching process to achieve a viable net metered system and recognizes the distinction between the two separate but related processes. (EDCs)

RESPONSE: The Board appreciates this comment in support of the rules.

2. COMMENT: We wish to express support for the language linking the rules to IEEE Standard 1547 within the Interconnection Definitions in N.J.A.C. 14:8-5.1, because that industry standard has been generally accepted as an appropriate reference by the EDCs and the renewable industry. (EDCs)

RESPONSE: The Board appreciates this comment in support of the rules.

Merits of the 2 MW limit:

3. COMMENT: The 2 MW cap in N.J.A.C. 14:8-4.3(a)(1) should be expressed in terms of direct current, not alternating current, so as to be consistent with other provisions relating to solar generation and to avoid requiring the EDCs to track two different measurements of solar capacity. (EDCs)

RESPONSE: The proposal to clarify that the 2 MW limit is to be expressed as alternating current was intended to make the units more consistent with those used to express the annual consumption limitation. The Board plans to eliminate the 2 MW cap through proposed amendments published elsewhere in this issue of the New Jersey Register.

4. COMMENT: Systems larger than 2 MW do not require the additional subsidies provided by the net metering rule. Projects over 2 MW are now generally eligible for tax credits, accelerated depreciation and solar renewable energy certificates (“SRECs”), in addition to the benefit of economies of scale associated with larger systems. We fully support the development of larger systems, but do not believe they require the additional ratepayer subsidy provided by net metering. In addition, pursuant to N.J.A.C. 14:1-1.2(b), the Board has the ability to grant a waiver of the current 2 MW size limit if the particular project files for and provides adequate support for such a request. (EDCs)

RESPONSE: The 2 MW limit on net metering was originally adopted when net metering was statutorily limited to residential and small commercial customers. However, amendments to N.J.S.A. 48:3-87 expanded net metering to all customers, which made it possible that a very large electricity customer, such as a hospital or factory, could install a generating unit exceeding 2 MW of capacity without exceeding its annual electricity usage. The Board would encourage this, as it would further the goals of increasing the use of clean, distributed renewable energy. To accommodate this type of situation, the Board has proposed an amendment to N.J.A.C. 14:8-4.3(a) to eliminate the 2 MW cap, which is published elsewhere in this issue of the New Jersey Register. This amendment will make the rules more consistent with the statutory amendments. It should be noted that the removal of the Board’s 2 MW cap does not exempt customer-generators from the provision limiting net metering generation to the customer-generator’s annual consumption, nor does it exempt them from limits on net metering imposed by PJM Interconnection, by FERC, or resulting from logistical and technical realities.

5. COMMENT: In proposed N.J.A.C. 14:8-5.2(a)(3), the Board has removed the 2 MW cap on Level 3 interconnections. While we understand that this proposed modification is due to the separation of the interconnection rules from the net metering rules, the Board may still want a reasonable cap on the size of customer-generator facilities interconnected with the EDCs’ systems at distribution voltage. We suggest a cap of 20 MW, which is the limiting size for small generator interconnections under the PJM Tariff. A corresponding change to proposed N.J.A.C. 14:8-5.6(a) would also be necessary. (EDCs)

RESPONSE: The Board's interconnection rules are not the only limit on the size of a customer-generator facility which can be interconnected with the distribution system. As noted by the commenters, PJM sets limits on interconnection in its tariff, and technical and physical considerations will also limit customer-generator facility size. Therefore, it is not necessary for the Board to incorporate the upper limit suggested by the commenters.

6. COMMENT: N.J.A.C. 14:8-4.3(a) limits the size of a photovoltaic installation to 100% of building demand, if the building demand is under 2 MW. This limits the ability to fully utilize available roof space for solar electric generation. I have been looking into installing solar on the roofs of warehouse buildings and would certainly want to be able to install more than the annualized building demand and still be able to participate in net metering. There are a number of locations that a warehouse tenant does not demand a large enough amount of electric in comparison to what the roof area can support. I would request that the BPU reconsider this section and/or extend the commenting period to allow for further investigation into expanding the PV installation capacity for net metering. (AD)

RESPONSE: Limiting generator capacity to meet annual onsite electricity consumption serves both a physical and an economic purpose. The installation of a customer-generator facility capable of producing more than annual onsite consumption is likely to require investment in physical upgrades to the local distribution system to accommodate the reverse power flows. The installation of a customer-generator facility of this size would also require additional financial arrangements for the electricity sales, beyond the straightforward relationship governed by a net metering tariff. Under the current net metering rules, a solar installation supplying the grid on a frequent or continuous basis would receive compensation for electricity at rates that include avoided generation charges, as well as transmission and distribution charges, while avoiding any contribution to the cost of these services provided by the local Electric Distribution Company.

7. COMMENT: The restrictions in N.J.A.C 14:8-4.3 that limit the amount of electricity that owners of warehouse and distribution facilities can generate and sell back to the grid from solar units is a disincentive for members of the industry to invest in this technology. Additionally, this policy further conflicts with the stated goals and objectives of the New Jersey Energy Master Plan that aim to maximize the amount of solar energy being produced and reduce the carbon footprint in New Jersey.

"(a) All electric distribution companies (EDCs) and supplier/providers, as defined at N.J.A.C. 14:4-1.2 and 14:8-1.2 respectively, shall offer net metering to their [residential and small commercial] customers[, as defined at N.J.A.C. 14:8-4.2,] that generate electricity[,] on the customer's side of the meter, using class I renewable energy sources, provided that the generating capacity of the customer-generator's facility does not exceed [two] **the lower of the following:**

- 1. Two megawatts[, and does not exceed the] alternating current; or**
- 2. The amount of electricity supplied by the electric power supplier or basic generation service provider to the customer over an annualized period."** (NAIOP)

RESPONSE: The goal of net metering is to provide an incentive for electricity generated, in an amount proportionate to the customer-generator's onsite electricity usage, rather than to encourage the customer-generator to enter the power generation business. This limit effectively calibrates the incentive provided (including the benefits achieved from avoided generation, transmission, and distribution charges) to the volume of electricity currently provided by the local infrastructure. If greater incentives were provided, such as full compensation at retail generation, transmission and distribution rates, this would encourage a customer-generator to produce more than their annual onsite electricity consumption, which would likely leave other ratepayers shouldering the cost of local infrastructure improvements. Entities that wish to enter the power generation business must be of a size and sophistication capable of navigating the FERC-regulated, PJM-administered interconnection and wholesale power marketing economy, and may be required to comply with the Board's rules for third party electric power suppliers at N.J.A.C. 14:4.

8. COMMENT: There is a need for a policy addressing compensation and accounting treatment related to any *monthly* excess generation produced by customer-generators over 2 MW. We suggest that such systems should be compensated either based on a bilateral agreement with a third party supplier *or* at the EDCs' avoided cost of wholesale power consistent with N.J.A.C. 14:8-4.3(e). Moreover, if a large, net-metered generating system is to be installed, all net metering rules must still be adhered to. If the customer-generator has excess generation or determines it wants another arrangement to handle the excess generation, the customer-generator would be required to file a letter in advance indicating this and follow the necessary EDC or PJM guidelines. Additionally, the customer-generator must own, operate and be responsible for all necessary electrical equipment on the customer-generator's side of the point of common coupling. (EDCs)

RESPONSE: The Board has proposed to remove the two megawatt limit on net metering in a rule proposal published elsewhere in this issue of the New Jersey Register.

Meter installation

9. COMMENT: N.J.A.C. 14:8-4.4(c) requires that all meters be installed within 10 business days after the interconnection is approved. While we strive to install meters promptly, there are frequently circumstances beyond the control of an EDC, such as weather-related events, that may extend the proposed 10-day period. We request that the Board consider a more reasonable period of 20 business days. In addition, there should be no explicit time requirement for the installation of meters for Level 3 interconnections. Level 3 projects require a detailed interconnection study; therefore, the meter installation timeframe should be part of the schedule established in the interconnection study. Third, stock meters are often not readily available and additional time is needed to properly meter the customer premise. We request a waiver from this proposed amendment's time requirement when the above-noted circumstance arises and would ask that an additional provision related to the meter availability be added to the proposed amendments. (EDCs)

RESPONSE: It is important that a customer-generator that has received EDC final interconnection approval be able to begin net metering promptly. The Board believes that the ten business day requirement is reasonable, and an EDC faced with a weather emergency can certainly contact Board staff to explain any justified delay in meter installation. Regarding level 3 interconnection reviews, the ten business day period for installing a meter under N.J.A.C. 14:8-4.4(c) does not begin until the EDC approves the interconnection (see N.J.A.C. 14:8-5.6(j)). Therefore, the detailed interconnection studies referenced by the commenters need not be completed within the ten business day period. Regarding the availability of stock meters, the EDC should be able to order a meter immediately upon approval of an initial customer application to interconnect. For these reasons, the Board has not made the commenters' suggested change.

Reporting requirements

10. **COMMENT:** The proposed increased reporting requirements (N.J.A.C. 14:8-4.5) could prove problematic. For instance, we do not currently have an automated process for providing "the total number of customer-generators that were paid for excess generation at the end of the customer-generators' annualized periods" and/or "the total dollar amount that the utility paid to customer-generators for excess generation at the end of the customer-generators annualized periods, separated by month" (N.J.A.C. 14:8-4.5(d)). Without significant programming changes at considerable incremental costs to the EDCs, these processes would have to be performed manually and will be labor intensive and administratively burdensome. At the very least, new, complex tracking systems will need to be developed to meet these increased reporting requirements. (EDCs)

RESPONSE: The Board sees no reason that each EDC cannot establish a simple customer relationship management database capable of tracking these data at little additional cost. In addition, the data required are crucial to the Board's accurate understanding of the effect of its net metering program, and will become increasingly important to the EDCs, the Board and the public as net metering and renewable energy use increase. Therefore, the commenters' suggested change has not been made.

11. **COMMENT:** We urge the Board to consider both the level and frequency of the proposed reporting, balancing the need to track results to assess achievement of Energy Master Plan goals against the current limitations of the EDCs' reporting systems related to net metering. If the Board nonetheless determines to raise the level of reporting as reflected in these proposed amendments, We request that these requirements not go into effect until 2011. (EDCs)

RESPONSE: The Board understands the limits of EDCs' existing automated data collection and reporting systems. However, the Board carefully crafted these new reporting requirements to solicit data which is readily available to EDCs and can be compiled and reported relatively easily, either manually or with a minimal investment in automation. Therefore, the Board does not believe that either a reduction or a delay in the reporting requirements is necessary.

Interconnection comments

12. COMMENT: There are several references in N.J.A.C. 14:8-5.3 to laboratories, which sometimes use differing language. The references should consistently be to an “OSHA-approved nationally recognized testing laboratory”, which could be defined as an “NRTL”. These NRTLs can be found at <http://www.osha.gov/dts/otpca/nrtl>. (EDCs)

RESPONSE: The commenter is correct that the rules were intended to describe laboratories that meet the standards of the Nationally Recognized Testing Laboratory Program, administered by the Occupational Safety and Health Administration (OSHA) in the U. S. Department of Labor. The rules have been clarified accordingly upon adoption.

13. COMMENT: The proposed amendments include in the definition of “interconnection agreement” in N.J.A.C. 14:8-5.1 a statement that an “interconnection agreement shall follow the standard form agreement developed by the Board and available from each EDC”. In general, these types of agreements should be developed by the EDCs in the first instance, and made available to interested parties. To date, only a Level 1 agreement has been released. There is no current standard form of agreement for Levels 2 and 3. (EDCs)

RESPONSE: The standard form Level 2 and 3 agreements are currently under development through the same process used to develop the recently revised level 1 agreement. This process included robust stakeholder input, including with an opportunity for input from all EDCs. The Board anticipates finalizing and distributing the level 2 and 3 agreements by early 2010.

14. COMMENT: N.J.A.C. 14:8-5.4(l) and (m) and 14:8-5.8(a) (formerly 4.7 and 4.11) should make it explicit that the EDC need not authorize that a system be energized unless or until it receives a Uniform Construction Code document certifying that the local code official has already inspected and approved the installation. Approval conditioned on an inspection that has not yet occurred, as contemplated by the proposed amendments, is unacceptable. First, EDCs have no authority over local code officials to assure that an inspection will be done. Second, energizing a system without this inspection may create unsafe conditions for the customer and/or an employee of the EDC. (EDCs)

RESPONSE: The commenters cite the level 1 interconnection review provisions at N.J.A.C. 14:8-5.4(l) and (m) (recodified through this rulemaking from N.J.A.C. 14:8-4.7(l) and (m)), and a proposed new provision governing EDC obligations after approval of an interconnection at N.J.A.C. 14:8-5.8(a) (note: N.J.A.C. 14:8-5.8 was recodified through this rulemaking from N.J.A.C. 14:8-4.11). The changes to the level 1 review provisions at N.J.A.C. 14:8-5.4(l) and (m) do not affect the timing or preconditions under which a customer-generator may energize a generating facility approved for interconnection using the level 1 procedures. The rules have always required the EDC to approve a level 1 interconnection conditioned on approval by the electrical code official. The amendments to the level 1 provisions merely remove two

previous requirements: first, that the customer-generator notify the EDC of the anticipated energizing date, and second, that the customer-generator provide this EDC notice five days prior to the anticipated energizing date (see N.J.A.C. 14:8-4.7(l) and (m) (recodified through this rulemaking as N.J.A.C. 14:8-5.4(l) and (m)). The Board is not aware of problems that have arisen from the existing level 1 provision for conditional code approval, and therefore has not made the commenters' suggested change to the level 1 provisions. Regarding the timing of code approval in a level 2 interconnection review, N.J.A.C. 14:8-5.5(r)1 clearly states that code approval must be issued prior to EDC approval of the interconnection. Regarding the timing of code approval in a level 3 review, the issue is not addressed in N.J.A.C. 14:8-5.6, with the result that the EDC has the authority to require code approval prior to EDC approval of the interconnection. Again, the Board does not believe that a clarification to the level 3 provisions on this matter is necessary. However, regarding the new provision at N.J.A.C. 14:8-5.8(a), the Board agrees that this provision could be interpreted so as to conflict with level 2 and level 3 interconnection review provisions. New N.J.A.C. 14:8-5.8(a), as it was proposed, seems to state that the EDC is required to issue a level 2 or 3 interconnection approval upon the satisfaction of the two conditions in the proposed new provision – that is, upon completion of the EDC inspection and the submittal of an executed interconnection agreement. This implies that the EDC is not authorized to require code approval as a condition precedent to EDC interconnection approval. This was not the Board's intent. The provision was intended merely to reiterate and emphasize the requirement that the EDC must provide prompt written notice of interconnection approval so that customer-generators could energize their systems promptly after EDC approval. Therefore, new N.J.A.C. 14:8-5.8(a) has been modified upon adoption to clarify this, and to remove any possible conflict with the level 2 and 3 review provisions.

Agency-initiated changes:

Cross references were corrected in N.J.A.C. 14:8-4.4(c), to reflect the separation of the net metering and interconnection rules into two separate subchapters, and the resulting recodification.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies that adopt, readopt or amend State rules that exceed any Federal standard or requirement to include in the rulemaking document a Federal Standards Analysis. N.J.A.C. 14:8 is not promulgated under the authority of, or in order to implement, comply with or participate in any program established under Federal law or under a State statute that incorporate or refers to Federal law, Federal standards, or Federal requirements. Accordingly, Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. does not require a Federal Standards Analysis for these adopted amendments.

Full text of the adoption follows (additions are indicated in boldface with asterisks ***thus***; deletions are indicated in brackets with asterisks ***[thus]***):

SUBCHAPTER 4. NET METERING FOR CLASS I RENEWABLE ENERGY SYSTEMS

14:8-4.4 Meters and metering

(a) - (b) (No change.)

(c) If the customer-generator's existing electric revenue meter does not meet the requirements at (b) above, the EDC shall install a new revenue meter for the customer-generator, at the company's expense, within ten business days after the interconnection is approved in accordance with N.J.A.C. *[14:8-4.7]* *14:8-5.4*(m) or (n), N.J.A.C. *[14:8-4.8]* *14:8-5.5*, or N.J.A.C. *[14:8-4.9]* *14:8-5.6*, as applicable. Any subsequent revenue meter change necessitated by the customer-generator, whether because of a decision to stop net metering or for any other reason, shall be paid for by the customer-generator.

(d) (No change.)

SUBCHAPTER 5. INTERCONNECTION OF CLASS I RENEWABLE ENERGY SYSTEMS

14:8-5.3 Certification of customer-generator interconnection equipment

(a) In order to qualify for the level 1 and the level 2 interconnection review procedures described at N.J.A.C. 14:8-5.4 and 5.5, a customer-generator's interconnection equipment shall have been tested and listed by ***[a]* *an OSHA-approved nationally recognized testing*** laboratory for continuous interactive operation with an electric distribution system in accordance with the following standards, as applicable:

1. -
2. (No change.)

(b) Interconnection equipment shall be considered certified for interconnected operation if it has been submitted by a manufacturer to ***[a]* *an OSHA-approved*** nationally recognized testing ***[and certification]*** laboratory, and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards listed in (a) above.

(c) (No change.)

(d) If the interconnection equipment includes only the interface components (switchgear, inverters, or other interface devices), an interconnection applicant shall show that the generator or other electric source being utilized with the interconnection equipment is compatible with the interconnection equipment and consistent with the testing and listing specified for the equipment. If the generator or electric source being utilized with the interconnection equipment is consistent with the testing and listing performed by the ***OSHA-approved*** nationally recognized testing ***[and certification]*** laboratory, the interconnection equipment shall be deemed certified, and the EDC shall not require further design review, testing or additional equipment.

14:8-5.8 Requirements after approval of an interconnection

(a) Once the ***[EDC performs an inspection or determines that no inspection is needed]* *customer-generator has met all requirements for interconnection approval*** under N.J.A.C. 14:8-5.4, 5.5, or 5.6; ***[and has received an executed interconnection agreement from the customer-generator;]*** the EDC shall notify the customer-generator in writing that the customer-generator is authorized to energize the customer-generator facility.

(b) - (g) (No change.)