

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on February 11, 2010

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman  
Patricia L. Acampora  
Maureen F. Harris  
Robert E. Curry, Jr.  
James L. Larocca

CASE 09-E-0819 - Niagara Mohawk Power Corporation d/b/a National  
Grid  
CASE 09-E-0820 - Consolidated Edison Company of New York, Inc.  
CASE 09-E-0829 - New York State Electric & Gas Corporation  
CASE 09-E-0830 - Central Hudson Gas & Electric Corporation  
CASE 09-E-0832 - Rochester Gas and Electric Corporation  
CASE 09-E-0834 - Orange and Rockland Utilities, Inc.

Tariff filings to Effectuate Amendments to Public  
Service Law §66-j (Net Energy Metering for Residential  
Micro-Combined Heat and Power or Fuel Cell Electric  
Generating Systems) and Conforming Changes to  
Standardized Interconnection Requirements.

ORDER MODIFYING AND AUTHORIZING  
MICRO-GEN NET METERING TARIFFS

(Issued and Effective February 12, 2010)

BY THE COMMISSION:

BACKGROUND

Pursuant to Chapter 355 of the Laws of 2009, Public  
Service Law (PSL) §66-j and was amended effective August 26,  
2009. The amendments expand §66-j by adding residential micro-  
combined heat and power (micro-CHP) and fuel cell electric  
generating systems (micro-fuel cell)(collectively, micro-Gen) to  
the list of eligible technologies that can be net metered, and  
to make other changes to net metering requirements. Major  
electric utilities were required to make the filings necessary

to effectuate the statutory changes within three months following the August 26, 2009 effective date of the statutory amendments.

Between November 5, 2009 and November 25, 2009, all six of New York's major electric utilities made filings that would conform their tariffs to the requirements of the amended net metering law.<sup>1</sup> Subsequently, several of the utilities filed modifications to their proposed tariffs, which have an effective date of February 26, 2010.

Notices of the tariff filings of Con Edison and National Grid were published in the State Register on December 9, 2009, in conformance with State Administrative Procedure Act (SAPA) §202(1). Notices of the filings of the remaining utilities were published on December 16, 2009. The notices also referenced revisions to the Standardized Interconnection Requirements (SIR) that would be needed to accommodate micro-gen net metering. The comment periods provided for under §202(1)(a) expired on January 26, 2010 and February 1, 2010, respectively. In six separate comments filed between January 26, 2010 and February 3, 2010, the E-Cubed Company LLC (E-Cubed) proposes changes to the micro-gen tariffs submitted by the utilities.<sup>2</sup>

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<sup>1</sup> The major electric utilities are: Central Hudson Gas & Electric Corporation (Central Hudson); Consolidated Edison Company of New York, Inc. (Con Edison); New York State Electric & Gas Corporation (NYSEG); Niagara Mohawk Power Corporation d/b/a National Grid (Niagara Mohawk); Orange and Rockland Utilities, Inc. (O&R); and, Rochester Gas and Electric Corporation (RG&E).

<sup>2</sup> While E-Cubed's comments on the proposed tariffs of Niagara Mohawk, Con Edison, and Central Hudson were filed late, they may be considered because they are not prejudicial and they advance the record in this proceeding.

THE TARIFF FILINGS

As required under the revisions to PSL §66-j, the utilities' tariff provide: 1) In the event that the amount of electricity supplied by the utility during the billing period exceeds the amount of electricity provided by a micro-gen customer-generator, the utility shall charge the customer-generator for the net electricity supplied at the same rate per kWh applicable to service provided to other customers in the same class which do not generate electricity onsite; and, 2) In the event that the amount of electricity produced by a micro-CHP or micro-fuel cell customer-generator exceeds the amount of electricity used by the customer-generator, the customer-generator will be credited on the next bill of service for the net electricity at the utility's avoided costs. Con Edison and O&R have published newspaper notifications to the public of their proposed tariff changes, but have requested waivers of the requirement of newspaper publication of the further tariff revisions filed subsequent to their original filings. Central Hudson, National Grid, RG&E and NYSEG have requested waivers of the requirement of newspaper publication of their filings because customers will be notified of the changes when they submit applications for micro-gen net metering service.

PROPOSED SIR CHANGES

The SIR for distributed generation units operating in parallel with the electric utility distribution systems were first adopted in 1999.<sup>3</sup> A feature of the ongoing reviews of the SIR is the proposal and adoption of substantive revisions,

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<sup>3</sup> Case 94-E-0952, Competitive Opportunities Regarding Electric Service, Opinion No. 99-13 (issued December 31, 1999).

beginning in 2000 and, as most recently performed, in 2009.<sup>4</sup> The update proposed here conforms the SIR, and the utility tariffs implementing it, to the PSL §66-j amendments providing for an expansion of the list of eligible technologies that can be net metered to include micro-CHP and micro-fuel cell facilities. No other modifications or substantive changes to the SIR have been proposed at this time.

#### E-CUBED'S COMMENTS

##### Niagara Mohawk Issues

E-Cubed presents a number of disparate suggestions for the improvement of Niagara Mohawk's micro-gen net metering tariff. E-Cubed characterizes as confusing Niagara Mohawk's definition of the avoided cost that must be paid to a micro-gen net metering customer if its monthly production exceeds its usage. E-Cubed criticizes the utilities' approach of referencing avoided cost as calculated under another provision of its tariff, instead of providing the avoided costs payable to micro-gen customers in the tariff applicable to them. It also complains that the avoided cost provision tariffed for micro-gens should specifically identify line loss values, again instead of referencing values located elsewhere in the tariff. E-Cubed adds that the utility should be required to post avoided cost information to its Website.

According to E-Cubed, customers installing micro-gen facilities might also desire to install other form of net-metered generators, such as solar and wind powered facilities.

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<sup>4</sup> See, e.g., Case 08-E-1018, Order modifying and Approving Rates, Charges, Rules, and Regulations Related to the Interconnection and Operation of Customer-Owned Generation (issued February 12, 2009); Case 94-E-0952, supra, Order Denying Petitions for Rehearing, Providing Clarification, Modifying Standard Interconnection Requirements, and Directing Filing of Revised Tariffs (issued November 15, 2000).

E-Cubed maintains that Niagara Mohawk's tariff should provide for the net metering of both types of facilities at a location, and references tariff provisions filed by O&R and Con Edison that allow for the net metering of such hybrid facilities. E-Cubed believes that the statutory net metering pricing provision applicable to the largest-sized generating unit at a particular location should determine the pricing for both units.

E-Cubed points out that the Standard Interconnection Requirements (SIR) must be updated to accommodate the commencement of net metering for micro-gens. It would establish a timetable for accomplishing the needed revisions. Finally, E-Cubed says it found several typographical errors in Niagara Mohawk's tariff and makes suggestions for improving the wording of certain tariff provisions.

#### O&R and Con Edison Issues

In commenting on the O&R and Con Edison tariffs, E-Cubed repeats its proposal for defining and referencing avoided cost in tariffs, for updating the SIR, and for posting avoided cost information to utility Websites. E-Cubed, however, praises several other provisions those utilities propose to tariff. Con Edison and O&R would allow customers to net meter hybrid facilities consisting of several forms of net metered generation, including micro-gen facilities, an approach E-Cubed advocates. Arguing that §66-j as amended permits any customer classified as residential to avail itself of micro-gen net metering, E-Cubed supports O&R in opening micro-gen net metering to any residential customer, rather than restricting it to primary residence locations.

O&R, E-Cubed notes, would also offset electric credits customers earn from net metering against their gas bills. E-Cubed maintains that provision is appropriate because micro-gen facilities can be fueled with natural gas.

Other Utility Issues

In addressing the tariff filings of NYSEG, RG&E, and Central Hudson, E-Cubed repeats its earlier assertions. It also argues that all of the utilities should be directed to follow O&R's lead by opening micro-gen net metering to all customers classified as residential.

Turning to the tariffs of NYSEG and RG&E, E-Cubed asserts that besides failing to properly reference the avoided cost applicable to the monthly crediting of micro-gen generation production exceedences, the utilities have failed to properly calculate that avoided cost. It also complains that the utilities use in their tariffs an acronym that could be confused with a proprietary trademark.

DISCUSSION AND CONCLUSION

E-Cubed's proposed modifications to the utilities' micro-gen net metering tariffs are rejected, with one exception. As E-Cubed points out, any customer classified as residential qualifies for micro-gen net metering under the amendments to PSL §66-j, and NYSEG and RG&E tariff provisions limiting that net metering to primary residences conflict with the statutory amendments. Moreover, additional modifications to the tariffs of Con Edison, NYSEG, O&R and RG&E are required to revise provisions on the net metering of hybrid facilities consisting of micro-gen and renewable-fueled generation facility components, because those provisions do not properly implement the amendments to PSL §66-j. Another revision to O&R's tariff is also required, to remove the provision allowing micro-gen customer generators to offset net metering credits against utility bills for gas service. Finally, the SIR must be revised to conform to the statutory amendments.

E-Cubed's Tariff Criticisms

Contrary to E-Cubed's arguments, the utilities have properly referenced avoided cost in their tariffs, and properly identified the avoided cost amount that micro-gens must be paid. Since avoided cost is a generic measure of a utility's overall cost in acquiring generation supply, it is appropriate for the utilities to reference only one method for measuring avoided cost in its tariff, and to guide all users of avoided cost numbers to the tariff provision where that measurement of avoided cost is detailed.

E-Cubed's criticisms of the methods NYSEG and RG&E employ for calculating avoided cost are similarly misplaced. Those utilities will merely continue their existing methods of calculation, which are already applicable to the annual cash-out of renewable-fueled generation net metered production exceedences, for use in calculating the value of micro-gen monthly generation production exceedences. The changes to the calculations that E-Cubed proposes cannot be implemented without affecting the monetization of the excess credits due annually to renewable-fueled net metering customers. Modifying the methods of calculation is therefore beyond the scope of these proceedings.

Other corrections E-Cubed would make to the utilities' tariffs are not needed at this time. As discussed above, arrangements for updating the SIR have already been proposed. E-Cubed's suggestions for improvements to utility Websites are not appropriately addressed in a proceeding limited to micro-gen tariffs, but may be considered later in a proceeding of broader application. The wording changes E-Cubed proposes to the Niagara Mohawk, NYSEG and RG&E tariffs also may be addressed at a later time, when the utilities makes housekeeping changes to their tariffs.

Hybrid Facilities

As E-Cubed notes, some utilities allow the combined net metering of a hybrid installation consisting of micro-gen facilities and other forms of net-metered facilities at the same location; those utilities are: Con Edison, NYSEG, O&R and RG&E. Moreover, the Wind Tariff Order authorizes the combined net metering of hybrid solar and wind facilities at one location, and provides that the statutory payment standard applicable is that adhering to the larger-sized facility.<sup>5</sup> While micro-gen facilities can be sited in hybrid configurations with other forms of net metered generation at one location, the combined metering configuration devised in the Wind Tariff Order for the benefit of wind and solar facilities is not available to micro-gen facilities.

Allowing renewable-fueled hybrid facilities to net meter through a combined configuration at one location was appropriate for two reasons. First, at the time of the Wind Tariff Order, both PSL §66-j, for solar facilities, and PSL §66-l, for wind facilities, required the annual cash-out of credits owed to a net metering customer-generator. That is, if a net metering customer's production over a year exceeded its consumption during that period, the excess would be monetized at the value of avoided cost at the end of the year. Because of this common provision, a hybrid arrangement of multiple renewable-fueled facilities can be net metered in harmony at one location under a combined metering configuration.

Second, renewable-fueled facilities operate at low capacity factors and are constrained in their hours of operation to a fraction of a year, because they are dependent upon the

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<sup>5</sup> Case 05-E-0697, et al., Wind Net Metering Tariffs, Order Modifying and Approving Tariffs and Providing For Further Proceedings (issued September 26, 2005)(Wind Tariff Order).



irregular availability of sunlight and wind speed. These factors constrain their ability, over time, to generate production in excess of usage and to accumulate large annual credits.

The net metering of micro-gen facilities differs from renewable-fueled facilities in those two important respects. The amendments to PSL §66-j extending net metering to micro-gen facilities do not provide for annual monetization of the value of excess production over usage. While micro-gen facilities are allowed to carry forward credits for those production exceedences, they may not monetize them after a year or any other period. If E-Cubed's recommendation were accepted, that statutory limitation would be impermissibly overridden in many cases, because a hybrid facility owner obtaining cash payment for its renewable-fueled facility at the end of an annual period would also monetize the value of its micro-gen production in contravention of the statute.

Moreover, micro-gen facilities may operate at high capacity factors for sustained and continuous periods of time over nearly all of a year because their fossil or other liquid or gas fuels are readily available. This operational characteristic distinguishes them from facilities dependent upon the availability of sunlight or wind speed as their fuel. As a result, operation of micro-gen facilities may yield production substantially in excess of usage, enabling them to realize a windfall if they could monetize the excess production at the end of a year.

Therefore, the provisions of the Wind Tariff Order, on the net metering of several types of renewable-fueled facilities in a hybrid arrangement at one location through a combined net metering configuration, will not be extended in this proceeding beyond their current scope. Con Edison, NYSEG, O&R and RG&E are

directed to reverse their tariff revisions allowing micro-gen customers to obtain the combined metering configuration benefits provided for in the Wind Tariff Order.

It should be stressed that, even without the benefits of the Wind Tariff Order, a customer may still install a micro-gen facility along with other types of net metered generation at one location, by separating their operations from each other. The circumstances where such arrangements are permissible, and the requirements for interconnecting such a combination of facilities while separating their operations from each other, are addressed on a case-by-case basis. One such permissible arrangement was described in the Allied Ruling,<sup>6</sup> and, although that arrangement may not be directly transferable to customers installing a hybrid facility with a micro-gen component, similar rulings may be sought on appropriate arrangements for the net metering of such a hybrid facility.

#### Other Tariff Provisions

Another revision to O&R's tariff is needed. The utility would allow customers to offset electric net metering credits against utility bills for gas service. Contrary to E-Cubed's suggestions, nothing in PSL §66-j authorizes such an approach. The statute does not mention gas bills, and instead requires the crediting "to the customer-generator for the net electricity provided" (emphasis added).<sup>7</sup> Moreover, the statute defines net metering as "the use of a net energy meter to measure during the billing period applicable to a customer-generator, the net amount of electricity supplied by an electric

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<sup>6</sup> Case 08-E-1426, Allied Converters, Inc., Declaratory Ruling on Metering and Billing of a Hybrid Generation Facility (issued May 19, 2009).

<sup>7</sup> PSL §66-j(4)(b).

corporation and provided to the corporation by a customer generator" (emphasis added).<sup>8</sup> The offset of electric net energy metering credits against gas bills cannot be squared with these statutory provisions. As a result, O&R is directed to remove from its tariffs the provision for the offset of such net metering credits against gas bills.

O&R, however, correctly extends micro-gen net metering to all residential customers. As E-Cubed points out, PSL §66-j(1)(a)(iv) and (v) do not limit micro-gen net metering to primary residences, even though that restriction is imposed on the net metering of residential solar facilities under PSL §66-j(1)(a)(i). The amendments to §66-j are best read as allowing all customers properly assigned to a residential classification to obtain micro-gen net metering. O&R has properly tariffed the effect of the statutory amendments on this point. The proposed tariffs of Central Hudson, Con Edison, and Niagara Mohawk are consistent with O&R's approach. NYSEG and RG&E, however, specifically limit micro-gen net metering to primary residences. They are directed to conform their tariffs to O&R's approach by removing the primary residence restriction.

#### SIR Revisions

No comments have been received on the proposal to revise the SIR, and utility tariffs implementing it, to accommodate the amendments to PSL §66-j providing for micro-gen net metering. Therefore, the SIR is revised accordingly and the utilities shall file the necessary tariff changes.

#### The Commission orders:

1. The amendments listed in the Appendix shall be allowed to become effective, provided that Consolidated Edison Company of New York, Inc., New York State Electric & Gas

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<sup>8</sup> PSL §66-j(1)(c).

Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation file the further revisions that are discussed in the body of this Order by February 23, 2010.

2. The further revisions described in Ordering Clause No. 1 above are authorized to become effective on February 26, 2010.

3. All electric utilities listed in the body of this Order are directed to comply with the revised Standard Interconnection Requirements (SIR) and file revised SIR addenda to their tariffs by February 23, 2010 to become effective on February 26, 2010.

4. The requirements of §66(12)(b) of the Public Service Law, as to newspaper publication of the amendments listed in the Appendix for Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid and Rochester Gas and Electric Corporation, and as to the further tariff revisions filed by those utilities and Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc., are waived, and, as to the revisions directed in Ordering Clause No. 1, are waived for the utilities listed in the body of this Order.

5. The deadlines provided for in this Order may be extended as the Secretary may require.

6. These proceedings are continued but shall be closed by the Secretary after the filings required by Ordering Clause No. 1 have been reviewed, unless the Secretary finds good cause to continue these proceedings further.

By the Commission,

(SIGNED)

JACLYN A. BRILLING  
Secretary

SUBJECT: Filing by CENTRAL HUDSON GAS & ELECTRIC CORPORATION

Amendments to Schedule P.S.C. No. 15 - Electricity

Original Leaves Nos. 167.7, 167.8, 213.9, 213.10

Issued: November 25, 2009      Effective: February 26, 2010

Sixth Revised Leaf No. 167.1

Seventh Revised Leaves Nos. 167, 167.5

Issued: December 14, 2009      Effective: February 26, 2010

First Revised Leaves Nos. 167.7, 167.8, 213.9, 213.10

Issued: January 13, 2010      Effective: February 26, 2010

SUBJECT: Filing by CONSOLIDATED EDISON COMPANY OF NEW YORK,  
INC.

Amendments to Schedule P.S.C. No. 9 - Electricity

Fifth Revised Leaf No. 158-I-2

Seventh Revised Leaves Nos. 158-H-1, 158-I-3

Ninth Revised Leaf No. 158-I-1

Eleventh Revised Leaf No. 158-I

Thirteenth Revised Leaf No. 158-H

Issued: November 5, 2009      Effective: February 26, 2010

Sixth Revised Leaf No. 158-I-1

Eighth Revised Leaves Nos. 158-H-1, 158-I-3

Tenth Revised Leaf No. 158-I-1

Fourteenth Revised Leaf No. 158-H

Issued: January 14, 2010      Effective: February 26, 2010

SUBJECT: Filing by NEW YORK STATE ELECTRIC & GAS CORPORATION

Amendments to Schedule P.S.C. No. 120 - Electricity

Original Leaves Nos. 117.35, 117.36, 117.37, 117.38  
Second Revised Leaves Nos. 117.31, 117.32  
Third Revised Leaves Nos. 266.1, 304.1  
Fourth Revised Leaves Nos. 116, 117.3  
Seventh Revised Leaf No. 127  
Tenth Revised Leaf No. 2.1

Issued: November 25, 2009      Effective: February 26, 2010

First Revised Leaves Nos. 117.35, 117.36, 117.37,  
117.38  
Third Revised Leaves Nos. 117.31, 117.32  
Fifth Revised Leaf No. 116

Issued: January 15, 2010      Effective: February 26, 2010

SUBJECT: Filing by NIAGARA MOHAWK POWER CORPORATION d/b/a  
NATIONAL GRID

Amendments to Schedule P.S.C. No. 220 - Electricity

Original Leaf No. 199.1  
First Revised Leaves Nos. 198, 199  
Second Revised Leaves Nos. 2, 37, 197, 418

Issued: November 18, 2009      Effective: February 26, 2010

Second Revised Leaves Nos. 198, 199

Issued: January 15, 2010      Effective: February 26, 2010

SUBJECT: Filing by ORANGE AND ROCKLAND UTILITIES, INC.

Amendments to Schedule P.S.C. No. 2 - Electricity

Original Leaf No. 22L-29-1  
Second Revised Leaf No. 22-L-31-1  
Fourth Revised Leaf No. 22L-28  
Fifth Revised Leaves Nos. 22L-23, 22L-31  
Sixth Revised Leaf No. 22L-30  
Seventh Revised Leaves Nos. 18D, 22L-29

Issued: November 25, 2009      Effective: February 26, 2010

Eighth Revised Leaf No. 18D

Issued: January 19, 2010      Effective: February 26, 2010

SUBJECT: Filing by ROCHESTER GAS AND ELECTRIC CORPORATION

Amendments to Schedule P.S.C. No. 19 - Electricity

Original Leaves Nos. 160.39.7, 160.39.8  
First Revised Leaves Nos. 160.39.5, 160.39.6  
Second Revised Leaf No. 160.39.3  
Third Revised Leaf No. 160.39.2  
Fourth Revised Leaves Nos. 4.1, 160.39, 163.2, 178.2  
Ninth Revised Leaf No. 2

Issued: November 2, 2009      Effective: February 26, 2010

First Revised Leaves Nos. 160.39.7, 160.39.8  
Second Revised Leaves Nos. 160.39.5, 160.39.6  
Third Revised Leaf No. 160.39.3  
Fourth Revised Leaf No. 160.39.2  
Fifth Revised Leaf No. 160.39

Issued: January 15, 2010      Effective: February 26, 2010