

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on September 17, 2009

COMMISSIONERS PRESENT:

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

CASE 08-E-0751 - Proceeding on Motion of the Commission to Identify the Sources of  
Electric System Losses and the Means of Reducing Them.

ORDER ADOPTING REACTIVE POWER TARIFFS  
WITH MODIFICATIONS

(Issued and Effective September 22, 2009)

INTRODUCTION

In the Order Establishing Energy Efficiency Portfolio Standard and Approving Programs, we required that a separate proceeding be instituted to identify measures to reduce electric system losses.<sup>1</sup> We ordered, as a first step, that utilities submit reports within six months of the June 23 Order to propose ways to reduce line losses, including proposed reactive power tariff provisions and charges.<sup>2</sup>

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<sup>1</sup> Case 07-M-0548 , Energy Efficiency Portfolio Standard, Order Establishing Energy Efficiency Portfolio Standard and Approving Programs (issued June 23, 2008) (June 23 Order).

<sup>2</sup> “Reactive power,” measured in kilovars (RkVA) is the electrical power used to develop the magnetic field in motors and other equipment. Higher reactive power requirements increase total power flows, resulting in a lower power factor and higher system thermal losses. Reactive power is also referred to as reactive demand in this order.

We then clarified that, to the extent a utility did not have reactive power provisions and rates in its tariff, the utility was required to develop such reactive power tariff and file it with the six-month reports. We also sought supporting documentation to justify the tariff provisions and ordered utilities with existing reactive power provisions to determine whether, and to what extent, such provisions should be updated or extended to other service classifications.<sup>3</sup>

On July 17, 2008, Staff convened a Technical Conference at which utilities, the New York Independent System Operator (NYISO) and other parties participated. On December 23, 2008, Niagara Mohawk Power Corporation (d/b/a National Grid) (National Grid), New York State Electric & Gas Corporation (NYSEG), Rochester Gas and Electric Corporation (RG&E), Central Hudson Gas & Electric Corporation (Central Hudson), Consolidated Edison Company of New York, Inc. (Con Edison), and Orange and Rockland Utilities, Inc. (O&R)<sup>4</sup> made filings in compliance with our orders.<sup>5</sup> The effective dates of the tariff amendments filed by the utilities are postponed through October 1, 2009.

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), notice of the proposed rulemaking related to the NYSEG filing was published in the State Register on January 14, 2009 and notices of the filings submitted by RG&E, Central Hudson, National Grid, Con Edison and O&R were published on January 21, 2009. The SAPA deadlines for filing comments expired on March 2 and March 9, 2009, respectively. No comments were received on the filings.

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<sup>3</sup> Case 08-E-0751, Proceeding on Motion of the Commission to Identify the Sources of Electric System Losses and the Means of Reducing Them, Order Clarifying Scope Of Proceeding (issued July 17, 2008), (July 17 Order).

<sup>4</sup> Collectively referred to as “the utilities” in this Order.

<sup>5</sup> While Con Edison and O&R filed tariffs encompassing voluntary programs to address customer reactive power usage, the filings were not consistent with the intent of our June 23 and July 17 Orders, which required the utilities to file proposed reactive power provisions and rates in their tariffs.

In this Order, we adopt a two-pronged approach to reduce losses: one includes tariff rates for large customers with low power factors;<sup>6</sup> the other includes operational changes on distribution and transmission systems, which we plan to address in a later order. The tariff changes we adopt in this Order are necessary to reduce power flows on electric delivery systems. Such changes will improve energy efficiency and reliability, as discussed more below.

### BACKGROUND

In the June 23 Order, we found that reduction of lost energy on the transmission and distribution (T&D) system is a potential source of savings and would benefit system operations. Total losses vary from one electric utility's system to the next, but are estimated to be between 6% and 10% depending on the system. Con Edison, for instance, calculated that its total system electric line losses amount to 6.64% of net generation and purchases, or 4,156,218 MWh, at a value of \$446 million (in 2007 dollars).

Reactive power requirements contribute to these losses. Reactive power tariff charges are necessary, therefore, to send accurate price signals to customers whose equipment imposes large reactive power requirements on a utility's delivery system. Reactive power charges, which reflect the utility's cost of providing reactive power should, therefore, be a component of the rate structure for the large customer classes. These classes of customers are likely to react to price signals and generally are able to install corrective equipment at their facilities to improve their power factors.<sup>7</sup> All customers will benefit from loss reductions over time as system improvements are achieved through active participation by large customers who choose to reduce their reactive power usage, and, therefore, their reactive power charges, by installing on-site equipment to improve their power factors.

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<sup>6</sup> The "power factor" is the ratio of real power, measured in kilowatts (kW), to total power, measured in kilovolt-amperes (kVA), in an AC electric circuit.

<sup>7</sup> While all customer usage creates some reactive power, the cost to install corrective measures currently is not justified for small customers.

REACTIVE DEMAND FILINGS BY UTILITIES

National Grid

National Grid's current reactive demand tariffs apply a \$0.85 per RkVA charge to SC 3 (Large General Service  $\geq 100$  kW) customers whose demand exceeds 500 kW for three consecutive months or when their connected load indicates that their demand would normally exceed 500 kW; and, a \$1.02 per RkVA charge to SC 3-A (Large General Service TOU  $\geq 2,000$  kW) customers. These charges apply to customers with power factors below 95%, which, National Grid notes, is the power factor required of wholesale generators by the Federal Energy Regulatory Commission (FERC). National Grid states that it applies these rates to more than 1,000 customers whose aggregate load is about one-third of the utility's total load.

National Grid's tariff summary focused on the relationship of its reactive demand charges to the cost of providing incremental capacitor bank capability. It found that revenues collected from customers through the reactive demand charge is comparable to the incremental revenue requirement necessary to install equipment on the Company's system to correct these customers' power factors to 95%. The Company did not examine whether reactive power charges should apply to customers with demand lower than 500 kW or whether the current power factor threshold of 95% should be revised.<sup>8</sup> National Grid believes that its current reactive demand charges are adequate; therefore, it did not propose any changes to its tariffs.

National Grid states that it does not apply explicit power factor charges to customers with small loads because the cost of doing so cannot be cost justified. The Company notes that power factor correction equipment needs to be designed, installed, operated, and maintained with care because too much corrective capacity will increase power losses and raise circuit voltage, which may result in equipment damage and reduced safety. Consequently, National Grid believes that its policy of applying power factor charges to customers 500 kW or larger is appropriate because these customers tend

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<sup>8</sup> National Grid's Six-Month Report (December 23, 2008), Attachment No. 2, p. 2 of 6.

to maintain staff skilled in operating and maintaining their systems in an efficient and economical manner.

### Central Hudson

In Central Hudson's most recent rate case, the Commission approved an increase of the Company's reactive demand charge from \$0.44 per RkVA to \$0.83 per RkVA.<sup>9</sup> The new reactive demand charge was based on the monthly per RkVA estimated cost that would be incurred if the Company were to install a 300 RkVA capacitor bank on its system. This charge applies to the Company's S.C. No. 3 (Primary) and S.C. No. 13 (Substation and Transmission) customers with power factors below 90% and metered demands greater than 1,000 kW. However, in the rate case, the Company proposed to apply the charge to customers with power factors below 97%. Staff opposed the Company's proposal, instead recommending that the charge apply to customers operating below a 95% power factor level. We deferred resolution of this issue to this proceeding.

### New York State Gas & Electric

NYSEG's reactive demand charge is \$0.00095 per RkVAh,<sup>10</sup> applicable to customers with power factors below 95% and metered demands of 200 kW or more for two consecutive months. In its December 23 filing, NYSEG proposed to lower the reactive demand charge to \$0.00078 per RkVAh, applying it to customers with power factors below 97%. The Company proposed to keep the metered demand provision (200 kW or more for 2 consecutive months) the same. NYSEG proposed that the new tariff provisions go into effect four months after Commission approval of its tariff filing. The Company estimated that the costs to implement these changes are approximately \$43,000

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<sup>9</sup> See Cases 08-E-0887 *et al.*, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Central Hudson Gas & Electric Corporation for Electric Service, Order Adopting Recommended Decision with Modifications (Issued and Effective June 22, 2009).

<sup>10</sup> NYSEG and RG&E base their rates on an hourly meter reading basis while National Grid and Central Hudson base theirs on a peak demand basis.

and requested that any incremental cost incurred to implement revised reactive power tariffs be recovered in NYSEG's next rate proceeding.

To calculate the proposed reactive demand charge, NYSEG first updated the expected costs of installing fixed and switched capacitors banks on its electric system. The number and types of capacitors needed were identified by determining the amount of fixed capacitors needed to provide a normal loading power factor of approximately 97% and the number of switched capacitors needed to maintain the 97% power factor level under non-normal loading conditions. The Company then divided the installation costs by the kilovars of capacitors banks needed and used the Company's annual levelized carrying charge rate and system load factor to calculate the proposed reactive demand charge.

NYSEG calculated an "economic power factor" by comparing the installed cost of reactive compensation to the energy savings obtained by avoiding the cost of real power losses on the system. It states that this methodology was used in the development of its current tariff. This methodology resulted in a 99.9% power factor requirement. NYSEG proposed to use a 97% power factor level for billing purposes because the Company notes that, as power factor correction approaches unity, the costs of the correction outweigh the benefits, and the proposed 97% level should be more cost-beneficial.

#### Rochester Gas & Electric

RG&E currently does not have reactive power tariffs. In its December 23 filing, it proposed to implement a reactive demand charge of \$0.00127 per RkVAh applicable to its SC 8 (General Service Time of Use) and SC 14 (Standby Service) customers operating below a 97% power factor. RG&E used the same methodology as NYSEG to calculate its proposed reactive demand charge and power factor applicability threshold.

The Company also proposed to apply the tariff in phases to accommodate a roll out of meters for all eligible customers and to program the billing requirements into its system. Consequently, RG&E proposed to implement the charge as follows: one year after Commission approval of its tariff for customers using not less than 1,000 kW in any

two of the previous twelve months; two years of Commission approval to customers using not less than 500 kW; and three years of Commission approval, to customers using not less than 300 kW. RG&E estimated that the costs to implement these changes are approximately \$210,000; the capital costs for new meters are about \$360,000. The Company requested that any incremental cost incurred for the implementation of the reactive power tariff be recovered in RG&E's next rate proceeding.

Consolidated Edison

In its December 23 filing, Con Edison submitted proposed reactive power tariffs to implement a VARs Improvement Program (VIP) for customers with low power factors. The Company did not propose any reactive demand tariff charges in its filing.<sup>11</sup> Con Edison proposed to make the VIP available to its full-service and retail access customers eligible for Mandatory Hourly Pricing<sup>12</sup> and to its customers with induction type generating equipment.

To implement the VIP, Con Edison proposed to identify customers with low power factors and to provide technical assistance to them in selecting the type of equipment they may wish to purchase to resolve their power factor issues. Con Edison proposed to offer an incentive of up to \$100 per RkVA to help cover the cost of installing corrective equipment and VAR capable metering to applicable customers who demonstrate an improvement in their overall power factor. It proposed to recover all costs associated with the VIP through its Monthly Adjustment Charge (MAC).<sup>13</sup> Finally, Con Edison proposed that customers can begin applying to participate in the VIP 120 days after Commission approval of its filing.

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<sup>11</sup> Con Edison does have reactive power tariffs applicable to customers with induction generators; it did not propose any tariff changes for these customers.

<sup>12</sup> Demand equal to or greater than 500 kW.

<sup>13</sup> Costs incurred by Con Edison and its contractors may include, but are not limited to, program evaluation, staffing, program development, marketing and market research, capital costs for enabling technologies, incentive payments to customers to install equipment and Company administrative and study costs.

Orange & Rockland Utilities

For the non-residential service classifications, O&R's tariff states that a customer's billing demand shall not be less than 90% of the kVA demand. The Company states that the intent of this provision, which dates back to 1965, was to promote power factor improvements for individual customers with poor power factors. However, in the mid-1980s, O&R replaced the meters for most of its large non-residential customers with electronic meters that were not capable of measuring power factor. Consequently, the Company stopped enforcing the power factor provision in its tariff. In its December 23 filing, O&R proposed to remove the power factor provision from its tariff and to implement a VARs Improvement Program (VIP) similar to that which Con Edison proposes

O&R proposed to make the VIP available to its Mandatory Hourly Pricing customers<sup>14</sup> and to customers with demands greater than 500 kW that are on standby/buyback tariffs. To implement the VIP, O&R proposed to identify customers with low power factors and to provide technical assistance to them in selecting the type of equipment they may wish to purchase to resolve their power factor issues. O&R proposed to offer an incentive of up to \$100 per RkVA to help cover the cost of installing corrective equipment and VAR capable metering to applicable customers who demonstrate an improvement in their overall power factor. It proposed to recover all costs associated with the VIP through its Energy Cost Adjustment (ECA).<sup>15</sup> O&R proposed that customers can begin applying to participate in the VIP 120 days after Commission approval of its filing.

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<sup>14</sup> Demand equal to or greater than 500 kW.

<sup>15</sup> Costs incurred by O&R and its contractors may include, but are not limited to, program evaluation, staffing, program development, marketing and market research, capital costs for enabling technologies, and incentive payments to customers to install equipment as well as all Company administrative and study costs.

## DISCUSSION

The Commission considered reactive power tariff charges in its past orders on a utility-by-utility basis. This resulted in varying requirements for reactive power demand charges. While differences in rates based on specific utility costs and system requirements are appropriate, standardization is possible for portions of the tariffs.<sup>16</sup>

Most, but not all, electric utilities include reactive power rates in tariffs that apply to large customers. Reactive power charges are necessary because they signal to large customers and operators of induction generators the utility's cost of providing them with reactive power. Historically, only the very largest customers have been subject to reactive power rates because of their significant impact, as a group, on system reactive power needs and because of their ability to take action to minimize their individual impacts. Reducing system reactive power needs reduces costs to all customers by reducing system line losses, increasing the capacity available to transmit real power, and improving voltage profiles on the system. Therefore, in this Order, we require the utilities to file reactive power tariffs and amend reactive power tariffs to include and reconcile the following requirements.

### Effective Dates

Central Hudson, NYSEG, and National Grid have reactive power tariffs in effect and are required to amend these tariff provisions to allow for customer notification as required by this Order to become effective on May 1, 2010. Con Edison and O&R are directed to file reactive power tariff provisions and rates, with supporting documentation, to become effective October 1, 2010, charging customers whose demand in any 2 of the previous 12 months is 1,000 kW or larger.<sup>17</sup> Con Edison, O&R and Central Hudson are directed to file tariff provisions and rates to become effective October 1, 2011, with supporting documentation, charging customers whose demands in any 2 of the previous 12 months are 500 kW or larger. NYSEG's proposal to continue charging reactive power

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<sup>16</sup> Open issues remain, such as optimum system power factor targets and the smallest level of customer usage demand above which the reactive power charges should apply.

<sup>17</sup> We are directing utilities to apply the reactive demand charge to customers using the kW threshold in any 2 of the previous 12 months to standardize this requirement.

rates to customers with demands exceeding 200 kW is approved with modification in that the Company shall amend its tariff to apply to customers with demands exceeding 200 kW in any 2 of the previous 12 months. RG&E's proposed phase-in is approved with modification.<sup>18</sup> The utilities may propose to the Commission, with sufficient justification, the application of reactive charges to customers with lower usage than the 500 kW threshold established in this Order.

As noted by Con Edison, induction generators lack an exciter and gather the needed excitation current from the Company's system, thereby consuming considerable reactive power.<sup>19</sup> Consequently, to the extent any utility does not have reactive power tariffs for induction generators, it is directed to file tariff provisions and rates, effective October 1, 2010, applicable to customers with induction generators having a total nameplate rating greater than or equal to 1,000 kW and, effective October 1, 2011, applicable to customers with induction generators having a total nameplate rating greater than or equal to 500 kW.

The utilities are directed to notify affected customers within 30 days of this Order of its requirements and the reasons the changes in current reactive demand tariffs or any new reactive demand tariff provisions adopted in accordance with this Order. This notice will provide customers time to take any power factor corrective action at their facilities before the tariff changes become effective.

#### Reactive Power Rates

Reactive power rates shall be based upon the avoided marginal cost to each utility of installing capacitor banks to supply required reactive power.<sup>20</sup> Generally, the rates should reflect the per-unit costs of corrective equipment and applicable carrying

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<sup>18</sup> RG&E is directed to file tariff amendments to revise its reactive demand applicability provision to charge rates to customers with demand not less than the phase-in threshold in any two of the previous twelve months.

<sup>19</sup> Con Edison December 23, 2008 report at 41.

<sup>20</sup> If, in the future, other technologies are developed that provide reactive power at a lower cost than capacitor banks, those technologies can be used to develop reactive power rates.

charges. The methodology each utility used in their December 2008 reports is accepted because each methodology appears reasonably based upon the marginal avoided cost reflective of each utility system's characteristics. Con Edison and O&R shall file the methodology they will use to calculate their reactive power rates, as well as the rates themselves.

#### Application of Reactive Power Rates

Reactive power charges can be applied on a peak usage basis (RkVA) or on an hourly usage basis (RkVAh).<sup>21</sup> For tariffs in which rates apply on a peak usage basis, reactive power charges shall apply to customers with power factors below 95%. For utilities measuring reactive power on an hourly basis, reactive power charges shall apply to customers with power factors below 97%. This difference is necessary for the following reason: an individual customer's peak usage of real power (kW) generally coincides with the system peak load, as does its peak usage of reactive power (RkVA); correspondingly, its power factor tends to be worst (at the lowest level) coincident with its peak load. In turn, losses are highest during system peak loading times and heavy reactive power usage during peak loading tends to further exacerbate these losses. Alternately, heavy reactive power usage during light load tends to have a much smaller impact on losses. A reactive power tariff that attempts to apply customer peak power factors for the threshold (e.g., the Central Hudson tariff), therefore, would tend to be more effective in helping reduce overall losses.

In contrast, under expected load patterns, the NYSEG and RG&E method of measuring real and reactive power over all hours would tend to result in a more optimistic customer power factor (compared to the companies that use peak readings only), giving more weight to lighter load reactive power usage and somewhat diluting the impact of peak reactive power usage. Consequently, if a 95% threshold were applied under both approaches, all else being equal, fewer customers would be expected to become subject to reactive power rates under the NYSEG and RG&E approach, and billable RkVAh would be lower than under the rates based upon peak usage. Therefore,

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<sup>21</sup> Due to the Commission's desire not to disrupt established billing processes, one form of measurement is not chosen over the other.

the higher 97% power factor threshold for utilities applying the reactive charge on an RkVAh basis would tend to offset this disparity, making the resulting assessments more consistent with the assessments of other utilities applying the reactive charge on an RkVA basis for customers with power factor below 95%.

Mitigating the Impact of New Rates

Establishing adequate, cost-based, reactive power tariff charges is an important step in encouraging customers to install corrective equipment, or to replace inefficient equipment that imposes large reactive requirements on the system. At the same time, we are aware of the cost implications for some customers that will be subject to reactive power tariffs or are subject to a higher standard than previously existed. We will, therefore, phase in application of the new rates over a two-year period to allow customers to plan for these charges and, to the extent possible, take actions to reduce their reactive power requirements.

While the installation of corrective measures at the transmission and distribution levels are needed, the most effective way to reduce losses resulting from customers' reactive requirements is to install corrective measures at the source of the problem (*i.e.*, at the customers' premises). The reactive power tariff provisions we adopt today support programs designed to encourage customers to take action to reduce their reactive loads. To better document the system-wide benefits anticipated from such programs, we require each electric utility subject to this Order to file, within 90 days of the issuance of this Order, an estimate of its system-wide savings expected per 100 RkVA of customer-sited correction, as applied to customers using 500 kW or more and in a manner reasonable for each utility's system. The savings shall be separately estimated for avoided losses on the distribution system and on the transmission system.

To monitor customers' responses to reactive power tariffs, we will require each electric utility subject to this Order to file on October 1 of each year, for five consecutive years starting in 2010, the number of customers subject to reactive power

charges, the percentage of the utility's total load used by these customers, and the billable RkVA or RkVAh over the previous 12 month period.<sup>22</sup>

### Incentive Programs

The VARs Improvement Programs proposed by Con Edison and O&R could provide customers with an incentive to evaluate their reactive power usage and proactively take action to avoid or reduce reactive power tariff charges. Con Edison's and O&R's proposed incentive programs, in conjunction with a roll out of reactive power rates, could provide a well-balanced program to encourage customers to reduce their reactive power requirements and should result in improvements in system delivery efficiency. Implementation of the VARs Improvement Programs would provide opportunities to measure customer willingness to participate in such programs and to determine whether it is appropriate to expand the program to other utilities.

The Con Edison and O&R filings, however, did not include an estimate of the overall costs of the program nor a cost/benefit analysis. Furthermore, the filings insufficiently justified their proposed incentive payment of \$100 per RkVA to participating customers. We encourage Con Edison and O&R to pursue future approval for the programs. In doing so, Con Edison and O&R should confer with Department of Public Service Staff on the contents of the plans as they are developed and submit sufficiently detailed information to justify approval, including plans for the design and implementation of their incentive programs and customer outreach and education proposals. Central Hudson, NYSEG, RG&E and National Grid are encouraged to review the Con Edison and O&R proposal and evaluate whether this type of program is appropriate for their customers.

Con Edison and O&R are required, in any future submission, to include justification for the incentive amounts they propose to pay customers to encourage their installation of corrective measures, as well as a cost/benefit analysis for the overall programs. In designing the programs, the incentive should be made available only to customers (1) who have meters that are capable of measuring reactive power; and (2)

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<sup>22</sup> Utilities implementing new reactive power tariffs in 2010 (RG&E, Con Edison and O&R) will file their first report on October 1, 2011.

whose power factors are below 95%. The Con Edison filing should include computations based on two scenarios: with NYPA loads included in the program and without NYPA loads included. Cost recovery mechanisms should be proposed for each scenario. In any event, the incentive payment is not to exceed the total installed cost of corrective equipment, such as capacitors or associated equipment.

Con Edison is installing VAR capable advanced meters for customers below 1,500 kW. It will be necessary that Con Edison also install such meters for customers above 1,500 kW. Metering costs should not be included in the incentive because Con Edison and O&R are installing VAR capable meters for customers in their Mandatory Hourly Pricing programs.

#### Costs Associated With the New Tariffs

By paying the new tariff rates, large customers with low power factors will assume the responsibility for the reactive correction costs they impose on the electric system. At the same time, the large customers affected by the new reactive power tariff provisions should benefit from improving their power factors because improved power factors could prolong the life of the equipment customers use to operate their businesses. Improved power factors will likely help these customers use less electricity overall if corrections are made as close as possible to the equipment that creates the reactive requirements.

Ultimately, the expectation is that the new rates will create an incentive for large customers to install equipment that improves their power factors, which will then reduce local and system-wide reactive power needs.<sup>23</sup> The mitigation measures we enact today, including phasing in over two years the levels at which the new reactive power rates will apply to large customers, should help to reduce the economic impact of the new rates on customers. The utilities should record incremental costs and revenues associated with the reactive power tariffs for possible future rate treatment.

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<sup>23</sup> While capacitor banks are the current technology for balancing power flows, new technologies are always being developed that can provide the same power factor improvements. We are not requiring in this order that any one technology be used to improve power factors.

The Commission orders:

1. Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation, are directed to cancel, effective no later than September 30, 2009, on not less than one day's notice, the tariff amendments listed in the Appendix.

2. New York State Electric & Gas Corporation is directed to file tariff amendments, effective November 1, 2009, on not less than one day's notice, containing reactive demand rates and power factor levels in accordance with this Order. The amendments shall state that, effective May 1, 2010, the new reactive rates and power factor level will be applicable to customers with demands not less than the proposed applicability levels in any two of the previous twelve months.

3. Niagara Mohawk Power Corporation is directed to file tariff amendments, effective November 1, 2009, on not less than one day's notice, stating that, effective May 1, 2010, the reactive demand rates will be applicable to customers with demands not less than the current applicability levels in any two of the previous twelve months.

4. Rochester Gas and Electric Corporation is directed to file tariff amendments, effective November 1, 2009, on not less than one day's notice, containing the reactive demand provisions and rates in accordance with the discussion in this Order. The amendments shall provide for a three-year phase-in of the reactive demand rates and shall state that the reactive demand rates will be applicable to customers with demands not less than the proposed applicability levels in any two of the previous twelve months.

5. Central Hudson Gas & Electric Corporation is directed to file tariff amendments for all applicable service classifications, effective November 1, 2009, on not less than one day's notice, stating that, effective May 1, 2010, reactive demand rates will be applicable to customers with power factors below 95% and demands not less than 1,000 kW in any two of the previous twelve months; and, as of October 1, 2011, reactive demand rates will be applicable to customers with power factor below 95% and demands not less than 500 kW in any two of the previous twelve months.

6. Consolidated Edison Company of New York, Inc., and Orange and Rockland Utilities, Inc., are directed to file within 30 days of the issuance of this Order, to become effective March 1, 2010, reactive power tariff provisions and rates with supporting documentation in accordance with the discussion in this Order.

7. Niagara Mohawk Power Corporation (d/b/a National Grid), New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. are directed to file within 30 days of the issuance of this Order, to become effective March 1, 2010, reactive power provisions and rates with supporting documentation for customers with on-site induction generators in accordance with the discussion in this Order.

8. Niagara Mohawk Power Corporation (d/b/a National Grid), New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. shall file, within 90 days of the issuance of this Order, an estimate of the system-wide savings expected per 100 RkVA of customer-sited correction, in a manner reasonable for each utility's individual system.

9. Niagara Mohawk Power Corporation (d/b/a National Grid), New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. shall file on October 1 each year, for five consecutive years starting 2010, the number of customers subject to reactive power charges, the percentage of the utility's total load used by these customers, and billable RkVA or RkVAh over the previous 12 month period.

10. Niagara Mohawk Power Corporation (d/b/a National Grid), New York State Electric & Gas Corporation, Rochester Gas and Electric Corporation, Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. are directed to notify customers to whom this Order applies, within 30 days of the issuance of this Order, of any tariff changes and the reasons for such changes in current reactive demand tariffs or of any new reactive

demand tariff provisions. Public Service Law Section 66(12) (b) newspaper publication requirements, as to Clauses 2, 3, 4, and 5 are waived.

11. Con Edison shall file a plan for installing VAR capable meters for customers with loads above 1,500 kW within 90 days of this Order.

12. The Secretary in her sole discretion may extend the deadlines set forth in the order.

13. This proceeding is continued.

By the Commission,

(SIGNED)

JACLYN A. BRILLING  
Secretary

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

Amendment to Schedule P.S.C. No. 9 – Electricity

Seventh Revised Leaf No. 158-N

Issued: December 23, 2008      Effective: March 23, 2009\*

\*Postponed to October 1, 2009 by SPO effective February 27, 2009

SAPA: 08-E-0751SA5 – STATE REGISTER – January 21, 2009

NEWSPAPER PUBLICATION: January 9, 16, 23 and 30, 2009

SUBJECT: Filing by NEW YORK STATE ELECTRIC & GAS CORPORATION

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

First Revised Leaves Nos. 234, 238, 242, 294.7

Second Revised Leaf No. 162

Third Revised Leaves Nos. 215.1, 222

Fourth Revised Leaves Nos. 134, 140, 288.2

Fifth Revised Leaf No. 232

Sixth Revised Leaves Nos. 149, 156, 176, 213, 233, 252

Seventh Revised Leaves Nos. 130, 147, 155, 168, 173, 212, 214, 247

Eighth Revised Leaf No. 129

Twelfth Revised Leaf No. 288.1

Fourteenth Revised Leaves Nos. 229, 230, 231

Fifteenth Revised Leaves Nos. 131, 139, 148, 157, 158, 166, 167,

174, 175, 215, 216, 228, 248, 249, 250, 251

Nineteenth Revised Leaf No. 288

Issued: December 23, 2008      Effective: April 1, 2009\*

\*Postponed to October 1, 2009 by SPO effective February 27, 2009

SAPA: 08-E-0751SA1 – STATE REGISTER – January 14, 2009

NEWSPAPER PUBLICATION: Waived.

SUBJECT: Filing by ORANGE AND ROCKLAND UTILITIES, INC.

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

Original Leaf No. 22L-40

Third Revised Leaf No. 96

Fifth Revised Leaf No. 93

Eighth Revised Leaf No. 100

Ninth Revised Leaf No. 23Y

Thirteenth Revised Leaf No. 29A

Sixteenth Revised Leaf No. 49

Twenty-Fifth Revised Leaf No. 27B

Twenty-Seventh Revised Leaf No. 2B

Issued: December 23, 2008      Effective: March 23, 2009\*

\*Postponed to October 1, 2009 by SPO effective February 27, 2009

SAPA: 08-E-0751SA4 – STATE REGISTER – January 21, 2009

NEWSPAPER PUBLICATION: January 20, January 27, February 3, and February 10

SUBJECT: Filing by ROCHESTER GAS AND ELECTRIC CORPORATION

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

Second Revised Leaves Nos. 195.1, 197, 249

Third Revised Leaves Nos. 196, 246

Eleventh Revised Leaf No. 243

Issued: December 29, 2008      Effective: April 1, 2009\*

\*Postponed to October 1, 2009 by SPO effective February 27, 2009

SAPA: 08-E-0751SA2 – STATE REGISTER – January 21, 2009

NEWSPAPER PUBLICATION: Waived