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Manager – Regulatory and Tariffs

December 15, 2016

VIA ELECTRONIC FILING

Honorable Kathleen H. Burgess, Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: Case 15-E-0283 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of New York State Electric & Gas Corporation for Electric Service

Case 15-E-0285 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Rochester Gas and Electric Corporation for Electric Service

Dear Secretary Burgess:

New York State Electric & Gas Corporation (“NYSEG”) and Rochester Gas and Electric Corporation (“RG&E”) (together the “Companies”), subsidiaries of Avangrid, Inc. (“AVANGRID”), hereby submit the enclosed tariff leaves in compliance with the New York State Public Service Commission’s (the “Commission”) Order Approving Electric and Gas Rate Plans in Accord with Joint Proposal, issued and effective June 15, 2016 (the “Order”), in the above referenced proceedings. These tariff leaves are transmitted for filing in compliance as identified herein and in accordance with the requirements of Appendix 7-H (electronic tariff filing system) to the Commission’s Codes, Rules and Regulations (16 NYCRR Appendix 7-H).

Below are the revised tariff leaves to become effective May 1, 2017.

NYSEG P.S.C. No. 121 - Electric

Leaf 4, Revision 4
Leaf 7, Revision 5
Leaf 43, Revision 16
Leaf 57, Revision 16
Leaf 60, Revision 5
Leaf 61.3, Revision 0

Honorable Kathleen H. Burgess
December 15, 2016

Page 2 of 4

RGE P.S.C. No. 18 - Electric

Leaf 27, Revision 14
Leaf 28, Revision 12
Leaf 29, Revision 13
Leaf 32, Revision 1
Leaf 36.2, Revision 0

Purpose of Filing

The Companies are filing tariff amendments in compliance with the Order to offer Company-owned light-emitting diode (“LED”) street lighting options for customers served under NYSEG Service Classification No. 3 and RG&E Service Classification No. 1.

Background

The Companies agreed in the Joint Proposal approved by the Order to make a tariff filing within six months of the issuance of the Order to offer Company-owned LED street lighting options.¹ The six month timeframe was necessary to assess customer interest and evaluate LED lighting options to determine adequate replacements for current street lighting luminaires.

To assess customer interest in LED street lighting options, the Companies administered an electronic survey to 580 municipalities within the Companies’ service territories. The survey sought input on general interest in LED street lights, as well as feedback on topics such as lighting type, quality, and the importance of additional features (e.g., dimming).

Proposed Offerings

The Companies are proposing to amend their tariff schedules by offering the following four LED street lighting options that meet the Companies’ standards, at a color temperature of 4,000 Kelvin:

- 3,000 lumen
- 6,300 lumen
- 10,000 lumen
- 15,000 lumen

The four options were selected based upon the Companies’ review of existing Company-owned street light luminaires, the responses to the customer survey, other utility LED street light programs, and discussions with United Illuminating Company, an AVANGRID subsidiary, regarding their experience with LED conversions.² The Companies also installed a small sampling of lights on their own system to assess compatibility and lumen output.

The proposed options would replace the 50, 70, 100, 150, 175, 250, and 400 watt Cobrahead luminaires that the Companies currently offer, which represent approximately 90,000, or 80%, of Company-owned street lights.

Rates

The Companies used similar assumptions in developing the rates for each of the four LED options. A fixed charge methodology is used to determine the annual cost of providing

¹ The Companies’ Joint Proposal, Appendix W, page 9.

² United Illuminating Company currently offers LED service throughout its service area as set forth in its tariff schedule C.P.U.C.A No. 860.

Honorable Kathleen H. Burgess
December 15, 2016

Page 3 of 4

service over the assumed book life. The costs that were incorporated into the development of the rates include depreciation, cost of capital, estimated installation costs, estimated maintenance costs, and taxes. The annual fixed charges were levelized to an annual revenue requirement, which was used to calculate the monthly rates to be charged to customers. Further details regarding the rate development may be found in Attachment 1.

Attachment 2 provides a comparison of the estimated savings of the proposed LED options as compared to the current non-LED cobra head offerings for each Company. The comparison is computed by taking the difference in delivery rates, estimated supply charges and estimated surcharges between the LED and non-LED lights. Savings are estimated to be available for several of the LED lamp options.

In accordance with the Companies' Joint Proposal approved by the Order, the Companies will be filing tariff provisions by March 31, 2017 to implement a Revenue Decoupling Mechanism ("RDM") commencing in Rate Year 2 (i.e., May 1, 2017), applicable to all Service Classifications within their street lighting tariff schedules.³ The RDM will be contingent upon Commission approval of LED street light offerings being effective at the start of Rate Year 2.

Implementation

The replacement of current non-LED street light luminaires in the Companies' service territories will be a considerable undertaking from a resource and logistics perspective. The implementation plan that NYSEG and RG&E are proposing will allow for conversions in an efficient and timely manner. Most of the major municipalities served by the Companies do not take service under the Company-owned street light tariffs, and the majority of the remaining municipalities are smaller-sized diverse municipalities spread over a large service territory.⁴ Therefore, NYSEG and RG&E are proposing that the Companies' obligation to install/replace non-LED street light luminaires with LED street lights in any annual period shall be limited to no more than 15% of the Companies' currently installed street light luminaires. The Companies intend to install or replace its non-LED street light luminaires with LED street lights on a first-come, first-served basis at the Companies' discretion, while also taking geographical location into consideration to ensure an efficient and coordinated conversion and installation of LEDs.

The customer must commit to converting no less than 20% of their currently installed street light luminaires, or a minimum of 100 luminaires, whichever is greater, per bill account in an annual period. The lights must be contained in a single contiguous geographic area. Each municipality is responsible for the design of their system, and must agree to compensate the Companies for the remaining book value of the lights being replaced. The remaining book value of the lights being replaced will be determined by the Companies and will be based on the municipality's currently installed luminaires. The Companies will require a one-time up-front payment for the remaining book value of the lights being replaced; however, if any municipalities are interested in financing conversion costs, the New York Green Bank staff can be made available to discuss financing opportunities.

Newspaper Publication

The Companies request that the requirements of Section 66(12)(b) of the New York Public Service Law and 16 NYCRR Section 720-8.1 as to newspaper publication be waived as

³ Pursuant to Ordering Clause No. 5 of the Order, the Companies are required to submit tariff revisions to effectuate Rate Year 2 changes on not less than 30 days' notice.

⁴ Most of the large municipalities in the Companies' service territories have purchased their street lighting systems and are served under customer-owned lighting or energy-only service classes.

Honorable Kathleen H. Burgess
December 15, 2016

Page 4 of 4

these revisions only affect municipal customers, and the Companies will notify all effected customers directly via electronic mail. These revisions do not constitute a "major change" under New York Public Service Law Section 66(12)(c).

State Administrative Procedures Act Notices are enclosed for publication in the State Bulletin.

Conclusion

As stated above, the Companies assessed interest from municipalities in LED street lighting, and the proposed options are comparable replacements for the majority of the street light luminaires currently in use. The Companies will evaluate additional LED options in the future based on further input from customers.

Company Contacts

If you have any questions related to this filing, please contact Kelly Dietrick at 585.724.8135 or me at 607.762.8710.

Respectfully Submitted,



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Manager – Regulatory and Tariffs
Rates and Regulatory Economics Dept.

Enclosures

**New York State Gas & Electric Corporation and Rochester Gas and Electric Corporation
Rate Development for Company-Owned Light Emitting Diode (“LED”) Cobra Head Street Lights**

New York State Public Service Commission’s (the “Commission”) Order Approving Electric and Gas Rate Plans in Accord with Joint Proposal, issued and effective June 15, 2016 (the “Order”) in Cases 15-E-0283 and 15-E-0285.

Methodology:

The Companies utilized a fixed charge methodology to determine the annual cost of providing service over the assumed book life. The costs incorporated in the development of the rates include depreciation, cost of capital, estimated maintenance costs, and taxes. The annual fixed charges are levelized to an annual revenue requirement used to calculate monthly rates to be charged to customers.

Four cobra head LED options will be offered to replace the current cobra head options.

The Companies developed rates using the fixed charge methodology for the new LED cobra head lights as well as for the replacement of the currently offered high pressure sodium cobra head light. The current cost of a head replacement was used for both rate calculations. The difference between the rate of the LED option and the high pressure sodium option was added to the rate of current light offerings to determine the rate for the new LED offerings.

Assumptions:

The following assumptions were made in the development of the monthly rates:

- Material costs – Four manufacturer’s quotes for the LED heads were obtained. One manufacturer offered a 10-year replacement warranty on the LED heads. The price quotes from this manufacturer were used to develop the LED rates. Sales tax and overhead costs were then applied.
- Installation costs – For NYSEG, the labor costs per light were estimated assuming a two man crew with an average installation time of a half hour. Overheads costs were then applied.

For RG&E, an estimate of the Company’s lighting contractor’s costs was assumed and then overheads were applied.

- Depreciation – A book depreciation of 29 years and a tax depreciation of 20 years was used to develop the rates for both the new LED heads and the high pressure sodium heads for the current light offerings. The Companies did not include any costs for the removal of the current lights.
- Taxes – A federal and state income tax rate of 39.225% was used.

A property tax estimate was based on a percentage of 2015 property tax expense as compared to average gross plant less general plant.

- Operation and Maintenance - A maintenance expense estimate was based on a percentage of 2015 street lighting expense and a general plant allocation as compared to average distribution plant. One hundred percent of this percentage was applied to the current light calculations and 20% of this percentage was applied to the LED lights.
- Capital structure – The cost of capital reflects a common equity ratio of 48% and return on equity of 9% per the second year of the Companies’ current rate plans.

LED Wattage	Lumens	Replaces Non-LED Options	Non-LED Billing Watts	Average Decrease in Kilowatthours per Month	NYSEG LED Cobra Monthly Rate	NYSEG Current Cobra Options Monthly Rate	Fixture Estimated Cost/(Benefits)	Delivery Charge (per kWh) Estimated Cost/(Benefits)	Estimated Surcharges/NBC Estimated Cost/(Benefits)	Estimated Supply Estimated Cost/(Benefits)	Estimated Cost/(Benefits) per Lamp
34	3,000	100 Watt Incan	130	34	\$ 7.56	\$ 6.01	\$ 1.55	\$ (0.96)	\$ (0.28)	\$ (1.33)	\$ (1.02)
34	3,000	50 Watt HPS	58	8	\$ 7.56	\$ 7.79	\$ (0.23)	\$ (0.24)	\$ (0.07)	\$ (0.33)	\$ (0.87)
34	3,000	70 Watt HPS	83	17	\$ 7.56	\$ 7.79	\$ (0.23)	\$ (0.49)	\$ (0.14)	\$ (0.68)	\$ (1.54)
34	3,000	70 Watt MH	95	21	\$ 7.56	\$ 4.76	\$ 2.79	\$ (0.61)	\$ (0.18)	\$ (0.84)	\$ 1.16
34	3,000	100 Watt HPS	117	29	\$ 7.56	\$ 7.79	\$ (0.23)	\$ (0.83)	\$ (0.24)	\$ (1.15)	\$ (2.45)
34	3,000	100 Watt MH	120	30	\$ 7.56	\$ 4.76	\$ 2.79	\$ (0.86)	\$ (0.25)	\$ (1.19)	\$ 0.50
34	3,000	100 Watt MV	127	33	\$ 7.56	\$ 4.25	\$ 3.31	\$ (0.93)	\$ (0.27)	\$ (1.28)	\$ 0.82
66	6,300	150 Watt HPS	171	37	\$ 8.49	\$ 7.79	\$ 0.71	\$ (1.05)	\$ (0.31)	\$ (1.45)	\$ (2.10)
66	6,300	175 Watt MH	210	50	\$ 8.49	\$ 4.68	\$ 3.81	\$ (1.44)	\$ (0.42)	\$ (1.99)	\$ (0.04)
66	6,300	175 Watt MV	210	50	\$ 8.49	\$ 4.25	\$ 4.25	\$ (1.44)	\$ (0.42)	\$ (1.99)	\$ 0.40
113	10,000	250 Watt HPS	313	70	\$ 8.38	\$ 7.79	\$ 0.60	\$ (2.00)	\$ (0.59)	\$ (2.76)	\$ (4.75)
113	10,000	250 Watt MH	313	70	\$ 8.38	\$ 15.16	\$ (6.78)	\$ (2.00)	\$ (0.59)	\$ (2.76)	\$ (12.12)
113	10,000	250 Watt MV	292	63	\$ 8.38	\$ 4.44	\$ 3.94	\$ (1.79)	\$ (0.52)	\$ (2.47)	\$ (0.84)
166	15,000	400 Watt HPS	486	112	\$ 12.31	\$ 8.23	\$ 4.08	\$ (3.20)	\$ (0.94)	\$ (4.42)	\$ (4.47)
166	15,000	400 Watt MH	486	112	\$ 12.31	\$ 15.16	\$ (2.85)	\$ (3.20)	\$ (0.94)	\$ (4.42)	\$ (11.40)
166	15,000	400 Watt MV	460	103	\$ 12.31	\$ 4.51	\$ 7.80	\$ (2.94)	\$ (0.86)	\$ (4.06)	\$ (0.06)

Assumptions:

Average monthly hours	350
Delivery rate (per kWh)	\$ 0.028540
Surcharge rates	
Transition charge	\$ 0.000137
Reliability support svcs. chg.	\$ 0.001411
NY state assessment	\$ 0.000987
SBC charge	\$ 0.005836
	<u>\$ 0.008371</u>
Supply rates	
Variable supply charge	\$ 0.034662
Merchant function charge	\$ 0.004810
	<u>\$ 0.039472</u>

Rochester Gas and Electric Corporation
LED Rates Compared to Current Cobra Head Lamp OfferingsAttachment 2
Schedule 2

LED Wattage	Lumens	Replaces Non-LED Options	Non-LED Billing Watts	Average Decrease in Kilowatthours per Month	RG&E LED Cobra Monthly Rate	RG&E Current Cobra Options Monthly Rate	Lamp Estimated Cost/(Benefits)	Estimated Surcharges/NBC Estimated Cost/(Benefits)	Estimated Supply Estimated Cost/(Benefits)	Estimated Cost/(Benefits) per Lamp
34	3,000	100 Watt Incan	116	29	\$ 2.78961	\$ 5.00707	\$ (2.22)	\$ (0.32)	\$ (1.02)	\$ (3.56)
34	3,000	50 Watt HPS	58	8	\$ 2.78961	\$ 1.35087	\$ 1.44	\$ (0.09)	\$ (0.30)	\$ 1.05
34	3,000	70 Watt HPS	81	16	\$ 2.78961	\$ 1.74397	\$ 1.05	\$ (0.19)	\$ (0.58)	\$ 0.28
34	3,000	70 Watt MH	95	21	\$ 2.78961	\$ 3.03650	\$ (0.25)	\$ (0.24)	\$ (0.76)	\$ (1.25)
34	3,000	100 Watt HPS	116	29	\$ 2.78961	\$ 2.34396	\$ 0.45	\$ (0.32)	\$ (1.02)	\$ (0.90)
34	3,000	100 Watt MH	130	34	\$ 2.78961	\$ 3.00362	\$ (0.21)	\$ (0.38)	\$ (1.19)	\$ (1.79)
34	3,000	100 Watt MV	133	35	\$ 2.78961	\$ 2.94013	\$ (0.15)	\$ (0.39)	\$ (1.23)	\$ (1.77)
66	6,300	150 Watt HPS	171	37	\$ 5.31661	\$ 3.28976	\$ 2.03	\$ (0.41)	\$ (1.31)	\$ 0.31
66	6,300	175 Watt MH	210	50	\$ 5.31661	\$ 2.89083	\$ 2.43	\$ (0.57)	\$ (1.79)	\$ 0.07
66	6,300	175 Watt MV	210	50	\$ 5.31661	\$ 4.24947	\$ 1.07	\$ (0.57)	\$ (1.79)	\$ (1.29)
113	10,000	250 Watt HPS	290	62	\$ 8.26851	\$ 5.51141	\$ 2.76	\$ (0.70)	\$ (2.20)	\$ (0.14)
113	10,000	250 Watt MH	300	65	\$ 8.26851	\$ 2.89436	\$ 5.37	\$ (0.74)	\$ (2.33)	\$ 2.31
113	10,000	250 Watt MV	300	65	\$ 8.26851	\$ 5.64947	\$ 2.62	\$ (0.74)	\$ (2.33)	\$ (0.44)
166	15,000	400 Watt HPS	460	103	\$ 13.75454	\$ 8.24538	\$ 5.51	\$ (1.16)	\$ (3.66)	\$ 0.69
166	15,000	400 Watt MH	460	103	\$ 13.75454	\$ 2.89436	\$ 10.86	\$ (1.16)	\$ (3.66)	\$ 6.04
166	15,000	400 Watt MV	460	103	\$ 13.75454	\$ 8.57456	\$ 5.18	\$ (1.16)	\$ (3.66)	\$ 0.36

Assumptions:

Average monthly hours

350

Surcharge rates

Transition charge	\$ 0.000131
Reliability support svcs. chg.	\$ 0.003605
NY state assessment	\$ 0.001120
SBC charge	\$ 0.006417
	<u>\$ 0.011273</u>

Supply rates

Variable supply charge	\$ 0.031358
Merchant function charge	\$ 0.004169
	<u>\$ 0.035528</u>