The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4770/4780 Responses to Record Requests Issued at the Commission's Evidentiary Hearing On June 25, 2018

Record Request No. 28

Request:

Please provide a copy of the proposed revised S-05 Streetlight Tariff reflecting the corrections made at the hearing,

Response:

Please see Attachment RR-PUC-28 for the revised proposed Rate S-05 Streetlight Tariff reflecting the corrections made at the evidentiary hearing on June 25, 2018. The marked-to-show-changes tariff in Attachment RR-PUC-28 reflects changes from the currently-effective Rate S-05 tariff.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket Nos. 4770/4780 Attachment RR-PUC-28 Page 1 of 8 RIPUC No. 21792190 Sheet 1

Canceling RIPUC No. 21422179

THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

AVAILABILITY

Street and Area Lighting Service is available under this rate to any municipal city or town, any fire district, any regional school district, any municipal water utility board, Kent County Water Authority, Rhode Island Commerce Corporation, Quonset Development Corporation, Rhode Island Airport Corporation, Narragansett Bay Commission, and the State of Rhode Island (collectively, and each individually, hereinafter referred to as Customer) in accordance with the qualifications and specifications set forth below and all provisions and terms as further defined in applicable attachment agreements.

Customers who have received service under the Company's General Street and Area Lighting Rate S-14 or Decorative Street and Area Lighting Service Rate S-06 and (1) have purchased street and area lighting facilities, including dedicated poles, standards, or accessories pursuant to R.I.G.L § 39-30-1 et seq.; or (2) have otherwise purchased street and area lighting facilities consistent with the requirements described in R.I.G.L § 39-30-1 et seq., shall be served under this rate, provided that the Customer has complied with all provisions and terms of the rates and any related attachment agreements. Service under this rate is contingent upon the execution of a written purchase and sale agreement for the Company's designated street and area lighting facilities, and dedicated poles, standards or accessories, the completed transfer of title to the facilities from the Company to the Customer, and the execution of and compliance with associated attachment agreements between the Customer and the Company. Any street and area lighting additions, removals, or replacements performed by the Customer shall be served on this tariff provided the Customer is compliant with all terms and provisions of this tariff and attachment agreements, and written notice is provided to the Company.

Service provided under this tariff shall be unmetered. The type of service supplied and delivery service voltage shall be determined by the Company in accordance with the Company's Specifications for Electrical Installations.

Street and Area Lighting Service under this rate does not include maintenance of street and area lighting equipment owned by the Customer. The Customer shall be responsible for providing maintenance, and absent a separate written contract between the Company and the Customer, the Company shall have no obligation to maintain facilities and equipment owned by the Customer.

STREET AND AREA LIGHTING - CUSTOMER-OWNED EQUIPMENT

RATE

The following are unmetered annual billable kWh delivered values for specific individual light source types functioning on a designated operating schedule for applicable customer-owned street and area lights. These annual billable kWh deliveries for the specified light source type/wattage and operating schedule shall be applied to customer-owned street and area lights that require annual kWh deliveries that are less than or equal to the values indicated below as determined by the Company.

1. Annual Billable kWh Deliveries

Incandescent & High Intensity Discharge (HID) Light Sources:

			Annual Billable kWh Delivered			
	Nominal	Billable	Operating Schedule			
<u>Light Source Type</u>	Wattage	Wattage	Continuous	Dusk-To-Dawn	Dimming-70%	Part-Night-4hr
Incandescent (INC)	105	105	920	438	392	285
	205	205	1,796	856	766	557

<u>Issued: November 27, 2017</u>July 2, 2018 Effective: <u>January</u>September 1, 2018

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

R.I.P.U.C. No. 2179 Sheet 2 Canceling R.I.P.U.C. No. 2142

THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING — CUSTOMER-OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

RATE (CONTINUED)

<u>Incandescent & High Intensity Discharge (HID) Light Sources (continued):</u>

			Annual Billable kWh Delivered			
	Nominal	Billable		Operating Schedule		
<u>Light Source Type</u>	Wattage	Wattage	Continuous	Dusk-To-Dawn	Dimming-70%	Part-Night-4hr
Mercury Vapor (MV)	100	130	1,139	543	486	353
wiereury vapor (WV)	175	211	1,848	881	789	573
	250	307	2,689	1,282	1,147	834
	400	477	4,179	1,991	1,783	1,295
	1,000	1,095	9,592	4,572	4,092	2,973
Metal Halide (MH)	400	451	3,951	1,883	1,685	1,224
` ,	1,000	1,078	9,443	4,501	4,028	2,927
High Pressure Sodium (HPS)) 50	61	534	255	228	166
8 ((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((((70	86	753	359	321	233
	100	118	1,034	493	441	320
	150	173	1,515	722	647	470
	250	304	2,663	1,269	1,136	825
	400	470	4,117	1,962	1,756	1,276

¹ Billable Wattage represents the total luminaire energy consumption including the ballast, control, and other applicable adjustments.

Solid State Lighting (SSL) Sources

Light Source Type: Light Emitting Diode (LED)

		Annual Billable kWh Delivered						
	Nominal	Billable		Oper				
<u>Light Source Type</u> Wattage ² (Range) Wattage			ge) Wattage	Continuous	Dusk-To-Dawn	Dimming-70%	Part-Night-4hr	
	Dimming-50%							
ı	1:1/E://: D:1/I	ED\0.1 (0	0.0 10	0.0	10	27	27	
	Light Emitting Diode (I	_ED) 0.1 to 2	0.0 10	88	42	37	27	
	<u>31</u>	•				0.4	0.0	
	20.1 to 40.0	30	263	125	112	81	<u>92</u>	
	40.1 to 60.0	50	438	209	187	136	<u>154</u>	
	60.1 to 100.0	80	701	334	299	217	<u>246</u>	
	100.1 to 140.0	120	1,051	501	448	326	<u>370</u>	

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

140.1 to 220.0	180	1,577	752	673	489	<u>554</u>
220.1 to 300.0	260	2,278	1,086	972	706	801

² LED Nominal Wattage includes the total device system wattage (LED array, driver, and control) and applicable adjustments. For billing purposes, a streetlight will be placed on an operating schedule based on the following: (1) if the streetlight's annual operating hour equivalent is no more than five (5) percent above the closest operating schedule's annual operating hour equivalent identified below in the Hours of Operation section, the streetlight shall be placed on that operating schedule; or (2) if the streetlight's annual operating hour equivalent is more than five (5) percent above the closest operating schedule's annual operating hour equivalent, the streetlight shall be placed on the operating schedule with the next highest annual operating hour equivalent.

2. Other Fees and Charges:

Fee or Charge Type Charge Amount

Lighting Service Charge Field/Office Survey Charge

See Terms and Conditions for Distribution Service See Attachment Agreement for Customer-Owned Street and Area Lighting Attachments

> R.I.P.U.C. No. 2179 Sheet 3 Canceling R.I.P.U.C. No. 2142

THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING—CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

3. Rates for Retail Delivery Service

Customers receiving delivery service under this rate shall be charged the applicable charges contained in the Summary of Retail Delivery Rates, RIPUC No. 2095, as in effect from time to time.

RATE ADJUSTMENT PROVISIONS

The charges for delivery service under this rate shall be subject to adjustment pursuant to the following provisions:

Customer Credit Provision

Energy Efficiency Program Provision

Infrastructure, Safety, and Reliability Provision

LIHEAP Enhancement Plan Provision

Long Term Contracting for Renewable Energy Recovery Provision

Long Term Contracting for Renewable Energy Recovery Reconciliation Provision

Net Metering Provision

Pension Adjustment Mechanism Provision

Qualifying Facilities Power Purchase Rate

Renewable Energy Growth Program Cost Recovery Provision

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

Residential Assistance Provision

Revenue Decoupling Mechanism Provision

Standard Offer Service Adjustment Provision

Storm Fund Replenishment Provision

Street Light Metering Pilot Cost Recovery Provision

Transition Cost Adjustment Provision

Transmission Service Cost Adjustment Provision

STANDARD OFFER SERVICE

Any Customer served under this rate who is eligible for Standard Offer Service shall receive such service pursuant to the Standard Offer Service tariff.

GROSS EARNINGS TAX

A Rhode Island Gross Earnings Tax adjustment will be applied to the charges determined above in accordance with Rhode Island General Laws.

DETERMINATION OF MONTHLY BILL

The monthly bill will be based on the following:

1. ENERGY CHARGES

The Energy Charges for customer-owned street and area lighting are determined by multiplying the current energy rates by the aggregation of Billable kWh Delivered for each light per billing period.

Transmission Service Charge Adjustment

The prices under this rate as set forth under "Monthly Charge" may be adjusted from time to time in the manner described in the Company's Transmission Service Cost Adjustment Provision.

Transition Charge Adjustment

The prices under this rate as set forth under "Monthly Charge" may be adjusted from time to time in the manner described in the Company's Non Bypassable Transition Charge Adjustment Provision.

Standard Offer Adjustment

All Customers served on this rate must pay any charges required pursuant to the terms of the Company's Standard Offer Adjustment Provision, whether or not the Customer is taking or has taken Standard Offer Service.

Energy Efficiency Programs

The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Energy Efficiency Program Provision as from time to time effective in accordance with law.

Infrastructure, Safety and Reliability Provision

The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Infrastructure, Safety and Reliability Provision as from time to time effective in accordance with law.

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

Customer Credit Provision The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Customer Credit Provision as from time to time effective in accordance with law. LIHEAP Enhancement Plan Provision The amount determined under the preceding provisions shall be adjusted in accordance with the Company's LIHEAP Enhancement Plan Provision as from time to time effective in accordance with law. Revenue Decoupling Mechanism Provision The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Revenue Decoupling Mechanism Provision as from time to time effective in accordance with law. R.I.P.U.C. No. 2179 Sheet 4 Canceling R.I.P.U.C. No. 2142

THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING — CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

The monthly billable kWh delivered shall be determined by allocating the Annual Billable kWh Delivered to each month based upon the Monthly Operating Hour Equivalents for lights and Operating Schedule as shown below. Applicable to lights under each Operating Schedule, the sum of the monthly billable kWh delivered for each light equals the annual billable kWh delivered in this tariff. Each month's daily kWh amount is determined from the monthly amount by dividing the monthly kWh by the number of days in the month. The daily kWh amount is multiplied by the actual number of days for each month during the billing period as measured from the prior billing date to the current billing date, and then multiplied by the energy charges per kWh.

Net Metering Provision and Qualifying Facilities Power Purchase Rate

The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Net Metering Provision and Qualifying Facilities Power Purchase Rate as from time to time effective in accordance with law.

Pension Adjustment Mechanism Provision

The amount determined under the preceding provisions shall be adjusted in accordance with the Company's Pension Adjustment Mechanism Provision as from time to time effective in accordance with law.

Hours of Operation

The Customer's street and area lighting may be operated for the hours and at the light level of the Customer's choice. However, for billing purposes all individual street and area lighting sources will be billed on an applicable Operating Schedule based upon the nature of the street and area lighting services as follows:

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Sheet 6

THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05

RETAIL DELIVERY SERVICE

- 1. <u>Continuous</u> Street and area lights operate continuously each day of the year, a total of approximately 8,760 hours each year.
- 2. <u>Dusk-To-Dawn</u> Street and area lights operate daily at full energy requirements from approximately one-half hour after sunset until approximately one-half hour before sunrise, a total of no greater than 4,175 hours each year.
- 3. <u>Dimming to 70%</u> Street and area lights operate daily at full energy consumption from approximately one-half hour after sunset until a time equal to the mid-point of the previous Dusk-To-Dawn service period, then an assumed 30% reduction in wattage and energy requirements for a period of reduced light output not to exceed four hours, as necessary, at which time returning to full energy requirements until approximately one-half hour before sunrise, determined to be a total of 2,715 hours at full energy requirements and 1,460 hours at reduced energy requirements, respectively, for a total annual hourly equivalent of no greater than 3,737 hours each year.
- 4. Part-Night Street and area lights operate daily from approximately one-half hour after sunset then turn off at a time equal to the mid-point of the previous Dusk-To-Dawn service period and, as necessary, turn back on four hours later until approximately one-half hour before sunrise, a total of no greater than 2,715 hours each year.
- 4.5. Dimming to 50% Street and area lights operate daily at full energy consumption from approximately one-half hour after sunset until a time equal to the mid-point of the previous Dusk-To-Dawn service period, then an assumed 50% reduction in wattage and energy requirements for a period of reduced light output not to exceed six hours, as necessary, at which time returning to full energy requirements until approximately one-half hour before sunrise, determined to be a total of 1,985 hours at full energy requirements and 1,095 hours at reduced energy requirements, respectively, for a total annual hourly equivalent of no greater than 3,080 hours each year.

For billing purposes, a streetlight will be placed on an operating schedule based on the following: (1) if the streetlight's annual operating hour equivalent is no more than five (5) percent above the closest operating schedule's annual operating hour equivalent identified below in the Hours of Operation section, the streetlight shall be placed on that operating schedule; or (2) if the streetlight's annual operating hour equivalent is more than five (5) percent above the closest operating schedule's annual operating hour equivalent, the streetlight shall be placed on the operating schedule with the next highest annual operating hour equivalent.

_____Customers requesting a change in Hours of Operation of a light due to installation or removal of a control device will be required to provide the estimated annual operating hours and energy reduction conditions it anticipates that the control device will provide as defined by the manufacturer's specifications. The Company will assign the Customer to the appropriate Operating Schedule based upon the Customer's light source type, billable wattage and expected annual operating hours.

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THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING — CUSTOMER OWNED EQUIPMENT S-05
RETAIL DELIVERY SERVICE

<u>Issued: November 27, 2017</u>July 2, 2018 Effective: <u>January</u>September 1, 2018

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

Monthly Operating Hour Equivalents

The Monthly Operating Hour Equivalents provided below represents the equivalent time of full energy deliveries to an individual light following the defined Hours of Operation defined above:

Table of Monthly Operating Hour Equivalents (Hrs)

			Operating Schedule				
<u>Month</u>	Days	Continuous	Dusk-To-Dawn	Dimming-70%	Part-Night-4hr	Dimming-50%	
January	31	744	442	401	316	<u>348</u>	
February	28	672	367	332	254	<u>282</u>	
March	31	744	363	326	238	<u>270</u>	
April	30	720	309	273	188	<u>218</u>	
May	31	744	280	244	156	<u>187</u>	
June	30	720	251	218	132	<u>162</u>	
July	31	744	267	233	146	<u>176</u>	
August	31	744	301	267	179	<u>210</u>	
September	30	720	338	300	218	<u>247</u>	
October	31	744	392	353	268	<u>298</u>	
November	30	720	418	379	297	<u>328</u>	
December	31	744	447	411	323	354	
Annual	365	8,760	4,175	3,737	2,715	<u>3,080</u>	

2. <u>OTHER FEES AND CHARGES</u>

Individual charges for specific Customer requested services will be identified as adjustments on the bill. The representation of applicable fees associated with specific agreements, or license terms and conditions between the Customer and the Company will be imposed according to the agreements, licenses, or as specified in the Terms and Conditions for Distribution Service and presented as adjustments on the Customer's bill.

INVENTORY OF LIGHTS

The Customer shall be responsible for reporting to the Company the quantity, type of light source, Operating Schedule, type of luminaires by location, and the applicable Customer identification reference for all lights that are operating at any time. The Customer shall provide the Company with a complete listing of all luminaires served under this rate within thirty (30) days following the beginning of each calendar year of all facilities in-service as of December 31 of the preceding calendar year. Such reporting is necessary to ensure that the Company bills the Customer accurately for the cost of distribution, transmission, transition, energy efficiency, and any other applicable delivery service charges and, where appropriate, Standard Offer Service. The Company may perform random confirmation of operating lights in a municipality to ensure the accuracy of such reports. If the Customer fails to meet the referenced reporting requirements or the identification of unreported lights by the Company, the Company will bill the Customer for all charges that would have been billed pursuant to the provisions of the tariff, plus interest charges at a rate of one and one quarter percent per month, from the point in time that the change(s) was estimated to have occurred until the point in time when the change(s) is reflected in the Company's billing system.

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THE NARRAGANSETT ELECTRIC COMPANY

STREET AND AREA LIGHTING - CUSTOMER OWNED EQUIPMENT S-05

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THE NARRAGANSETT ELECTRIC COMPANY STREET AND AREA LIGHTING – CUSTOMER OWNED EQUIPMENT S-05 RETAIL DELIVERY SERVICE

RETAIL DELIVERY SERVICE

TERMINATION OF SERVICE

If a Customer that has purchased designated Company street and area lighting facilities subsequently chooses to terminate the service provided by the Company under this tariff, the Customer must provide six months advance written notice of such termination.

TERMS AND CONDITIONS

The Company's Terms and Conditions in effect from time to time, where applicable hereto and not inconsistent with any specific provisions hereof, are a part of this rate.

Effective: June 1, 2017

<u>Issued: November 27, 2017</u>July 2, 2018

Effective: January September 1, 2018