

October 24, 2016

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 4628 - National Grid's Tariff Advice Filing to Amend Tariffs
RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Streetlighting Proposal
Responses to Division Data Requests – Set 2**

Dear Ms. Massaro:

Enclosed please find 10 copies of National Grid's¹ responses to the second set of data requests issued by the Rhode Island Division of Public Utilities and Carriers in the above-referenced docket.

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact me at 401-784-7415.

Very truly yours,



Robert J. Humm

Enclosures

cc: Docket 4628 Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹The Narragansett Electric Company d/b/a National Grid.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

CV 2016-00000, 2016
Date

Docket No. 4628 - National Grid – Company-Owned LED Streetlighting Proposal

Service List updated 8/15/16

Name/Address	E-mail Distribution	Phone
Raquel Webster, Esq. National Grid 40 Sylvan Rd. Waltham, MA 02451	Raquel.webster@nationalgrid.com ;	781-907-2121
	Celia.obrien@nationalgrid.com ;	
	Joanne.scanlon@nationalgrid.com ;	
	Robert.humm@nationalgrid.com ;	
	Raymond.sheridan@nationalgrid.com ;	
	Jeanne.lloyd@nationalgrid.com ;	
	Robin.Pieri@nationalgrid.com ;	
Leo Wold, Esq. Dept. of Attorney General 150 South Main St. Providence, RI 02903	Lwold@riag.ri.gov ;	401-274-4400 Ext. 2218
	Steve.scialabba@dpuc.ri.gov ;	
	Al.contente@dpuc.ri.gov ;	
	James.lanni@dpuc.ri.gov ;	
	Joseph.shilling@dpuc.ri.gov ;	
	jmunoz@riag.ri.gov ;	
	dmacrae@riag.ri.gov ;	
Tim Woolf Jennifer Kallay Synapse Energy Economics 22 Pearl Street Cambridge, MA 02139	twoolf@synapse-energy.com ;	
	jkallay@synapse-energy.com ;	
File an original & 9 copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	Luly.massaro@puc.ri.gov ;	401-780-2017
	Cynthia.WilsonFrias@puc.ri.gov ;	
	Alan.nault@puc.ri.gov ;	
	Todd.bianco@puc.ri.gov ;	
Chris Kearns, Chief Program Development RI Office of Energy Resources (OER)	Christopher.Kearns@energy.ri.gov ;	401-574-9113
	Nicholas.ucci@energy.ri.gov ;	
Jeff Broadhead, Executive Director Washington County Regional Planning Council & PRISM	jb@wcrpc.org ;	
	dan@rileague.org ;	
	george.woodbury@lightsmartconsulting.com ;	

Seth Handy, Esq.	seth@handylawllc.com;	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-1

Request:

Please confirm if there are tariffs for LED streetlighting controls in the Company-Owned LED Streetlighting Tariffs proposed by National Grid in Massachusetts.

Response:

National Grid's Massachusetts electric operating companies, Massachusetts Electric Company and Nantucket Electric Company, proposed a Company-owned LED street lighting option as part of their Company-owned street lighting tariffs in their most recent rate case, D.P.U. 15-155, that reflects the use of industry standard static photo-electric street lighting controls for dusk-to-dawn and continuous operation conditions. The Department of Public Utilities approved the Massachusetts proposal in its order issued September 30, 2016.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-2

Request:

Please provide a status on Docket 4513 - Proceeding to Establish a Pilot Metering Program for Municipal-Owned Streetlights. Please explain how the status of this docket is precluding the Company from including controls in this tariff. Please estimate when the Company will be able to reconsider including controls in this tariff.

Response:

National Grid continues to proceed with the metering pilot, which the PUC approved in Docket No. 4513. To date, laboratory testing of the metering devices has been completed. The end-to-end network system testing as proposed within a meter farm application is planned to commence following final resolution of data acquisition issues from the network service providers. The testing progress of actual in-service field applications continues to experience various delays beyond the control of the Company. Alternative solutions to achieve the timely resolution of this task are being considered by all active parties in addition to a revised cost estimate for the Company's information systems interface assessment.

Preliminary meter device test results have identified a range of accuracy variance and/or non-compliant results with existing industry meter test standards between manufacturers. In addition, the development and preparation of the remaining testing and assessment phases of the pilot have identified various concerns related to the management, control, correction, and transmission of meter data, which are planned to be investigated. Further industry investigation has identified that only one investor-owned utility plans to utilize network-controlled street light meter data for billing purposes. This utility, which owns and operates the system within an unregulated business environment, manages the networked meter devices in compliance with their established metering regulations. General utility/industry feedback continues to question the total cost-value proposition as it compares to the incremental energy savings by manipulating the operation control of the lighting system. Only utilities that adopt the street lighting controls utilizing an existing, compatible automated meter information communication network have identified a positive economic benefit.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-2, page 2

Based upon the pilot's preliminary meter quality findings and the status of networked system deployment within the industry, the Company did not consider the adoption of a street lighting networked control system to be appropriate for the Company-owned LED tariff advice filing. However, the Company will re-evaluate the viability of such technology following the findings and conclusion of the metering pilot. Additionally, the Company will consider and assess the value proposition for its customers and the associated cost recovery methods.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-3

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.9 rows 18-21 and p.10 lines 1-2.

“In addition, the Company is proposing that it be allowed to impose a cap on the number of LED fixtures that it replaces, should customer demand be high, to ten (10) percent per year of the total quantity of active and inactive street lighting and area lighting fixtures per customer account if that customer is considered a municipal, governmental authority, or public entity.”

Please clarify that the cap may be applied at the Company's discretion, but not be applied automatically. Please also confirm that the Company will make every effort to address any installation backlog caused by the cap once the constraint been lifted, including converting more than ten percent of a municipalities' street lighting to LEDs in a given year, if resources allow.

Response:

Based on customer demand and resulting resource constraint impacts, the Company's application of the cap will be discretionary and include communication and agreement with the requesting customer. The Company's request for a conversion quantity limitation is due to the following factors: customer demand uncertainty, financial and labor constraints, product availability, and the equitable treatment of all customers requesting this offering. Commitments made with a customer will be managed and fulfilled as timely and efficiently as resources allow.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-4

Request:

Are the percentage markups for Stores Handling and Plant Overhead consistent with the percentage markups for other types of capital investments?

Response:

The Stores Handling and Plant Overhead factors used to establish the facility rates for the proposed LED luminaires are consistent with the Company's other electric plant capital investments.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
In Re: National Grid's Tariff Advice Filing
To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112
Company-Owned LED Street lighting Proposal
Responses to Division's Second Set of Data Requests
Issued October 3, 2016

Division 2-5

Request:

Research is suggesting that LED lights with higher color temperatures have adverse effects on health. What range of color temperatures does the Company's LED streetlighting tariff allow municipalities to install?

Response:

In consideration of various parameters, constraints, guidelines, and standards associated with roadway lighting, the Company has elected to use LED light source correlated color temperatures (CCT) of approximately 4,000K (kelvin) for Roadway luminaires, which are predominately utilized for illuminating collector and connector roadways and major highways; and 2,700-3,000K within other luminaires, such as the proposed Post Top luminaire, which are predominately utilized in residential areas.