

August 18, 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 1**

Dear Ms. Massaro:

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

This filing also includes a Motion for Protective Treatment in accordance with Rule 1.2(g) of the Rhode Island Public Utilities Commission's (PUC) Rules and Regulations and R.I. Gen. Laws § 38-2-2(4)(B). National Grid seeks protection from public disclosure of certain pricing information provided by multiple vendors, which is provided in Attachment DIV 1-7 of the filing. Accordingly, National Grid has provided the PUC with one complete unredacted copy of the confidential documents in a sealed envelope marked, **"Contains Privileged and Confidential Materials – Do Not Release,"** and has included redacted copies of these materials for the public filing.

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. Division
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

August 18, 2016

Date

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

Service List updated 8/15/16

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| | | |

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

RHODE ISLAND PUBLIC UTILITIES COMMISSION

| | | |
|--|---|-----------------|
| <hr/> |) | |
| In Re: National Grid's Tariff Advice Filing |) | |
| To Amend Tariffs RIPUC Nos. 2110, 2111, and 2112 |) | Docket No. 4628 |
| Company-Owned LED Street lighting Proposal |) | |
| <hr/> |) | |

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID'S MOTION FOR PROTECTIVE
TREATMENT OF CONFIDENTIAL INFORMATION**

National Grid¹ hereby requests that the Rhode Island Public Utilities Commission (the PUC) provide confidential treatment and grant protection from public disclosure of certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by Rule 1.2(g) of the PUC's Rules and Regulations and R.I. Gen. Laws § 38-2-2(4)(B). National Grid also hereby requests that, pending entry of that finding, the PUC preliminarily grant National Grid's request for confidential treatment pursuant to Rule 1.2(g)(2).

I. BACKGROUND

On July 1, 2016, National Grid filed a tariff advice filing to amend the Company's Decorative Street and Area Lighting Service Provision, RIPUC No. 2110 (S-06), Limited Service – Private Lighting Provision, RIPUC No. 2111 (S-10), and General Street and Area Lighting Service Provision, RIPUC No. 2112 (S-14) (collectively, the Streetlighting Tariffs) for approval by the PUC pursuant to PUC Rule 1.9(c) in the above-captioned docket. Subsequent to this filing, the Division of Public Utilities and Carriers (the Division) issued its first set of data

¹ The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

requests to National Grid (the Requests). In responding to the Division's Requests, National Grid has submitted as Attachment DIV 1-7 confidential pricing information provided by multiple vendors in connection with their pricing submissions to National Grid for the proposed LED luminaires in National Grid's proposed Company-Owned LED Streetlighting Offering (the LED Offering). Due to the sensitive nature of the pricing information, National Grid has redacted all pricing information from Attachment DIV 1-7, and seeks confidential protection for such information.

II. LEGAL STANDARD

The PUC's Rule 1.2(g) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). To the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where disclosure of information would be likely either (1) to impair the Government's

ability to obtain necessary information in the future; *or* (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. *See Providence Journal Company v. Convention Center Authority*, 774 A.2d 40 (R.I. 2001).

The first prong of the test is satisfied when information is voluntarily provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. *Providence Journal*, 774 A.2d at 47.

III. BASIS FOR CONFIDENTIALITY

The vendors' pricing information, which is provided in Attachment DIV 1-7, is confidential and privileged information specific to the vendors. Only the vendors have the right to indicate whether their pricing information should be available to anyone else (i.e., a competitor) or to the public in general. Moreover, the disclosure of the pricing information could impact the vendors' ability to obtain advantageous pricing in the future, thereby causing substantial harm to the vendors. Accordingly, National Grid seeks protection for the vendors' pricing information.

IV. CONCLUSION

For foregoing reasons, National Grid respectfully requests that the PUC grant its Motion for Protective Treatment.

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID**

By its attorney,

A handwritten signature in blue ink, appearing to be "RH", followed by a long horizontal flourish.

Robert J. Humm, Esq. (#7920)
National Grid
280 Melrose Street
Providence, RI 02907
(401) 784-7415
Dated: August 18, 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 First Set of Data Requests
Issued August 3, 2016

Division 1-1

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.9 lines 4-8.

"However, of the available unmetered controls for part-night operation, the Company was not able to identify an acceptable control that would function on both LED and existing lamp source types".

- a. Are the LED street lights that the Company is proposing to offer dimmable?
- b. Why is it important for the controls to function on both LED and existing lamp source types?
- c. Can the Company install controls that function on the LED lamps only? If not, please explain.
- d. If acceptable controls cannot be identified and installed now, can LED lamps be fitted to enable controls to be installed in the future?

Response:

- a. Yes, the Company has selected LED luminaires that would be deployed if the Company's LED proposal is approved, which include dimming capability for potential use in the future. Most manufacturers have incorporated dimming in their luminaires. However, the Company did not include a dimming schedule in this filing because it would require a separate control and changes to the Company's billing system that may delay the availability of the LED luminaires and the potential savings to customers. Additionally, there are several factors that a customer would need to evaluate before considering the use of dimming capability, including pedestrian safety, driver safety, and security.
- b. Because the proposed LED fixtures are to be added to the existing unmetered street lighting tariffs, the Company believes it would be more efficient to offer a part-night operating schedule to all of its eligible customers, regardless of light source. To accommodate such an offering today would require the Company to stock more than one control type to work on each type of fixture based on light source, and to train the operational, design engineering, and back office staff on the differences of each control type in addition to the existing types. Thus, due to the inefficiencies of offering a part-night operating schedule for fixtures of all light source types, the Company is not proposing a part-night operating schedule at this time.

Division 1-1, page 2

- c. Yes, the Company would be able to procure a part-night operating control that would function on the LED fixtures alone, subject to performing further research and determining the capability with the LED roadway fixtures the Company anticipates procuring. However, the Company's preference would be to offer a control that works fixtures of all light source types as stated above in response to part (b).
- d. When the Company submits its request for proposals (RFP) to manufacturers for the purchase of LED luminaires, the RFP will include the specification of having a seven pin contact included in the twist-lock receptacle in order to allow for future part-night, dimming, network operation and other options, in addition to the standard dusk-to-dawn operation. The Company will need to consider other factors in relation to such technology, such as rate structure and billing system impacts, but the inclusion of acceptable controls now will make it easier to adopt differing operating schedules in the future.

The Narragansett Electric Company
d/b/a National Grid
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Division 1-2

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.9 rows 18-21 and p.10 lines 1-5.

“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 and area lighting fixtures per customer account if that customer is considered a municipal, governmental authority, or public entity. No quantity cap would be imposed on the other customer types receiving service on rates S-06, S-10, or S-14 due to the small quantity of lights per customer account. There also would not be a cap on new LED streetlight installations regardless of customer type.”

Explain why new installations are not included in the cap.

Response:

The number of requests the Company receives for new street or area lights is minimal and is part of the Company's normal operations compared to the anticipated quantity of exchanges of existing lights to the proposed LED lights. The process to install a new light includes time for procurement of the materials and planning of crew availability, making it manageable to accommodate these requests. In contrast, the quantity of exchanges of existing luminaires to LED luminaires that could be requested by a municipality at any given time is unknown and could be more difficult to manage based on unexpected high volume of requested exchanges coupled with ongoing operation and maintenance of the system and emerging priority work requiring the same Company resources.

Division 1-3

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.10 lines 12-14.

"Currently, the Company has a total street and area lighting inventory, both active and inactive, of approximately 103,000 Company-owned fixtures."

- a. Define the terms active and inactive, as they relate to the street and area lighting inventory.
- b. Provide the quantity of lamps in this inventory by lamp type, luminaire type, and wattage.
- c. Identify the year(s) this inventory was purchased.

Response:

- a. The terms "active" and "inactive" refer to the billing status of the light. An "active" luminaire is one that is turned on at the light's location and the customer accepts the responsibility for paying the Annual Luminaire Charge and energy consumption bill charges. If there is a pole that is installed only to support a street or area light (typically referred to as a non-distribution pole as it is recorded to the street lighting plant unit code in the fixed asset system), the customer is assessed an Annual Pole Charge. As with the luminaire, if a customer has requested the lighting service and is being billed for the charge, the pole is also considered active. The active designation also includes street or area lights that have been turned off at the request of the municipal customer under the Rate S-14 provision for Temporary Turn-Off Service. A reduced Annual Luminaire, or facility, Charge is assessed designating the "active" billing status.

On the other hand, an "inactive" light is one that is not currently billed to a customer and the light is not operating. The Company replaces the photoelectric control device with a hollow twist-lock cap that stops the light from turning on. This cap is red in color, hence is often referred to as "red capped."

- b. The requested information, as stored in Company's billing system, is provided in Attachment DIV 1-3b.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4628
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Division 1-3, page 2

- c. The Company's billing system is the source of the inventory presented in the Joint Pre-Filed Direct Testimony and in the Company's response to Division Request 1-3b, above. The date of purchase of such street and area lighting equipment is not stored in the Company's billing system. Therefore, the Company is unable to provide the purchase date for each lighting facility identified in Attachment DIV 1-3b.

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|-------------------------------------|-------------------|---------|--------------------------------|--------------|---------------|--------------|------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Barrington Area Quantities | Flood Light | 0 | 17 | | | | 17 |
| | | 250 | 21 | | | | 21 |
| | | 400 | 3 | | 8 | | 11 |
| | | 1000 | | | 2 | | 2 |
| | Flood Light Total | | 41 | | 10 | | 51 |
| | Post Top | 50 | 4 | | | | 4 |
| | | 100 | 18 | | | | 18 |
| | Post Top Total | | 22 | | | | 22 |
| | Roadway | 50 | 1525 | | | | 1525 |
| | | 70 | 3 | | | | 3 |
| 100 | | 160 | | 1 | | 161 | |
| 250 | | 57 | | | | 57 | |
| 400 | 1 | | | | 1 | | |
| Roadway Total | | 1746 | | 1 | | 1747 | |
| Barrington Area Quantities Total | | | 1809 | | 11 | | 1820 |
| Bristol Area Quantities | Flood Light | 0 | 15 | | | | 15 |
| | | 250 | 10 | | | | 10 |
| | | 400 | 3 | | 5 | | 8 |
| | Flood Light Total | | 28 | | 5 | | 33 |
| | Post Top | 50 | 1 | | | | 1 |
| | | 100 | 63 | | | | 63 |
| | Post Top Total | | 64 | | | | 64 |
| | Roadway | 50 | 1443 | | | | 1443 |
| | | 70 | 1 | | | | 1 |
| | | 100 | 321 | | | | 321 |
| | | 175 | | | 3 | | 3 |
| | | 250 | 164 | | | | 164 |
| | | 400 | 4 | | 2 | | 6 |
| 1000 | | | 2 | | 2 | | |
| Roadway Total | | 1933 | | 7 | | 1940 | |
| Bristol Area Quantities Total | | | 2025 | | 12 | | 2037 |
| Burrillville Area Quantities | Flood Light | 0 | 31 | | | | 31 |
| | | 250 | 17 | | | | 17 |
| | | 400 | 2 | | | | 2 |
| | Flood Light Total | | 50 | | | | 50 |
| | Post Top | 100 | 2 | | | | 2 |
| | | | 2 | | | | 2 |
| | Roadway | 50 | 26 | | | | 26 |
| | | 70 | 268 | | | | 268 |
| | | 100 | 124 | | 4 | | 128 |
| | | 150 | 2 | | | | 2 |
| 175 | | | | 11 | | 11 | |
| 250 | 4 | | | | 4 | | |
| Roadway Total | | 424 | | 15 | | 439 | |
| Burrillville Area Quantities Total | | | 476 | | 15 | | 491 |
| Central Falls Area Quantities | Flood Light | 0 | 141 | | | | 141 |
| | | 250 | 62 | | | | 62 |
| | | 400 | 8 | | 2 | | 10 |
| | Flood Light Total | | 211 | | 2 | | 213 |
| | Roadway | 50 | 2 | | | | 2 |
| | | 70 | 621 | | | | 621 |
| | | 100 | 269 | | | | 269 |
| | | 150 | 25 | | | | 25 |
| | | 250 | 91 | | | | 91 |
| | | 400 | 70 | | | | 70 |
| Roadway Total | | 1078 | | | | 1078 | |
| Central Falls Area Quantities Total | | | 1289 | | 2 | | 1291 |
| Charlestown Area Quantities | Flood Light | 0 | 3 | | | | 3 |
| | | 250 | 6 | | | | 6 |
| | | 400 | 3 | | 9 | | 12 |
| | Flood Light Total | | 12 | | 9 | | 21 |
| | Roadway | 50 | 168 | | | | 168 |
| | | 70 | 1 | | | | 1 |
| | | 100 | 18 | | 73 | | 91 |
| | | 105 | | 28 | | | 28 |
| | | 175 | | | 10 | | 10 |
| | | 250 | 8 | | | | 8 |
| 400 | | | | 2 | | 2 | |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|-----------------------------------|--------------------------------------|---------|--------------------------------|--------------|---------------|--------------|------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Charlestown Area Quantities | Roadway Total | | 195 | 28 | 85 | | 308 |
| Charlestown Area Quantities Total | | | 207 | 28 | 94 | | 329 |
| Coventry Area Quantities | Flood Light | 0 | 31 | | | | 31 |
| | | 250 | 20 | | | | 20 |
| | | 400 | 6 | | 15 | | 21 |
| | | 1000 | | | 7 | | 7 |
| | Flood Light Total | | 57 | | 22 | | 79 |
| | Post Top | 100 | 9 | | | | 9 |
| | Post Top Total | | 9 | | | | 9 |
| | Roadway | 50 | 2135 | | | | 2135 |
| | | 70 | 2 | | | | 2 |
| | | 100 | 137 | | 91 | | 228 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 19 | | 19 |
| | | 250 | 42 | | | | 42 |
| | | 400 | 1 | | 22 | | 23 |
| | Roadway Total | | 2318 | | 132 | | 2450 |
| Coventry Area Quantities Total | | | 2384 | | 154 | | 2538 |
| Cranston Area Quantities | Flood Light | 0 | 74 | | | | 74 |
| | | 250 | 25 | | | | 25 |
| | | 400 | 18 | | 36 | 1 | 55 |
| | | 1000 | | | 32 | | 32 |
| | Flood Light Total | | 117 | | 68 | 1 | 186 |
| | Post Top | 50 | 1 | | | | 1 |
| | Post Top Total | | 66 | | | | 66 |
| | Post Top Total | | 67 | | | | 67 |
| | Roadway | 50 | 3237 | | | | 3237 |
| | | 70 | 10 | | | | 10 |
| | | 100 | 4767 | | 34 | | 4801 |
| | | 105 | | 1 | | | 1 |
| | | 150 | 2 | | | | 2 |
| | | 175 | | | 11 | | 11 |
| | | 250 | 1466 | | 5 | | 1471 |
| 400 | | 65 | | 64 | | 129 | |
| Roadway Total | | 9547 | 1 | 131 | | 9679 | |
| Cranston Area Quantities Total | | | 9731 | 1 | 199 | 1 | 9932 |
| Cumberland Area Quantities | Flood Light | 0 | 191 | | | | 191 |
| | | 250 | 97 | | | | 97 |
| | | 400 | 12 | | 5 | | 17 |
| | Flood Light Total | | 300 | | 5 | | 305 |
| | Post Top | 100 | 74 | | | | 74 |
| | Post Top Total | | 74 | | | | 74 |
| | Roadway | 50 | 64 | | | | 64 |
| | | 70 | 3114 | | | | 3114 |
| | | 100 | 404 | | 1 | | 405 |
| | | 150 | 3 | | | | 3 |
| | | 175 | | | 35 | | 35 |
| | | 250 | 122 | | | | 122 |
| | | 400 | 8 | | | | 8 |
| | Roadway Total | | 3715 | | 36 | | 3751 |
| | Cumberland Area Quantities Total | | | 4089 | | 41 | |
| East Greenwich Area Quantities | Flood Light | 0 | 6 | | | | 6 |
| | | 250 | 17 | | | | 17 |
| | | 400 | 3 | | 16 | | 19 |
| | | 1000 | | | 3 | | 3 |
| | Flood Light Total | | 26 | | 19 | | 45 |
| | Post Top | 100 | 34 | | | | 34 |
| | Post Top Total | | 34 | | | | 34 |
| | Roadway | 50 | 1049 | | | | 1049 |
| | | 70 | 16 | | | | 16 |
| | | 100 | 112 | | 1 | | 113 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 106 | | | | 106 |
| | | 400 | 8 | | 24 | | 32 |
| | Roadway Total | | 1291 | | 27 | | 1318 |
| | East Greenwich Area Quantities Total | | | 1351 | | 46 | |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|---------------------------------------|-------------------|---------|--------------------------------|--------------|---------------|--------------|------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| East Providence Area Quantities | Flood Light | 0 | 23 | | | | 23 |
| | | 250 | 26 | | | | 26 |
| | | 400 | 6 | | 25 | | 31 |
| | | 1000 | | | 12 | | 12 |
| | Flood Light Total | | 55 | | 37 | | 92 |
| | Post Top | 50 | 6 | | | | 6 |
| | | 100 | 22 | | | | 22 |
| | Post Top Total | | 28 | | | | 28 |
| | Roadway | 50 | 3617 | | | | 3617 |
| | | 100 | 908 | | 3 | 5 | 913 |
| | | 105 | | | | | 3 |
| | | 150 | 1 | | | | 1 |
| 175 | | | | | 38 | 38 | |
| 250 | | 408 | | | | 408 | |
| 400 | | 13 | | | 53 | 66 | |
| Roadway Total | | 4947 | 3 | 96 | | 5046 | |
| East Providence Area Quantities Total | | | 5030 | 3 | 133 | | 5166 |
| Exeter Area Quantities | Flood Light | 250 | 2 | | | | 2 |
| | | 400 | | | 3 | | 3 |
| | | 1000 | | | 2 | | 2 |
| | Flood Light Total | | 2 | | 5 | | 7 |
| | Roadway | 50 | 4 | | | | 4 |
| | | 100 | 1 | | 1 | 6 | 7 |
| | | 105 | | | | | 1 |
| | | 175 | | | | 12 | 12 |
| | | 250 | 12 | | | 2 | 14 |
| | | 400 | 1 | | | 11 | 12 |
| Roadway Total | | 18 | 1 | 31 | | 50 | |
| Exeter Area Quantities Total | | | 20 | 1 | 36 | | 57 |
| Foster Area Quantities | Flood Light | 0 | 2 | | | | 2 |
| | | 400 | | | 1 | | 1 |
| | Flood Light Total | | 2 | | 1 | | 3 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 100 | 8 | | | | 8 |
| | | 175 | | | 5 | | 5 |
| | | 250 | 1 | | | | 1 |
| 400 | | | 3 | | 3 | | |
| Roadway Total | | 10 | | 8 | | 18 | |
| Foster Area Quantities Total | | | 12 | | 9 | | 21 |
| Glocester Area Quantities | Flood Light | 0 | 5 | | | | 5 |
| | | 250 | 3 | | | | 3 |
| | | 400 | 4 | | 6 | | 10 |
| | | 1000 | | | 2 | | 2 |
| | Flood Light Total | | 12 | | 8 | | 20 |
| | Roadway | 50 | 113 | | | | 113 |
| | | 100 | 5 | | 5 | | 10 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 9 | | | | 9 |
| 400 | | | 1 | | 1 | | |
| Roadway Total | | 127 | | 8 | | 135 | |
| Glocester Area Quantities Total | | | 139 | | 16 | | 155 |
| Hopkinton Area Quantities | Flood Light | 0 | 3 | | | | 3 |
| | | 250 | 1 | | | | 1 |
| | | 400 | 1 | | 4 | | 5 |
| | Flood Light Total | | 5 | | 4 | | 9 |
| | Roadway | 50 | 394 | | | | 394 |
| | | 100 | 12 | | 1 | 120 | 132 |
| | | 105 | | | | | 1 |
| | | 175 | | | | | 1 |
| | | 250 | 82 | | | 1 | 82 |
| 400 | | 1 | | | 12 | 13 | |
| 1000 | | | | 1 | 1 | | |
| Roadway Total | | 489 | 1 | 134 | | 624 | |
| Hopkinton Area Quantities Total | | | 494 | 1 | 138 | | 633 |
| Jamestown Area Quantities | Flood Light | 0 | 6 | | | | 6 |
| | | 250 | 7 | | | | 7 |
| | | 300 | | | | 1 | 1 |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|---|-------------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | Luminaire Total |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Jamestown Area Quantities | Flood Light | 400 | 1 | | | 2 | 3 |
| | | 800 | | | 2 | | 2 |
| | | 1000 | | | 1 | | 1 |
| | Flood Light Total | | 14 | | 3 | 3 | 20 |
| | Post Top | 50 | 2 | | | | 2 |
| | | 100 | 1 | | | | 1 |
| | Post Top Total | | 3 | | | | 3 |
| | Roadway | 50 | 19 | | | | 19 |
| | | 70 | 16 | | | | 16 |
| | | 100 | 1 | 190 | 80 | | 81 |
| | | 105 | | 7 | | | 190 |
| Johnston Area Quantities | | 206 | | | | | 7 |
| | | 250 | 3 | | | | 3 |
| | | 400 | 4 | | 4 | | 8 |
| | Roadway Total | | 43 | 197 | 84 | | 324 |
| Jamestown Area Quantities Total | | | 60 | 197 | 87 | 3 | 347 |
| Lincoln Area Quantities | Flood Light | 0 | 22 | | | | 22 |
| | | 250 | 19 | | | | 19 |
| | | 400 | 11 | | 10 | 2 | 23 |
| | | 1000 | | | 11 | | 11 |
| | Flood Light Total | | 52 | | 21 | 2 | 75 |
| | Post Top | 100 | 11 | | | | 11 |
| | Post Top Total | | 11 | | | | 11 |
| | Roadway | 50 | 3593 | | | | 3593 |
| | | 70 | 2 | | | | 2 |
| | | 100 | 279 | 12 | 16 | | 295 |
| | | 105 | | | | | 12 |
| Little Compton Area Quantities | | 250 | 375 | | | | 375 |
| | | 400 | 4 | | 1 | | 5 |
| | Roadway Total | | 4253 | 12 | 17 | | 4282 |
| Johnston Area Quantities Total | | | 4316 | 12 | 38 | 2 | 4368 |
| Middletown Area Quantities | Flood Light | 0 | 205 | | | | 205 |
| | | 250 | 80 | | | | 80 |
| | | 400 | 10 | | | | 10 |
| | | 800 | | | 1 | | 1 |
| | Flood Light Total | | 295 | | 1 | | 296 |
| | Post Top | 50 | 1 | | | | 1 |
| | | 100 | 208 | | | | 208 |
| | Post Top Total | | 209 | | | | 209 |
| | Roadway | 50 | 3 | | | | 3 |
| | | 70 | 1916 | | | | 1916 |
| | | 100 | 489 | | | | 489 |
| Middletown Area Quantities | | 150 | 2 | | | | 2 |
| | | 250 | 105 | | | | 105 |
| | | 400 | 20 | | 4 | | 24 |
| | Roadway Total | | 2535 | | 4 | | 2539 |
| Lincoln Area Quantities Total | | | 3039 | | 5 | | 3044 |
| Little Compton Area Quantities | Flood Light | 250 | 2 | | | | 2 |
| | | 400 | 1 | | 3 | | 4 |
| | | 1000 | | | 1 | | 1 |
| | Flood Light Total | | 3 | | 4 | | 7 |
| | Roadway | 50 | 9 | | | | 9 |
| | | 175 | | | 1 | | 1 |
| | Roadway Total | | 9 | | 1 | | 10 |
| Little Compton Area Quantities Total | | | 12 | | 5 | | 17 |
| Middletown Area Quantities | Flood Light | 0 | 130 | | | | 130 |
| | | 250 | 96 | | | | 96 |
| | | 400 | 14 | | 10 | 6 | 30 |
| | | 500 | 1 | | | | 1 |
| | | 800 | | | 13 | | 13 |
| | | 1000 | 10 | | 7 | 4 | 21 |
| | Flood Light Total | | 251 | | 30 | 10 | 291 |
| | Post Top | 50 | 22 | | | | 22 |
| | | 100 | 39 | | | | 39 |
| | Post Top Total | | 61 | | | | 61 |
| | Roadway | 50 | 85 | | | | 85 |
| Middletown Area Quantities | | 70 | 271 | | | | 271 |
| | | 100 | 22 | | 647 | | 669 |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|--|-------------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | Luminaire Total |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Middletown Area Quantities | Roadway | 105 | | 1 | | | 1 |
| | | 250 | 98 | | 1 | | 99 |
| | | 400 | 20 | | 79 | | 99 |
| | Roadway Total | | 496 | 1 | 727 | | 1224 |
| Middletown Area Quantities Total | | | 808 | 1 | 757 | 10 | 1576 |
| Narragansett Area Quantities | Flood Light | 0 | 50 | | | | 50 |
| | | 250 | 14 | | | | 14 |
| | | 400 | 4 | | 13 | | 17 |
| | | 1000 | | | 6 | | 6 |
| | Flood Light Total | | 68 | | 19 | | 87 |
| | Post Top | 175 | | | 2 | | 2 |
| | Post Top Total | | | | 2 | | 2 |
| | Roadway | 50 | 933 | | | | 933 |
| | | 70 | 53 | | | | 53 |
| | | 100 | 189 | | 215 | | 404 |
| | | 175 | | | 62 | | 62 |
| | | 250 | 66 | | 6 | | 72 |
| | | 400 | 8 | | 13 | | 21 |
| | Roadway Total | | 1249 | | 296 | | 1545 |
| Narragansett Area Quantities Total | | | 1317 | | 317 | | 1634 |
| Newport Area Quantities | Flood Light | 0 | 127 | | | | 127 |
| | | 250 | 101 | | | | 101 |
| | | 300 | | | | 2 | 2 |
| | | 400 | 14 | | 13 | 4 | 31 |
| | | 500 | 2 | | | | 2 |
| | | 800 | | | 10 | | 10 |
| | | 1000 | 1 | | | 26 | 27 |
| | Flood Light Total | | 245 | | 23 | 32 | 300 |
| | Post Top | 50 | 2 | | | | 2 |
| | Post Top | 100 | 138 | | | | 138 |
| | Post Top Total | | 140 | | | | 140 |
| | Roadway | 50 | 138 | | | | 138 |
| | | 70 | 331 | | | | 331 |
| | | 100 | 64 | | 971 | | 1035 |
| | | 105 | | 28 | | | 28 |
| | | 150 | 2 | | | | 2 |
| | | 175 | | | 40 | | 40 |
| | | 206 | | 8 | | | 8 |
| | | 250 | 322 | | | | 322 |
| | | 400 | 18 | | 255 | | 273 |
| | Roadway Total | | 875 | 36 | 1266 | | 2177 |
| Newport Area Quantities Total | | | 1260 | 36 | 1289 | 32 | 2617 |
| North Kingstown Area Quantities | Flood Light | 0 | 36 | | | | 36 |
| | | 250 | 8 | | | | 8 |
| | | 400 | 14 | | 12 | | 26 |
| | | 1000 | | | 14 | | 14 |
| | Flood Light Total | | 58 | | 26 | | 84 |
| | Post Top | 50 | 5 | | | | 5 |
| | Post Top | 100 | 47 | | | | 47 |
| | Post Top Total | | 52 | | | | 52 |
| | Roadway | 50 | 1551 | | | | 1551 |
| | | 70 | 20 | | | | 20 |
| | | 100 | 239 | | 172 | | 411 |
| | | 105 | | 1 | | | 1 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 99 | | 99 |
| | | 206 | | 3 | | | 3 |
| | | 250 | 185 | | 7 | | 192 |
| | | 400 | 20 | | 143 | | 163 |
| | | 1000 | | | 5 | | 5 |
| | Roadway Total | | 2016 | 4 | 426 | | 2446 |
| North Kingstown Area Quantities Total | | | 2126 | 4 | 452 | | 2582 |
| North Providence Area Quantities | Flood Light | 0 | 28 | | | | 28 |
| | | 250 | 8 | | | | 8 |
| | | 400 | 13 | | 6 | | 19 |
| | | 1000 | | | 25 | | 25 |
| | Flood Light Total | | 49 | | 31 | | 80 |
| | Post Top | 100 | 25 | | | | 25 |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|---|--------------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | Luminaire Total |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| North Providence Area Quantities | Post Top Total | | 25 | | | | 25 |
| | Roadway | 50 | 2698 | | | | 2698 |
| | | 70 | 16 | | | | 16 |
| | | 100 | 623 | | 20 | | 643 |
| | | 105 | | 1 | | | 1 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 457 | | | | 457 |
| | | 400 | 3 | | 2 | | 5 |
| | Roadway Total | | 3797 | 1 | 24 | | 3822 |
| | Wall Lighter | 250 | 1 | | | | 1 |
| | Wall Lighter Total | | 1 | | | | 1 |
| North Providence Area Quantities Total | | | 3872 | 1 | 55 | | 3928 |
| North Smithfield Area Quantities | Flood Light | 0 | 102 | | | | 102 |
| | | 250 | 41 | | | | 41 |
| | | 400 | 9 | | 1 | 1 | 11 |
| | | 500 | 4 | | | | 4 |
| | | 1000 | | | 1 | | 1 |
| | Flood Light Total | | 156 | | 2 | 1 | 159 |
| | Post Top | 50 | 7 | | | | 7 |
| | | 100 | 29 | | | | 29 |
| | Post Top Total | | 36 | | | | 36 |
| | Roadway | 50 | 21 | | | | 21 |
| | | 70 | 1083 | | | | 1083 |
| | | 100 | 311 | | | | 311 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 1 | | 1 |
| | | 250 | 98 | | | | 98 |
| | | 400 | 4 | | | | 4 |
| | Roadway Total | | 1518 | | 1 | | 1519 |
| North Smithfield Area Quantities Total | | | 1710 | | 3 | 1 | 1714 |
| Pawtucket Area Quantities | Flood Light | 0 | 547 | | | | 547 |
| | | 250 | 254 | | | | 254 |
| | | 400 | 32 | | 22 | 2 | 56 |
| | | 500 | 8 | | | | 8 |
| | | 1000 | | | 9 | | 9 |
| | Flood Light Total | | 841 | | 31 | 2 | 874 |
| | Post Top | 100 | 2 | | | | 2 |
| | Post Top Total | | 2 | | | | 2 |
| | Roadway | 50 | 44 | | | | 44 |
| | | 70 | 3148 | | | | 3148 |
| | | 100 | 1433 | | 5 | | 1438 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 17 | | 17 |
| | | 200 | 2 | | | | 2 |
| | | 250 | 994 | | | | 994 |
| | | 400 | 10 | | 2 | | 12 |
| | | 500 | 12 | | | | 12 |
| | Roadway Total | | 5644 | | 24 | | 5668 |
| Pawtucket Area Quantities Total | | | 6487 | | 55 | 2 | 6544 |
| Portsmouth Area Quantities | Flood Light | 0 | 72 | | | | 72 |
| | | 250 | 60 | | | | 60 |
| | | 400 | 8 | | 9 | 2 | 19 |
| | | 500 | 1 | | | | 1 |
| | | 800 | | | 1 | | 1 |
| | | 1000 | | | 3 | 2 | 5 |
| | Flood Light Total | | 141 | | 13 | 4 | 158 |
| | Post Top | 50 | 32 | | | | 32 |
| | Post Top Total | | 32 | | | | 32 |
| | Roadway | 50 | 241 | | | | 241 |
| | | 70 | 414 | | | | 414 |
| | | 100 | 11 | | 223 | | 234 |
| | | 105 | | 8 | | | 8 |
| | | 206 | | 9 | | | 9 |
| | | 250 | 66 | | | | 66 |
| | | 400 | 11 | | 24 | | 35 |
| | Roadway Total | | 743 | 17 | 247 | | 1007 |
| Portsmouth Area Quantities Total | | | 916 | 17 | 260 | 4 | 1197 |
| Providence Area Quantities | Flood Light | 0 | 251 | | | | 251 |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|----------------------------------|-------------------|---------|--------------------------------|--------------|---------------|--------------|-------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Providence Area Quantities | Flood Light | 250 | 68 | | | | 68 |
| | | 400 | 39 | | 71 | | 110 |
| | | 1000 | | | 67 | | 67 |
| | Flood Light Total | | 358 | | 138 | | 496 |
| | Roadway | 50 | 3150 | | | | 3150 |
| | | 70 | 37 | | | | 37 |
| | | 100 | 2253 | | 5 | | 2258 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 7 | | 7 |
| | | 250 | 9346 | | 85 | | 9431 |
| 400 | | 1591 | | 134 | | 1725 | |
| 1000 | | | 44 | | 44 | | |
| Roadway Total | | 16378 | | 275 | | 16653 | |
| Providence Area Quantities Total | | | 16736 | | 413 | | 17149 |
| Richmond Area Quantities | Flood Light | 0 | 4 | | | | 4 |
| | | 250 | 3 | | | | 3 |
| | | 400 | 1 | | 1 | | 2 |
| | | 1000 | | | 2 | | 2 |
| | Flood Light Total | | 8 | | 3 | | 11 |
| | Roadway | 50 | 217 | | | | 217 |
| | | 70 | 29 | | | | 29 |
| | | 100 | 12 | | 1 | | 13 |
| | | 175 | | | 6 | | 6 |
| | | 250 | 63 | | | | 63 |
| 400 | | | 9 | | 9 | | |
| Roadway Total | | 321 | | 16 | | 337 | |
| Richmond Area Quantities Total | | | 329 | | 19 | | 348 |
| Scituate Area Quantities | Flood Light | 0 | 17 | | | | 17 |
| | | 250 | 10 | | | | 10 |
| | | 400 | 2 | | 1 | | 3 |
| | Flood Light Total | | 29 | | 1 | | 30 |
| | Roadway | 50 | 580 | | | | 580 |
| | | 100 | 117 | | | | 117 |
| | | 175 | | | 1 | | 1 |
| | | 250 | 80 | | | | 80 |
| 400 | 11 | | | | 11 | | |
| Roadway Total | | 788 | | 1 | | 789 | |
| Scituate Area Quantities Total | | | 817 | | 2 | | 819 |
| Smithfield Area Quantities | Flood Light | 0 | 25 | | | | 25 |
| | | 250 | 21 | | | | 21 |
| | | 400 | 6 | | 5 | | 11 |
| | Flood Light Total | | 52 | | 5 | | 57 |
| | Post Top | 50 | 12 | | | | 12 |
| | | 100 | 173 | | | | 173 |
| | Post Top Total | | 185 | | | | 185 |
| | Roadway | 50 | 1553 | | | | 1553 |
| | | 70 | 2 | | | | 2 |
| | | 100 | 241 | | 2 | | 243 |
| 150 | | 1 | | | | 1 | |
| 175 | | | | 1 | | 1 | |
| 250 | | 103 | | | | 103 | |
| 400 | | 3 | | | | 3 | |
| Roadway Total | | 1903 | | 3 | | 1906 | |
| Smithfield Area Quantities Total | | | 2140 | | 8 | | 2148 |
| South Kingstown Area Quantities | Flood Light | 0 | 24 | | | | 24 |
| | | 250 | 8 | | | | 8 |
| | | 400 | 12 | | 46 | | 58 |
| | | 1000 | | | 12 | | 12 |
| | Flood Light Total | | 44 | | 58 | | 102 |
| | Post Top | 50 | 3 | | | | 3 |
| | | 100 | 2 | | | | 2 |
| | Post Top Total | | 5 | | | | 5 |
| | Roadway | 50 | 1230 | | | | 1230 |
| | | 70 | 4 | | | | 4 |
| 100 | | 143 | | 12 | | 155 | |
| 105 | | | 1 | | | 1 | |
| 150 | | 1 | | | | 1 | |
| 175 | | | | 18 | | 18 | |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|--|-------------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | Luminaire Total |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| South Kingstown Area Quantities | Roadway | 250 | 70 | | 2 | | 72 |
| | | 400 | 12 | | 11 | | 23 |
| | Roadway Total | | 1460 | 1 | 43 | | 1504 |
| South Kingstown Area Quantities Total | | | 1509 | 1 | 101 | | 1611 |
| Tiverton Area Quantities | Flood Light | 0 | 20 | | | | 20 |
| | | 250 | 28 | | | | 28 |
| | | 400 | 1 | | 16 | | 17 |
| | | 1000 | | | 2 | | 2 |
| | Flood Light Total | | 49 | | 18 | | 67 |
| | Post Top | 50 | 6 | | | | 6 |
| | | 100 | 49 | | | | 49 |
| | Post Top Total | | 55 | | | | 55 |
| | Roadway | 50 | 1134 | | | | 1134 |
| | | 70 | 6 | | | | 6 |
| | | 100 | 68 | | 2 | | 70 |
| | | 150 | 1 | | | | 1 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 10 | | | | 10 |
| | Roadway Total | | 1219 | | 4 | | 1223 |
| Tiverton Area Quantities Total | | | 1323 | | 22 | | 1345 |
| Warren Area Quantities | Flood Light | 0 | 25 | | | | 25 |
| | | 250 | 10 | | | | 10 |
| | | 400 | 5 | | 17 | | 22 |
| | | 1000 | | | 1 | | 1 |
| | Flood Light Total | | 40 | | 18 | | 58 |
| | Post Top | 100 | 14 | | | | 14 |
| | | | | | | | |
| | Post Top Total | | 14 | | | | 14 |
| | Roadway | 50 | 807 | | | | 807 |
| | | 100 | 86 | | | | 86 |
| | | 175 | | | 14 | | 14 |
| | | 250 | 236 | | | | 236 |
| | | 400 | 2 | | 35 | | 37 |
| | | 1000 | | | 1 | | 1 |
| | Roadway Total | | 1131 | | 50 | | 1181 |
| Warren Area Quantities Total | | | 1185 | | 68 | | 1253 |
| Warwick Area Quantities | Flood Light | 0 | 93 | | | | 93 |
| | | 250 | 45 | | | | 45 |
| | | 400 | 14 | | 37 | | 51 |
| | | 1000 | | | 22 | | 22 |
| | Flood Light Total | | 152 | | 59 | | 211 |
| | Post Top | 100 | 128 | | | | 128 |
| | | | | | | | |
| | Post Top Total | | 128 | | | | 128 |
| | Roadway | 50 | 6899 | | | | 6899 |
| | | 70 | 1 | | | | 1 |
| | | 100 | 800 | | | | 800 |
| | | 150 | 2 | | | | 2 |
| | | 175 | | | 23 | | 23 |
| | | 250 | 850 | | | | 850 |
| | | 400 | 40 | | 29 | | 69 |
| | Roadway Total | | 8592 | | 53 | | 8645 |
| Warwick Area Quantities Total | | | 8872 | | 112 | | 8984 |
| West Greenwich Area Quantities | Flood Light | 0 | 5 | | | | 5 |
| | | 250 | 5 | | | | 5 |
| | | 400 | 1 | | 5 | | 6 |
| | | 1000 | | | 1 | | 1 |
| | Flood Light Total | | 11 | | 6 | | 17 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 100 | 4 | | | | 4 |
| | | 105 | | 2 | | | 2 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 5 | | | | 5 |
| | | 400 | 2 | | 6 | | 8 |
| | Roadway Total | | 12 | 2 | 8 | | 22 |
| West Greenwich Area Quantities Total | | | 23 | 2 | 14 | | 39 |
| West Warwick Area Quantities | Flood Light | 0 | 12 | | | | 12 |
| | | 250 | 11 | | | | 11 |

Narragansett Electric Company
Actively Billing Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Active Components | | | Component Category Description | Material | | | |
|---|-------------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | Luminaire Total |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| West Warwick Area Quantities | Flood Light | 400 | 1 | | 14 | | 15 |
| | | 1000 | | | 4 | | 4 |
| | Flood Light Total | | 24 | | 18 | | 42 |
| | Post Top | 50 | 3 | | | | 3 |
| | | 100 | 21 | | | | 21 |
| | Post Top Total | | 24 | | | | 24 |
| | Roadway | 50 | 2319 | | | | 2319 |
| | | 70 | 19 | | | | 19 |
| | | 100 | 237 | | 108 | | 345 |
| | | 175 | | | 8 | | 8 |
| | | 250 | 169 | | 2 | | 171 |
| | | 400 | 9 | | 21 | | 30 |
| Roadway Total | | | 2753 | | 139 | | 2892 |
| West Warwick Area Quantities Total | | | 2801 | | 157 | | 2958 |
| Westerly Area Quantities | Flood Light | 0 | 27 | | | | 27 |
| | | 250 | 33 | | | | 33 |
| | | 400 | 6 | | 28 | | 34 |
| | Flood Light Total | | 66 | | 28 | | 94 |
| | Post Top | 50 | 2 | | | | 2 |
| | | 100 | 76 | | | | 76 |
| | | 175 | | | 1 | | 1 |
| | Post Top Total | | 78 | | 1 | | 79 |
| | Roadway | 50 | 887 | | | | 887 |
| | | 70 | 3 | | | | 3 |
| | | 100 | 267 | | 1304 | | 1571 |
| | | 105 | | 1 | | | 1 |
| | | 175 | | | 318 | | 318 |
| | | 250 | 110 | | | | 110 |
| | | 400 | 6 | | 42 | | 48 |
| Roadway Total | | | 1273 | 1 | 1664 | | 2938 |
| Westerly Area Quantities Total | | | 1417 | 1 | 1693 | | 3111 |
| Woonsocket Area Quantities | Flood Light | 0 | 251 | | | | 251 |
| | | 250 | 140 | | | | 140 |
| | | 400 | 14 | | 8 | 6 | 28 |
| | | 500 | 1 | | | | 1 |
| | | 800 | | | 1 | | 1 |
| | | 1000 | | | | 3 | 3 |
| | Flood Light Total | | 406 | | 9 | 9 | 424 |
| | Post Top | 100 | 13 | | | | 13 |
| | Post Top Total | | 13 | | | | 13 |
| | Roadway | 50 | 6 | | | | 6 |
| | | 70 | 2933 | | | | 2933 |
| | | 100 | 285 | | 2 | | 287 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 159 | | | | 159 |
| | | 400 | 14 | | | | 14 |
| Roadway Total | | | 3397 | | 4 | | 3401 |
| Woonsocket Area Quantities Total | | | 3816 | | 13 | 9 | 3838 |
| Grand Total | | | 95947 | 306 | 6851 | 64 | 103168 |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | Luminaire Total |
|--|----------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Barrington Area Quantities | Flood | 400 | 2 | | 5 | | 7 |
| | | 1000 | | | 3 | | 3 |
| | Flood Total | | 2 | | 8 | | 10 |
| | Post Top | 100 | 18 | | | | 18 |
| | Post Top Total | | 18 | | | | 18 |
| | Roadway | 250 | 9 | | | | 9 |
| | Roadway Total | | 9 | | | | 9 |
| Barrington Area Quantities Total | | | 29 | | 8 | | 37 |
| Bristol Area Quantities | Flood | 250 | 9 | | | | 9 |
| | | 400 | 6 | | 7 | | 13 |
| | | 1000 | | | 5 | | 5 |
| | Flood Total | | 15 | | 12 | | 27 |
| | Post Top | 50 | 5 | | | | 5 |
| | | 100 | 46 | | | | 46 |
| | Post Top Total | | 51 | | | | 51 |
| | Roadway | 100 | | | 2 | | 2 |
| | | 400 | | | 5 | | 5 |
| | Roadway Total | | | | 7 | | 7 |
| Bristol Area Quantities Total | | | 66 | | 19 | | 85 |
| Burrillville Area Quantities | Flood | 250 | 19 | | | | 19 |
| | | 400 | 15 | | | | 15 |
| | Flood Total | | 34 | | | | 34 |
| | Roadway | 50 | 2 | | | | 2 |
| | | 70 | 2 | | | | 2 |
| | | 100 | 6 | | 4 | | 10 |
| | | 175 | | | 2 | | 2 |
| | | 400 | 1 | | | | 1 |
| | Roadway Total | | 11 | | 6 | | 17 |
| Burrillville Area Quantities Total | | | 45 | | 6 | | 51 |
| Central Falls Area Quantities | Flood | 250 | 28 | | | | 28 |
| | | 400 | 31 | | | | 31 |
| | Flood Total | | 59 | | | | 59 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 100 | 3 | | | | 3 |
| | | 175 | | | 1 | | 1 |
| | Roadway Total | | 4 | | 1 | | 5 |
| Central Falls Area Quantities Total | | | 63 | | 1 | | 64 |
| Charlestown Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | 2 | | 3 | | 5 |
| | Flood Total | | 3 | | 3 | | 6 |
| | Roadway | 50 | 5 | | | | 5 |
| | | 70 | 1 | | | | 1 |
| | | 100 | 2 | | 12 | | 14 |
| | | 105 | | 3 | | | 3 |
| | | 175 | | | 1 | | 1 |
| | | 400 | | | 1 | | 1 |
| | Roadway Total | | 8 | 3 | 14 | | 25 |
| Charlestown Area Quantities Total | | | 11 | 3 | 17 | | 31 |
| Coventry Area Quantities | Flood | 250 | 5 | | | | 5 |
| | | 400 | 8 | | 7 | | 15 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 13 | | 8 | | 21 |
| | Post Top | 50 | 5 | | | | 5 |
| | | 100 | 1 | | | | 1 |
| | Post Top Total | | 6 | | | | 6 |
| | Roadway | 50 | 17 | | | | 17 |
| | | 100 | 1 | | | | 1 |
| | | 175 | | | 1 | | 1 |
| | | 250 | 12 | | | | 12 |
| | | 400 | | | 6 | | 6 |
| | Roadway Total | | 30 | | 7 | | 37 |
| Coventry Area Quantities Total | | | 49 | | 15 | | 64 |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | Luminaire Total |
|---------------------------------------|----------------|----------------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Cranston Area Quantities | Flood | 250 | 7 | | | | 7 |
| | | 400 | 14 | | 29 | | 43 |
| | | 1000 | | | 28 | | 28 |
| | Flood Total | | 21 | | 57 | | 78 |
| | Post Top | 50 | 6 | | | | 6 |
| | | 100 | 58 | | | | 58 |
| | Post Top Total | | 64 | | | | 64 |
| | Roadway | 50 | 12 | | | | 12 |
| | | 70 | 1 | | | | 1 |
| | | 100 | 6 | | | | 6 |
| | | 175 | | | 2 | | 2 |
| 250 | | 64 | | | | 64 | |
| 400 | | | | 94 | | 94 | |
| 1000 | | | 2 | | 2 | | |
| Roadway Total | | 83 | | 98 | | 181 | |
| Cranston Area Quantities Total | | | 168 | | 155 | | 323 |
| Cumberland Area Quantities | Flood | 250 | 29 | | | | 29 |
| | | 400 | 71 | | 4 | 1 | 76 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 100 | | 5 | 1 | 106 |
| | Roadway | 70 | 6 | | | | 6 |
| | | 100 | 3 | | 1 | | 4 |
| | | 250 | 14 | | | | 14 |
| Roadway Total | | 23 | | 1 | | 24 | |
| Cumberland Area Quantities Total | | | 123 | | 6 | 1 | 130 |
| East Greenwich Area Quantities | Flood | 250 | 5 | | | | 5 |
| | | 400 | 3 | | 5 | | 8 |
| | | 1000 | | | 9 | | 9 |
| | Flood Total | | 8 | | 14 | | 22 |
| | Post Top | 50 | 12 | | | | 12 |
| | | 100 | 6 | | | | 6 |
| | Post Top Total | | 18 | | | | 18 |
| | Roadway | 50 | 5 | | | | 5 |
| 250 | | 5 | | | | 5 | |
| 400 | | | | 3 | | 3 | |
| Roadway Total | | 10 | | 3 | | 13 | |
| East Greenwich Area Quantities Total | | | 36 | | 17 | | 53 |
| East Providence Area Quantities | Flood | 250 | 5 | | | | 5 |
| | | 400 | 6 | | 27 | | 33 |
| | | 1000 | | | 17 | | 17 |
| | Flood Total | | 11 | | 44 | | 55 |
| | Post Top | 50 | 2 | | | | 2 |
| | | Post Top Total | | 2 | | | |
| | Roadway | 50 | 3 | | | | 3 |
| | | 100 | 8 | | | | 8 |
| | | 175 | | | 2 | | 2 |
| 250 | | 3 | | | | 3 | |
| 400 | | | | 1 | | 1 | |
| Roadway Total | | 14 | | 3 | | 17 | |
| East Providence Area Quantities Total | | | 27 | | 47 | | 74 |
| Exeter Area Quantities | Flood | 400 | | | 1 | | 1 |
| | Flood Total | | | | 1 | | 1 |
| | Roadway | 100 | 1 | | 1 | | 2 |
| | Roadway Total | | 1 | | 1 | | 2 |
| Exeter Area Quantities Total | | | 1 | | 2 | | 3 |
| Foster Area Quantities | Flood | 400 | | | 2 | | 2 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | | | 3 | | 3 |
| Foster Area Quantities Total | | | | | 3 | | 3 |
| Glocester Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | | | 9 | | 9 |
| | | 1000 | | | 2 | | 2 |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | Luminaire Total |
|---|----------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Glocester Area Quantities | Flood Total | | 1 | | 11 | | 12 |
| | Roadway | 50 | 10 | | | | 10 |
| | Roadway Total | | 10 | | | | 10 |
| Glocester Area Quantities Total | | | 11 | | 11 | | 22 |
| Hopkinton Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | | | 1 | | 1 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 1 | | 2 | | 3 |
| | Roadway | 50 | 8 | | | | 8 |
| | | 100 | | | 1 | | 1 |
| | | 250 | 7 | | | | 7 |
| | | 400 | | | 1 | | 1 |
| | Roadway Total | | 15 | | 2 | | 17 |
| Hopkinton Area Quantities Total | | | 16 | | 4 | | 20 |
| Jamestown Area Quantities | Flood | 250 | 3 | | | | 3 |
| | | 400 | | | 1 | | 1 |
| | Flood Total | | 3 | | 1 | | 4 |
| | Post Top | 50 | 16 | | | | 16 |
| | | 100 | 6 | | | | 6 |
| | Post Top Total | | 22 | | | | 22 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 70 | 4 | | | | 4 |
| | | 100 | | | 7 | | 7 |
| | Roadway Total | | 5 | | 7 | | 12 |
| Jamestown Area Quantities Total | | | 30 | | 8 | | 38 |
| Johnston Area Quantities | Flood | 250 | 4 | | | | 4 |
| | | 400 | 4 | | 18 | | 22 |
| | | 1000 | | | 7 | | 7 |
| | Flood Total | | 8 | | 25 | | 33 |
| | Roadway | 250 | 3 | | | | 3 |
| | | 400 | | | 1 | | 1 |
| | Roadway Total | | 3 | | 1 | | 4 |
| Johnston Area Quantities Total | | | 11 | | 26 | | 37 |
| Lincoln Area Quantities | Flood | 250 | 15 | | | | 15 |
| | | 400 | 37 | | 1 | | 38 |
| | Flood Total | | 52 | | 1 | | 53 |
| | Roadway | 70 | 2 | | | | 2 |
| | | 100 | 1 | | 4 | | 5 |
| | | 175 | | | 2 | | 2 |
| | | 400 | 2 | | | | 2 |
| | Roadway Total | | 5 | | 6 | | 11 |
| Lincoln Area Quantities Total | | | 57 | | 7 | | 64 |
| Little Compton Area Quantities | Flood | 400 | 2 | | 2 | | 4 |
| | Flood Total | | 2 | | 2 | | 4 |
| | Roadway | 50 | 23 | | | | 23 |
| | | 175 | | | 1 | | 1 |
| | Roadway Total | | 23 | | 1 | | 24 |
| Little Compton Area Quantities Total | | | 25 | | 3 | | 28 |
| Middletown Area Quantities | Flood | 250 | 19 | | | | 19 |
| | | 400 | 36 | | 6 | | 42 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 55 | | 7 | | 62 |
| | Post Top | 50 | 64 | | | | 64 |
| | | 100 | 7 | | | | 7 |
| | Post Top Total | | 71 | | | | 71 |
| | Roadway | 50 | 2 | | | | 2 |
| | | 70 | 21 | | | | 21 |
| | | 100 | | | 7 | | 7 |
| | | 250 | 5 | | | | 5 |
| | | 400 | | | 4 | | 4 |
| | Roadway Total | | 28 | | 11 | | 39 |
| Middletown Area Quantities Total | | | 154 | | 18 | | 172 |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | Luminaire Total |
|--|----------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Narragansett Area Quantities | Flood | 400 | | | 2 | | 2 |
| | Flood Total | | | | 2 | | 2 |
| | Roadway | 100 | | | 2 | | 2 |
| | | 400 | | | 3 | | 3 |
| Roadway Total | | | | | 5 | | 5 |
| Narragansett Area Quantities Total | | | | | 7 | | 7 |
| Newport Area Quantities | Flood | 250 | 26 | | | | 26 |
| | | 400 | 29 | | 5 | 3 | 37 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 55 | | 6 | 3 | 64 |
| | Post Top | 50 | 11 | | | | 11 |
| | | 100 | 76 | | | | 76 |
| | Post Top Total | | 87 | | | | 87 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 70 | 25 | | | | 25 |
| | | 100 | 4 | | 11 | | 15 |
| | 250 | 15 | | | | 15 | |
| | 400 | 1 | | 10 | | 11 | |
| Roadway Total | | | 46 | | 21 | | 67 |
| Newport Area Quantities Total | | | 188 | | 27 | 3 | 218 |
| North Kingstown Area Quantities | Flood | 250 | 2 | | | | 2 |
| | | 400 | 7 | | 9 | | 16 |
| | | 1000 | | | 11 | | 11 |
| | Flood Total | | 9 | | 20 | | 29 |
| | Roadway | 50 | 1 | | | | 1 |
| Roadway Total | | | 1 | | | | 1 |
| North Kingstown Area Quantities Total | | | 10 | | 20 | | 30 |
| North Providence Area Quantities | Flood | 250 | 4 | | | | 4 |
| | | 400 | 4 | | 18 | | 22 |
| | | 1000 | | | 10 | | 10 |
| Flood Total | | | 8 | | 28 | | 36 |
| North Providence Area Quantities Total | | | 8 | | 28 | | 36 |
| North Smithfield Area Quantities | Flood | 250 | 17 | | | | 17 |
| | | 400 | 17 | | | | 17 |
| | Flood Total | | 34 | | | | 34 |
| | Post Top | 100 | 4 | | | | 4 |
| | Post Top Total | | 4 | | | | 4 |
| | Roadway | 70 | 2 | | | | 2 |
| | | 100 | 9 | | | | 9 |
| | 250 | 14 | | | | 14 | |
| Roadway Total | | | 25 | | | | 25 |
| North Smithfield Area Quantities Total | | | 63 | | | | 63 |
| Pawtucket Area Quantities | Flood | 250 | 94 | | | | 94 |
| | | 400 | 235 | | 16 | | 251 |
| | | 500 | 2 | | | | 2 |
| | | 1000 | 2 | | 1 | | 3 |
| | Flood Total | | 333 | | 17 | | 350 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 70 | 1 | | | | 1 |
| | | 100 | | | 1 | | 1 |
| | 250 | 26 | | | | 26 | |
| Roadway Total | | | 28 | | 1 | | 29 |
| Pawtucket Area Quantities Total | | | 361 | | 18 | | 379 |
| Portsmouth Area Quantities | Flood | 250 | 12 | | | | 12 |
| | | 400 | 15 | | 6 | | 21 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 27 | | 7 | | 34 |
| | Roadway | 50 | 32 | | | | 32 |
| | | 70 | 41 | | | | 41 |
| | | 100 | 2 | | 29 | | 31 |
| | 105 | | | | | 2 | |
| | 250 | 2 | | 2 | | 2 | |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | |
|---------------------------------------|----------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| City and Town Grouped Name | Luminaire Type | Wattage | Luminaire | | | | Luminaire Total |
| | | | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Portsmouth Area Quantities | Roadway | 400 | 1 | | 3 | | 4 |
| | Roadway Total | | 78 | 2 | 32 | | 112 |
| Portsmouth Area Quantities Total | | | 105 | 2 | 39 | | 146 |
| Providence Area Quantities | Flood | 250 | 15 | | | | 15 |
| | | 400 | 36 | | 93 | | 129 |
| | | 1000 | | | 84 | | 84 |
| | Flood Total | | 51 | | 177 | | 228 |
| | Roadway | 100 | 3 | | | | 3 |
| | | 250 | 6 | | | | 6 |
| | | 400 | 5 | | 3 | | 8 |
| | | 1000 | | | 2 | | 2 |
| | Roadway Total | | 14 | | 5 | | 19 |
| Providence Area Quantities Total | | | 65 | | 182 | | 247 |
| Richmond Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | | | 1 | | 1 |
| | Flood Total | | 1 | | 1 | | 2 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 400 | | | 7 | | 7 |
| Roadway Total | | 1 | | 7 | | 8 | |
| Richmond Area Quantities Total | | | 2 | | 8 | | 10 |
| Scituate Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | 1 | | | | 1 |
| | Flood Total | | 2 | | | | 2 |
| | Roadway | 50 | 2 | | | | 2 |
| | | 100 | 1 | | | | 1 |
| Roadway Total | | 3 | | | | 3 | |
| Scituate Area Quantities Total | | | 5 | | | | 5 |
| Smithfield Area Quantities | Flood | 250 | 10 | | | | 10 |
| | | 400 | 10 | | 5 | | 15 |
| | Flood Total | | 20 | | 5 | | 25 |
| | Post Top | 100 | 1 | | | | 1 |
| | Post Top Total | | 1 | | | | 1 |
| | Roadway | 50 | 3 | | | | 3 |
| | | 250 | 1 | | | | 1 |
| Roadway Total | | 4 | | | | 4 | |
| Smithfield Area Quantities Total | | | 25 | | 5 | | 30 |
| South Kingstown Area Quantities | Flood | 250 | 2 | | | | 2 |
| | | 400 | 3 | | 27 | | 30 |
| | | 1000 | | | 3 | | 3 |
| | Flood Total | | 5 | | 30 | | 35 |
| | Roadway | 50 | 1 | | | | 1 |
| | | 100 | 3 | | 1 | | 4 |
| | | 175 | | | 1 | | 1 |
| | | 250 | 2 | | | | 2 |
| 400 | | | | 3 | | 3 | |
| Roadway Total | | 6 | | 5 | | 11 | |
| South Kingstown Area Quantities Total | | | 11 | | 35 | | 46 |
| Tiverton Area Quantities | Flood | 250 | 3 | | | | 3 |
| | | 400 | 4 | | 16 | | 20 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 7 | | 17 | | 24 |
| | Post Top | 50 | 2 | | | | 2 |
| | | 100 | 31 | | | | 31 |
| | Post Top Total | | 33 | | | | 33 |
| | Roadway | 50 | 52 | | | | 52 |
| | | 100 | 2 | | | | 2 |
| | | 175 | | | 2 | | 2 |
| | | 250 | 8 | | | | 8 |
| 400 | | | | 9 | | 9 | |
| Roadway Total | | 62 | | 11 | | 73 | |
| Tiverton Area Quantities Total | | | 102 | | 28 | | 130 |
| Warren Area Quantities | Flood | 250 | 6 | | | | 6 |

Narragansett Electric Company
Inactive Unmetered Company Owned Street and Area Lighting Quantities as of April 14, 2016

| Sum of Number Inactive Components | | | Component Category Description | Material | | | Luminaire Total |
|--------------------------------------|----------------|---------|--------------------------------|--------------|---------------|--------------|-----------------|
| | | | Luminaire | | | | |
| City and Town Grouped Name | Luminaire Type | Wattage | High Pressure Sodium | Incandescent | Mercury Vapor | Metal Halide | |
| Warren Area Quantities | Flood | 400 | 8 | | 11 | | 19 |
| | | 1000 | | | 8 | | 8 |
| | Flood Total | | 14 | | 19 | | 33 |
| | Roadway | 100 | 1 | | | | 1 |
| | | 250 | 1 | | | | 1 |
| | | 400 | | | 5 | | 5 |
| Roadway Total | | 2 | | 5 | | 7 | |
| Warren Area Quantities Total | | | 16 | | 24 | | 40 |
| Warwick Area Quantities | Flood | 250 | 13 | | | | 13 |
| | | 400 | 18 | | 34 | | 52 |
| | | 1000 | | | 21 | | 21 |
| | Flood Total | | 31 | | 55 | | 86 |
| | Roadway | 50 | 53 | | | | 53 |
| | | 100 | 37 | | | | 37 |
| | | 250 | 88 | | | | 88 |
| | | 400 | 5 | | 44 | | 49 |
| Roadway Total | | 183 | | 44 | | 227 | |
| Warwick Area Quantities Total | | | 214 | | 99 | | 313 |
| West Greenwich Area Quantities | Flood | 250 | 1 | | | | 1 |
| | | 400 | | | 1 | | 1 |
| | Flood Total | | 1 | | 1 | | 2 |
| | Roadway | 250 | 1 | | | | 1 |
| | Roadway Total | | 1 | | | | 1 |
| West Greenwich Area Quantities Total | | | 2 | | 1 | | 3 |
| West Warwick Area Quantities | Flood | 250 | 2 | | | | 2 |
| | | 400 | 15 | | 15 | | 30 |
| | | 1000 | | | 3 | | 3 |
| | Flood Total | | 17 | | 18 | | 35 |
| | Roadway | 250 | 3 | | | | 3 |
| | | 400 | 1 | | 31 | | 32 |
| | Roadway Total | | 4 | | 31 | | 35 |
| West Warwick Area Quantities Total | | | 21 | | 49 | | 70 |
| Westerly Area Quantities | Flood | 250 | 3 | | | | 3 |
| | | 400 | 2 | | 7 | | 9 |
| | | 1000 | | | 8 | | 8 |
| | Flood Total | | 5 | | 15 | | 20 |
| | Post Top | 50 | 5 | | | | 5 |
| | | 100 | 14 | | | | 14 |
| | Post Top Total | | 19 | | | | 19 |
| | Roadway | 50 | 4 | | | | 4 |
| | | 100 | 1 | | 5 | | 6 |
| | | 105 | | 1 | | | 1 |
| | | 175 | | | 4 | | 4 |
| 250 | | 3 | | | | 3 | |
| 400 | | | | 11 | | 11 | |
| Roadway Total | | 8 | 1 | 20 | | 29 | |
| Westerly Area Quantities Total | | | 32 | 1 | 35 | | 68 |
| Woonsocket Area Quantities | Flood | 250 | 68 | | | | 68 |
| | | 400 | 117 | | 8 | 2 | 127 |
| | | 1000 | | | 1 | | 1 |
| | Flood Total | | 185 | | 9 | 2 | 196 |
| | Post Top | 50 | 2 | | | | 2 |
| | | 100 | 9 | | | | 9 |
| | Post Top Total | | 11 | | | | 11 |
| | Roadway | 70 | 8 | | | | 8 |
| | | 100 | 1 | | | | 1 |
| | | 175 | | | 2 | | 2 |
| 250 | | 1 | | | | 1 | |
| Roadway Total | | 10 | | 2 | | 12 | |
| Woonsocket Area Quantities Total | | | 206 | | 11 | 2 | 219 |
| Grand Total | | | 2358 | 6 | 989 | 6 | 3359 |

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 First Set of Data Requests
Issued August 3, 2016

Division 1-4

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.10 lines 14-21.

“An annual cap of ten (10) percent totals approximately 10,300 of the 103,000 fixtures available for LED exchange and represents an amount of fixtures that the Company anticipates could reasonably be replaced during a 12-month period, given existing resources and expected work load. This rationale is especially compelling when requests are concentrated in a local area that would require the exclusive use of the same Company resources that perform electric service work, in addition to the administrative resources that would be required to process changes in billing and system record changes.”

- a. Provide a count of the existing street lighting fixtures by municipality, broken out by lamp type, luminaire type and wattage.
- b. Confirm whether, under this cap, some of the fixtures in the Company's street lighting inventory will be ten or more years old at the time they are installed. If this is not true, please explain.

Response:

- a. Please see Attachment DIV 1-3b.
- b. Some of the existing fixtures that would be replaced by LED fixtures may be 10 or more years old at the time of replacement. Regardless of the age of the existing fixtures, the Company is installing new LED luminaires.

The Narragansett Electric Company
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Division 1-5

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.11 lines 16-21.

“Pursuant to the Permanent Discontinuance of Lighting Facilities provision in the Rate S-06, S-10 and S-14 tariffs, at the customer's request, removal of the existing lighting equipment for the purpose of installing LED lighting equipment would require the customer to pay the unamortized balance of the original installation costs plus cost of removal less salvage value for lights in excess of one percent of the total lights on the customer's account.”

- a. How will the unamortized balance of the original installation costs be calculated?
- b. Provide the cost of removal.
- c. Provide the salvage value.
- d. Does the Company plan to provide de-lamping as part of its offering?
- e. If so, what are the costs to customers to:
 1. Turn off the lamp, but leave it in place.
 2. Physically remove the lamp.

Response:

- a. The calculation of the unamortized balance for the removal of existing lights will be performed in the same manner as the Company currently develops discontinuance prices on an annual basis for each type of luminaire and standard (i.e., non-distribution pole). The Company obtains the net book value (i.e., the original installed cost less accumulated depreciation) of all streetlighting assets from the Company's fixed asset system. The Company further subcategorizes each category of asset (i.e., luminaires, brackets, conduit, etc.) as related to underground installations only or as common to both underground and overhead installations. The net book value is then allocated across the actual billing inventory units (both active and inactive) to determine a cost per unit. The Company allocates these two subcategories of net book value based upon a revenue allocator calculated from the current luminaire and standard charges. The net book value of underground assets is allocated only to standards used in providing underground service. The net book value of all other assets that is common to both overhead and underground service is allocated to luminaires and standards used in providing such services. The per-unit costs are calculated by dividing the allocated net book value for each type of luminaire and standard by the number of units in inventory.

Division 1-5, page 2

- b. The Company cannot quantify the cost of removal and salvage value incurred as a result of removing the existing lights for the purpose of replacing them with LED lights, as each exchange will involve a different quantity of lights. However, as part of the estimated cost of the LED fixtures, the Company has included the cost of labor for the time a crew travels and installs a LED fixture, which inherently includes an estimate for the time it will take to remove the existing light. This information is included in the Streetlighting Tariffs in Schedule NG-4 at page 9.
- c. Please see the above response to Division Request 1-5b.
- d. Customers served under the S-14 tariff have the choice to temporarily turn-off designated street and area lighting facilities for a period of up to three years, during which time they would be charged the temporary turn-off rates reflected in RIPUC No. 2095, Summary of Retail Delivery Rates. If a customer chooses to permanently discontinue streetlight service, the Company has the right to remove the streetlighting equipment or perform an in-place retirement of the equipment. Customers must pay the discontinuance price (described above in response to Division Request 1-5a) for termination of service to each streetlight facility; however, there is no additional charge to customers for removal of Company equipment.
- e. Please see the above response to Division Request 1-5d.

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Division 1-6

Request:

Please refer to the Joint Pre-Filed Direct Testimony, p.12 lines 14-21 and p.13 lines 1-7.

“Yes. The proposed annual price for each LED fixture is calculated in Schedule NG-3. Page 1 of Schedule NG-3 shows the calculation of the proposed luminaire charges which consist of the sum of the Annual Carrying Charge on Line (5) plus the Annual Delivery Charge on Line (7). The Annual Carrying Charge is designed to recover the costs of those facilities specifically necessary to provide lighting service. The Annual Delivery Charge is intended to recover other distribution system costs. The Annual Carrying Charge is calculated by multiplying the installed cost from Schedule NG-4, page 1, Line (3) by the Carrying Charge Rate of 17.46% on Line (4) of Schedule NG-3. On page 2 of Schedule NG-3, the Carrying Charge Rate of 17.46% is calculated 1 using the Weighted Average Cost of Capital (9.68%) and Property Tax Percent (2.22%) approved in the Company most recent general rate case in RIPUC Docket No. 4323 as well as a straight line depreciation rate applicable to an 18 year depreciable life (5.56%). On page 1, the Annual Delivery Charge on Line (7) is calculated using the Rate S-05 approved distribution rate of \$0.02654 per kilowatt-hour (kWh) on Line (6) times the annual kWh of the fixture on Line (2).”

- a. Have other jurisdictions used this formula to calculate pricing for Company-Owned LED fixtures? If so, please list the jurisdictions.
- b. Explain whether the Company is proposing to earn a rate of return on conversions to Company-Owned LED street lights.
- c. If so, is this rate of return the same as the rate of return the Company earns on other types of capital investments?
- d. Define the term facilities.
- e. Can the annual carrying charge be reduced if LED street lighting conversions provide enough energy savings to render one or more facilities unnecessary to provide lighting service? Please explain.

Response:

- a. The Company's affiliates, Massachusetts Electric Company and Nantucket Electric Company, have used this formula in their Company-Owned LED proposal made as part of their general rate case currently pending before the Massachusetts Department of Public Utilities (D.P.U. 15-155). Additionally, this method was used to determine the fixture and standard prices for Rate S-06, Decorative Street and Area Lighting, approved

Prepared by or under the supervision of:
Raymond J. Sheridan, Jeanne A. Lloyd, and Robin E. Pieri

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by the Public Utilities Commission (PUC) in Docket 4065, the Company's 2009 general rate case in Rhode Island, and by Massachusetts Electric Company and Nantucket Electric Company for their Rate S-6, Decorative Street and Area Lighting-Company-Owned Equipment in their 2009 general rate case in D.P.U. 09-39 in Massachusetts.

- b. Yes, the proposed LED luminaire charges include a return on the Company's investment, consistent with the rates of other street light technologies.
- c. Yes, the rate of return included in the proposed LED luminaire charges is the rate of return approved by the PUC in the Company's most recent general rate case, Docket 4323.
- d. The term "facilities" refers to all of the components of the light, including the luminaire, bracket, arm, control, pole, standard, and foundation (if the latter three are required solely to provide streetlight service).
- e. The annual carrying charge is not dependent upon the number of lighting fixtures installed. The annual carrying charge is designed to produce an annual revenue requirement associated with each individual lighting fixture that includes a return on capital investment, depreciation, and property and income taxes. The number of facilities installed in any community or in any particular area of a community is determined by each lighting service customer, and is based upon the desired level of illumination and quality of light source.

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Division 1-7

Request:

Please refer to Schedule NG-4, Installed Cost of LED Fixtures, 20 Watt LED Roadway Installed Cost, p.2, lines 1-5, 7, 11 and 12.

- a. Provide the source of the material cost for each LED luminaire proposed by the Company.
- b. Does the material cost reflect the cost the Company paid to purchase its inventory, in the year it was purchased, or the cost to purchase this inventory today?
- c. Define the term Stores Handling.
- d. Define the term Plant Overhead.

Response:

- a. The material costs for the proposed LED luminaires are the result of vendor preliminary pricing submissions. Preliminary pricing was provided by four vendors for four of the roadway offerings and the post-top luminaire. The vendor pricing for the proposed 20 watt LED roadway was not included in this initial cost request. The material cost for the 20 watt LED roadway was obtained verbally from multiple vendors. The vendor pricing information is attached hereto as Attachment DIV 1-7. As such pricing information is deemed confidential. National Grid is filing a motion for protective treatment of confidential information.
- b. The material cost reflects the current amounts for materials, other than the LED luminaire, provided by the Company's procurement contracts in place at the time of this filing. The material cost consists of the necessary items for the lighting assembly, including the luminaire, bracket, wire, photo-electric control, and other ancillary items. The material cost of the proposed LED luminaires represents preliminary pricing provided by multiple vendors, which is attached hereto in Attachment DIV 1-7. As stated above, such pricing information is deemed confidential, so National Grid is filing a motion for protective treatment of confidential information. .
- c. "Stores Handling" includes costs such as labor, burdens, transportation, and facility rents that support the management of inventory warehouses. Such costs are charged to a "stores handling clearing pool." The stores handling rate is applied as an overhead on material issues. As a result, stores handling is a component of the capitalized cost of assets placed in service.

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- d. "Plant overhead" includes costs such as labor, labor overheads, and transportation costs that support capital construction. Such costs are typically associated with employees who support a large number of capital projects, thus making it impractical for those employees to charge individual construction projects. Furthermore, such costs are charged to a "capital clearing pool," or work order. Monthly overhead rates are applied to clear these costs to all construction projects based on the total amount of labor and contractor costs charged to such projects. The monthly rates are estimates based on historical trends and are adjusted periodically to achieve the objective of minimizing the uncleared balances in the plant overhead account.

LED – New Luminaires for National Grid

Roadway Luminaire #1

| | | |
|--|------------------|---|
| STD Item: SK06A | Item ID: 9389768 | Material Noun: Luminaire Material Modifier: Light Emitting Diode (LED) Material Additional Description: Roadway, 30 watts ±, 120-277VAC |
| Long Description: "Luminaire, Light Emitting Diode (LED), Horizontal Roadway, 30 watts ±, 2,700 delivered lumens ±, 120-277 VAC, IES full cutoff, type II, PECR, dimming capable, GRAY housing, in accordance with National Grid MS-6211." | | |
| Comment: <i>intended for use on residential roadways (50w and 70w HPS replacements).</i> | | |

| Manufacturer | Manufacturer's Part Number | Budget Price | Comment |
|----------------------------|-----------------------------|--------------|---------|
| GE Lighting Solutions | ERL1-0-A7-E1-40-A-GRAY | | |
| Cooper Lighting | VERD-A016-D-U-T2-4N7-10K-AP | | |
| American Electric (Acuity) | ATBS-C-MVOLT-R2-MP-NL-P7-AO | | |
| Cree | BXSPR-A-0-2-F-F-U-S-N-SPX | | |
| Leotek | | | |

Roadway Luminaire #2

| | | |
|--|------------------|---|
| STD Item: SK06C | Item ID: 9389795 | Material Noun: Luminaire Material Modifier: Light Emitting Diode (LED) Material Additional Description: Roadway, 60 watts ±, 120-277VAC |
| Long Description: "Luminaire, Light Emitting Diode (LED), Horizontal Roadway, 60 watts ±, 5,000 delivered lumens ±, 120-277 VAC, IES full cutoff, type II, PECR, dimming capable, GRAY housing, in accordance with National Grid MS-6211." | | |
| Comment: <i>intended for use on collector roadways. (100w and 150w HPS replacements).</i> | | |

| Manufacturer | Manufacturer's Part Number | Budget Price | Comment |
|----------------------------|-------------------------------|--------------|---------|
| GE Lighting Solutions | ERL1-0-C7-E1-40-A-GRAY | | |
| Cooper Lighting | VERD-A018-D-U-T2-4N7-10K-AP | | |
| American Electric (Acuity) | ATBS-G-MVOLT-R2-MP-NL-P7-AO | | |
| Cree | BXSP-B-HT-2ME-A-40K-UL-SV-SPX | | |
| Leotek | | | |

Roadway Luminaire #3

| | | |
|---|------------------|--|
| STD Item: SK06G | Item ID: 9389786 | Material Noun: Luminaire Material Modifier: Light Emitting Diode (LED) Material Additional Description: Roadway, 140 watts ±, 120-277VAC |
| Long Description: "Luminaire, Light Emitting Diode (LED), Horizontal Roadway, 140 watts ±, 13,000 delivered lumens ±, 120-277 VAC, IES full cutoff, type III, PECR, dimming capable, GRAY housing, in accordance with National Grid MS-6211." | | |
| Comment: <i>intended for use on major roadways - (250w HPS replacement).</i> | | |

| Manufacturer | Manufacturer's Part Number | Budget Price | Comment |
|----------------------------|-------------------------------|--------------|-----------------|
| GE Lighting Solutions | ERS1-0-14-B1-X-40-A-GRAY | | |
| Cooper Lighting | VERD-G-A028-D-U-T3-4N7-10K-AP | | 103 watts input |
| American Electric (Acuity) | ATBM-E-MVOLT-R3-MP-NL-P7 | | |
| Cree | BXSP-C-HT-3ME-F-40K-UL-SV-SPX | | |
| Leotek | | | |

Roadway Luminaire #4

| | | |
|---|------------------|---|
| STD Item: SK06H | Item ID: 9389785 | Material Noun: Luminaire Material Modifier: Light Emitting Diode (LED) Material Additional Description: Roadway, 140 watts \pm , 120-277VAC |
| Long Description: "Luminaire, Light Emitting Diode (LED), Horizontal Roadway, 275 watts \pm , 25,000 delivered lumens \pm , 120-277 VAC, IES full cutoff, type III, PECR, dimming capable, GRAY housing, in accordance with National Grid MS-6211." | | |
| Comment: <i>intended for use on major roadways - (400w HPS replacement).</i> | | |

| Manufacturer | Manufacturer's Part Number | Budget Price | Comment |
|----------------------------|----------------------------------|--------------|-----------------|
| GE Lighting Solutions | ERS2-0-25-B1-X-40-A-GRAY | | |
| Cooper Lighting | VERD-G-A02-D-U-T3-4N7-10K-AP | | 143 watts input |
| American Electric (Acuity) | ATB2-80BLEDE10-MVOLT-R3-MP-NL-P7 | | |
| Cree | STRLWY-3ME-HT-2-F-UL-SV-40K-SPX | | |
| Leotek | | | |

Post Top Luminaire #1 – "Carriage" Post Top

| | | |
|--|-------------------------|--|
| STD Item: SL76C | Item ID: <i>Pending</i> | Material Noun: Luminaire Material Modifier: Light Emitting Diode (LED) Material Additional Description: Carriage Post Top, 60 watts \pm , 120-277VAC |
| Long Description: "Luminaire, Light Emitting Diode (LED), "Carriage Style Post Top, 60 watts \pm , 5,000 delivered lumens \pm , 120-277 VAC, IES full cutoff, type III, PECR, dimming capable, BLACK housing, in accordance with National Grid MS-6260." | | |
| Comment: | | |

| Manufacturer | Manufacturer's Part Number | Budget Price | Comment |
|----------------------------|-----------------------------------|--------------|----------------|
| Cooper Lighting | UTLD-E02-LED-D-U-T3-4N7-BK | | 54 watts input |
| American Electric (Acuity) | AVPCL2-20LEDE70-MVOLT-4K-R3-P7-TL | | 47 watts input |

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Division 1-8

Request:

Please refer to Schedule NG-6, Bill Comparison of Company-Owned LED and HPS Pricing, p.1 lines 16-20.

- a. The Annual Billed kWh (column a) for the HPS Post Top, 50w is the same as the Annual Billed kWh for the LED Post Top, 60w. The Annual Billed kWh for the DEC HPS Twin Post Top, 50w is the same as the Annual Billed kWh for the DEC LED Twin Post Top, 60w. Are there any LED luminaires on the market that can provide energy savings for customers with these lamp types?
- b. Why is the Proposed LED Facility Price (column c) lower than the HPS Facility Price (column b) for these two luminaires?

Response:

- a. No, there are no lower wattage LED Post Top fixtures which would have provided energy savings for customers converting from a 50W high-pressure sodium (HPS) Post Top while also providing equivalent lumens. In determining which LED luminaires to offer, the Company chose luminaires that would provide equivalent lumen output as the existing technologies. However, customers could replace their current 100w HPS Post Top with the 60W LED Post Top and realize energy savings.
- b. The proposed 60w Post Top LED luminaire charge is lower than the charges for the 50w and 100W HPS Post Top luminaires primarily due to maintenance costs being included in the calculation of the charges for the HPS facilities, whereas there are no maintenance costs included in the LED luminaire charge.

The charges for the 50W and 100W HPS Post Top luminaires were originally determined in conjunction with the implementation of the Decorative Street and Area Lighting tariff, Rate S-06, which was approved in the Company's 2009 rate case in Docket 4065. The pricing of the decorative street and area lighting facilities approved in Docket 4065 was performed in the same manner as the pricing of the proposed LED luminaires. The decorative street and area lights, like the proposed LED luminaires, were new fixtures at the time they were proposed. Therefore, the Company based the pricing of the luminaires and poles on the sum of (1) the carrying charges associated with the then current equipment and materials prices and installation costs, and (2) an estimate of maintenance

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expense over the expected life of the facility.¹ Therefore, even though the calculated carrying charge for the LED luminaire is higher than the HPS versions, the total facility cost of the LED is lower, as there is no estimate of maintenance expense included in the pricing of the 60W Post Top LED luminaire.

¹ See Schedule NG-JEW-4, Docket No. 4065, for the derivation of the Rate S-06 luminaire and pole charges.

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Division 1-9

Request:

Please refer to Schedule NG-6, Bill Comparison of Company-Owned LED and HPS Pricing, p.1 lines 2-7, 11, 13-15.

- a. Explain why the Company is offering:
1. two LED Roadway options (20w and 30w) to customers to replace HPS Roadway 50w and 70w luminaires.
 2. two LED Roadway options (140w and 275w) to customers to replace HPS Roadway 400w luminaires.

Response:

1. The Company recognizes that technology is moving toward lower wattage, so the Company wanted to provide customers with the option of two roadway fixtures that would allow energy savings when replacing the 50W and 70W HPS luminaires. The customer should decide the best option based on the lumen output levels required for a specific location. While the Company prefers the 30W LED roadway to replace the 50W and 70W HPS for its comparable lumen output, the choice of the replacement LED luminaire is left to the customer.
2. As indicated above, the Company is proposing two options to permit the customer to choose the replacement LED luminaire based on the customer's physical location and illumination needs. The comparison is for illustrative purposes only; the customer will decide the fixture size it needs. The Company does not provide lighting design services. Customers will have the option to choose the best fixture for the specific location.

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Division 1-10

Request:

Please refer to Schedule NG-6, Bill Comparison of Company-Owned LED and HPS Pricing.

1. Identify where the maintenance cost savings for the LEDs are captured.
2. Provide the source of the Annual Billed kWh for each LED luminaire proposed by the Company.

Response:

1. The Company has captured the maximum maintenance cost savings possible by including no maintenance cost recovery in the calculation of the proposed LED luminaires.
2. The Annual Billed kWh for each LED luminaire proposed by the Company was determined by adding the following: (1) the manufacture specifications for wattage of the luminaire multiplied by its annual operating hours, divided by 1,000 and rounded two decimal places; and (2) the wattage for the control multiplied by its annual operating hours, divided by 1,000 and rounded two decimal places. Please see Attachment DIV 1-10 for the calculation of Annual Billed kWh for each LED luminaire.

The Narragansett Electric Company
LED Streetlight Annual kWh Calculations

| Line No. | Light Source | Fixture kWh | | | | Control kWh | | | Total Annual kWh |
|----------|-----------------------------|-------------|------------------------|------------------|-------|--------------------|---------------|-------|------------------|
| | | Lamp Watts | Ballast / Driver Watts | Total Load Watts | Hours | Fixture Annual kWh | Control Watts | Hours | |
| | | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| (1) | Light Emitting Diode | | | | | | | | |
| (2) | | 20 | 0 | 20 | 4175 | 83.50 | 1 | 4585 | 4.59 |
| (3) | | 30 | 0 | 30 | 4175 | 125.25 | 1 | 4585 | 4.59 |
| (4) | | 60 | 0 | 60 | 4175 | 250.50 | 1 | 4585 | 4.59 |
| (5) | | 140 | 0 | 140 | 4175 | 584.50 | 1 | 4585 | 4.59 |
| (6) | | 275 | 0 | 275 | 4175 | 1148.13 | 1 | 4585 | 4.59 |
| (7) | Operating Hours | | | | | | | | |
| (8) | Total Annual Hours | 8,760 | | | | | | | |
| (9) | Luminaire Burning Hours | 4,175 | | | | | | | |
| (10) | Photo Cell Burning Hours | 4,585 | | | | | | | |

Line and Column Notes:

Column (a): Manufacturer specifications
Column (b): Manufacturer specifications
Column (c): Column (a) + Column (b)
Column (d): Operating Hours
Column (e): [Column (c) x Column (d)] ÷ 1000, rounded to 2 decimal places
Column (f): Manufacturer specifications

Column (g): Operating Hours
Column (h): [Column (f) x Column (g)] ÷ 1000, rounded to 2 decimal p
Column (i): Column (e) + Column (h), rounded to 0 decimal places
Line 8: 24 hours x 365 days
Line 9: Per tariff, sum of monthly operating hours
Line 10: Per manufacturer specifications

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Division 1-11

Request:

Provide the Company's 2015 annual revenues from street lighting.

Response:

Please see Attachment DIV 1-11 for the Company's annual charges billed to street lighting customers (i.e., customers receiving service under Rates S-10 and S-14) for calendar year 2015. Commodity charges for such streetlighting accounts receiving electric supply from a non-regulated power producer are not included in this attachment. There are charges that do not represent revenue to the Company, such as the statutory renewables charge included with the Energy Efficiency Charge for billing purposes.

The Narragansett Electric Company
Streetlight Revenue
Calendar Year 2015

| | CY 2015 Total Billed Revenue |
|--|------------------------------------|
| (1) Distribution | \$11,805,184 |
| (2) Infrastructure, Safety and Reliability Factor | \$1,154,053 |
| (3) Revenue Decoupling Mechanism Adjustment Factor | \$27,866 |
| (4) Pension/PBOP Adjustment Factor | \$1,330 |
| (5) Renewable Energy Distribution Charge | \$75,834 |
| (6) ReGrowth Program | \$40,344 |
| (7) LIHEAP Enhancement Charge | \$24,835 |
| (8) Transmission Charges | \$1,239,025 |
| (9) Transition Charges | (\$69,391) |
| (10) Energy Efficiency Charges | \$623,344 |
| (11) Standard Offer Service | \$1,402,363 |
| (12) SOS Admin Cost Factor | \$21,310 |
| (13) SOS Adjustment Factor | \$41,939 |
| (14) Renewable Energy Standard Charge | \$48,425 |
| (15) Gross Earnings Tax | \$685,352 |
| (16) Total Revenue | \$17,121,813 |

Source: Company Revenue Reports

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Division 1-12

Request:

Energy savings opportunities.

- a. Will the Company allow customers to replace existing, non-LED luminaires with incandescent, mercury vapor, high pressure sodium vapor and metal halide luminaires? Please explain.
- b. Will the Company require municipalities to conduct a street lighting audit, including an assessment of light levels and identification of opportunities for de-lamping and reduced lighting levels, prior to converting to LED street lighting? Please explain.

Response:

- a. Due to Federal regulations, the Company no longer installs incandescent or mercury vapor sourced luminaires except upon failure of existing incandescent or mercury vapor lamps. The Company will continue to replace failed lamps for the incandescent and mercury vapor fixtures as long as the Company can obtain replacement lamps. The Company will continue to replace existing and install new street and area luminaires with high pressure sodium sourced luminaires. The Company offers a flood light with a metal halide lamp and will continue to replace or install this type of luminaire in accordance with the approved tariff offerings.
- b. The Company offers a variety of street and area lighting options to serve its customers. The luminaires are installed and maintained by the Company as requested by each customer. The customer is responsible to determine the number of lights it needs, as well as the type, size, and location of each light. The Company does not provide lighting design services. Thus, it is up to the municipality, not the Company, to choose whether or not to conduct a lighting assessment.