

November 21, 2013

**BY HAND DELIVERY & ELECTRONIC MAIL**

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

**RE: Docket 4442 - The Narragansett Electric Company d/b/a National Grid  
Tariff Advice Filing for Customer-Owned Street & Area Lighting Proposal  
Rebuttal Testimony**

Dear Ms. Massaro:

On behalf of National Grid<sup>1</sup>, enclosed is the rebuttal testimony of Jeanne A. Lloyd and John E. Walter concerning the above-referenced proceeding.

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Docket 4442 Service List  
Leo Wold, Esq.  
Steve Scialabba, Division

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

**Certificate of Service**

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically transmitted to the individuals listed below. Copies of this filing will be hand delivered to the RI Public Utilities Commission and the RI Division of Public Utilities and Carriers



\_\_\_\_\_  
Joanne M. Scanlon

November 21, 2013  
Date

**Docket No. 4442 - National Grid – LED Tariff Advice Filing  
Service List updated 10/2/13**

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**REBUTTAL TESTIMONY**

**OF**

**JEANNE A. LLOYD**

**November 21, 2013**

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1 **I. Introduction and Qualifications**

2 **Q. Please state your full name and business address.**

3 A. My name is Jeanne A. Lloyd, and my business address is 40 Sylvan Road, Waltham,  
4 Massachusetts 02451.

5

6 **Q. Have you previously submitted testimony in this docket?**

7 A. Yes. On September 16, 2013, I submitted pre-filed direct testimony in this docket on  
8 behalf of The Narragansett Electric Company d/b/a National Grid (the “Company”).

9

10 **II. Purpose of Testimony**

11 **Q. What is the purpose of your testimony?**

12 A. The purpose of my testimony is to respond to several issues raised by Daniel T. Carrigg  
13 and George Woodbury, witnesses in this docket on behalf of two interveners, The Rhode  
14 Island League of Cities and Towns and The Washington County Regional Planning  
15 Council (collectively, “Intervenors”) regarding the proposed Customer-Owned Lighting  
16 Rate S-05 tariff.

17

18 **III. Response to Issues Raised by Intervenors**

19 **Q. On pages eight and nine of his testimony, Mr. Carrigg indicates that the property  
20 records provided as part of Commission Data Request 1-7 are confusing. Please**

1           **describe how the Company maintains its streetlighting property records in its asset**  
2           **management system.**

3    A.    The Company employs the mass plant convention of accounting for certain assets on a  
4           vintage year basis. These assets include the Company’s investment in street light  
5           equipment, utility poles, and other components of the distribution system that are too  
6           numerous to practically track on an individual basis given the small relative value of each  
7           individual asset. This accounting treatment is an acceptable utility practice for such  
8           equipment. As shown in Attachment Commission 1-7(b) of Commission Data Request  
9           1-7, streetlighting assets are recorded by retirement unit, such as brackets, floodlights,  
10          conduit, etc. The original cost and accumulated depreciation of all units placed in service  
11          in any year is tracked in the asset management system, as indicated in Attachment  
12          Commission 1-7(b). Therefore, this system can provide an accurate value for all lighting  
13          assets currently in service. However, this system cannot determine the location and value  
14          associated with any individual light that is currently in service.

15  
16    **Q.    On page nine, line 6 of his testimony, Mr. Carrigg refers to the illustrative prices**  
17          **shown on Commission Attachment 1-7 (a) as “proposed” prices. Are the prices in**  
18          **Attachment 1-7 (a) the actual purchase price for each community?**

19    A.    No. First, as required by the Rhode Island Municipal Streetlight Investment Act (the  
20          “Act”), in order for a municipality to begin the purchase process, it must provide notice to  
21          the Company of its intent to purchase and convert the street light assets serving the

1 municipality to an alternative tariff approved by the Commission. The Commission's  
2 Information Request 1-7 is not a form of notice issued to any municipality to the  
3 Company of an intent to purchase street light assets. The information request is simply a  
4 request for the specific information identified in the question and the information  
5 provided in the response serves no other purpose beyond this proceeding.  
6

7 Second, as indicated in the Company's response to Commission 1-7, these prices are  
8 illustrative. The analysis, which was performed in a very short time frame to meet data  
9 request deadlines in this docket, was intended to estimate the potential purchase price for  
10 all the municipalities in the Company's service territory should they all decide at once to  
11 purchase the street lighting assets currently installed to provide them with street lighting  
12 service. To perform this analysis, the Company was required to make several  
13 assumptions in order to reasonably estimate the amount of net book value associated with  
14 those specific assets, as not all of the Company's street lighting assets serve municipal  
15 customers.  
16

17 The actual purchase price for any community deciding to purchase lighting assets will be  
18 based on the net book value of the assets and the inventory of active and inactive  
19 luminaires and standards that provide service to the municipality at the time the  
20 community notifies the Company of its intent to purchase the assets. This purchase price

1 will likely be different from the estimated amounts shown in Attachment Commission 1-  
2 7(a).

3  
4 **Q. Mr. Carrigg describes apparent inconsistencies between the inventory (billing)**  
5 **records and the property records for the towns of Richmond and Exeter. Can you**  
6 **explain these inconsistencies?**

7 A. With regard to Exeter, Mr. Carrigg indicates that the Company's inventory records show  
8 municipal lighting accounts when the town claims to pay no streetlight invoices to the  
9 Company. One of the data fields included in the Company's billing data base is  
10 Customer Type. Customer type, as the name implies, is designed to categorize the  
11 account according to the type of business in which the customer is engaged. Customer  
12 types include, among other things, municipal government, federal government, state  
13 government, and commercial business. This field is not used in calculating customer  
14 bills, but is a convenient way to group data for purposes of analysis. The Company has  
15 used this data field in performing the various analyses requested by the Commission and  
16 other parties during the discovery process. In some cases, a customer account may be  
17 designated as a municipal account even if the account is not actually paid by the  
18 particular municipal government. For example, housing authorities, parks departments,  
19 cemeteries, and regional school districts may each be billing entities separate from the

1 municipal government. However, for purposes of the Company's inventory data, they  
2 would each be coded as a municipal government customer type.

3  
4 As indicated above, the Company made several simplifying assumptions so that it could  
5 analyze a large amount of inventory data and property records information to estimate the  
6 purchase prices for each community. One of the assumptions was that all accounts coded  
7 as municipal government were included as lighting asset subject to purchase. This  
8 simplifying assumption may have resulted in the Company including some non-  
9 municipal assets in the determination of the allocation factors used to allocate the net  
10 plant value between municipal and other assets. On an ongoing basis, when a  
11 municipality requests an individual purchase price analysis, the Company will use actual  
12 billing accounts and work closely with each municipality to identify the inventory to be  
13 purchased.

14  
15 With regard to Richmond, the Company's billing inventory shows municipal lighting  
16 accounts located in tax district "S Hope Valley T Richmond." This tax district is  
17 associated with the town of Hopkinton in the data base. As indicated above, the  
18 Company will work with customers on a case-by-case basis to ensure a proper accounting  
19 of all inventory to be purchased.

20

21

1 **Q. On page13, lines 6 through 15 of his testimony, Mr. Woodbury states that he does**  
2 **not understand the allocation of plant and costs used to derive the revenue**  
3 **requirement and asks for a detailed explanation of the logic in the allocation of plant**  
4 **and costs in Schedule JAL-4. Would you please provide a detailed explanation?**

5 A. First, it is important to understand how the full service charges applicable to customers  
6 receiving service on street and area lighting rate S-14 were developed. The current rates  
7 were determined as part of the Company's most recent general rate case in Docket No.  
8 4323, filed in April 2012. In this proceeding, the Company performed an allocated cost  
9 of service study to determine the appropriate revenue requirement for each of the  
10 Company's service classes, including the outdoor lighting classes. The Company and  
11 intervening parties ultimately reached a settlement on all issues in the case, including  
12 class cost of service and rate design ("Amended Settlement Agreement"). The parties  
13 submitted the Amended Settlement Agreement to the Commission for its review and  
14 approval on November 14, 2012, and the Commission approved the Amended Settlement  
15 Agreement on December 20, 2012. The Company implemented new rates on February 1,  
16 2013. The class cost of service study, which included certain adjustments as agreed to by  
17 parties in the Amended Settlement Agreement, was included as Compliance Attachment  
18 3A, submitted on January 24, 2013 as part of the Company's Compliance Filing in  
19 Docket No. 4323.

20 The final approved revenue requirement for the lighting classes was \$12.0 million. This  
21 revenue requirement was designed to recover the cost of lighting facilities as well as an

1 allocated portion of other distribution related costs such as the Company's investment in  
2 primary and secondary distribution system infrastructure (return and depreciation),  
3 distribution O&M, administrative and general costs, billing and customer service costs,  
4 and all taxes, including income and property taxes. The entire \$12.0 million revenue  
5 requirement is reflected in the fixed monthly facilities charges billed to Rate S-14  
6 customers. Therefore, the monthly facilities charges include the costs associated with  
7 distribution facilities that will not be purchased by the municipalities, but must still be  
8 recovered by customers who purchase their lighting equipment, since those facilities will  
9 be used to provide delivery service to customer-owned lights. Therefore, the analysis  
10 demonstrated in Schedule JAL-4 is designed to separate the total street and area lighting  
11 revenue requirement into two pieces, the portion that is related to the lighting equipment,  
12 shown in column (c) of Schedule JAL-4 ("Lighting"), and the portion that is related to the  
13 provision of delivery service, shown in column (b) ("Delivery"). The portion related to  
14 Lighting represents the costs that will be avoided by customers who purchase their  
15 lighting assets.

16  
17 **Q. How was the allocation of distribution plant between Lighting and Delivery**  
18 **determined?**

19 A. Costs booked to FERC account 373 – Street Lighting and Signal System are directly  
20 assigned to Lighting as this represents the cost of the assets subject to purchase. Costs  
21 booked to FERC accounts 361 through 367 are assigned to Delivery. These accounts

1 include the cost of substation, towers, overhead and underground conductors, and other  
2 investment necessary to support the delivery of electricity to all customer premises. This  
3 assignment of costs is shown on Schedule JAL-4, page 2, lines 6 through 19.  
4

5 **Q. On page 13, lines 10 through 13 of his testimony, Mr. Woodbury indicates that**  
6 **portions of FERC accounts 361 through 367 will be purchased by the municipalities.**  
7 **Do you agree?**

8 A. No. Only assets booked to FERC account 373, Street Lighting and Signal Systems, will  
9 be subject to purchase by municipalities. Therefore, all costs booked to accounts 361  
10 through 367 is assigned to Delivery and remains the Company's assets.  
11

12 **Q. How was the allocation of operations and maintenance ("O&M") expense between**  
13 **Lighting and Delivery determined?**

14 A. Costs booked to FERC accounts 585 and 596 – Street Lighting and Signal System are  
15 directly assigned to Lighting as these are the costs incurred to provide maintenance to  
16 lighting equipment and represents the cost that the Company will avoid by no longer  
17 performing street light maintenance on lighting equipment it will no longer own. O&M  
18 expense associated with accounts 581 – 584, 587, and 592 – 595 are assigned to Delivery.  
19 The remaining O&M accounts (588 – 590) are allocated between Delivery and Lighting.  
20 This assignment of O&M costs is shown on Schedule JAL-4, page 3, lines 39 through 58.  
21

1 **Q. How are other costs, such as the allocated O&M expenses, administrative and**  
2 **general expense, and taxes, allocated between Lighting and Delivery?**

3 A. Other costs that are not directly assigned to either Lighting or Delivery are allocated  
4 based upon a causal factor such as allocated plant or allocated O&M. All costs are  
5 allocated in a manner consistent with the cost allocation methodology approved in  
6 Docket No. 4323.

7  
8 **Q. What was the final result of the allocation of costs between Lighting and Delivery?**

9 A. As shown in Schedule JAL-4, page 1, of the \$12.0 million total revenue requirement,  
10 approximately \$2.5 million is allocated to Delivery with the remaining amount allocated  
11 to Lighting.

12  
13 **IV. Conclusion**

14 **Q. Does this conclude your testimony?**

15 A. Yes.

**REBUTTAL TESTIMONY**

**OF**

**JOHN E. WALTER**

**November 21, 2013**

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1 **I. Introduction and Qualifications**

2 **Q. Please state your full name and business address.**

3 A. My name is John E. Walter, and my business address is 144 Kensington Avenue, Buffalo,  
4 New York 14214.

5

6 **Q. Have you previously submitted testimony in this docket?**

7 A. Yes. On September 16, 2013, I submitted pre-filed direct testimony in this docket on  
8 behalf of The Narragansett Electric Company d/b/a National Grid (the “Company”).

9

10 **II. Purpose of Testimony**

11 **Q. What is the purpose of your testimony?**

12 A. The purpose of my testimony is to respond to several issues raised by Daniel T. Carrigg  
13 and George Woodbury, witnesses in this docket on behalf of two interveners, The Rhode  
14 Island League of Cities and Towns and The Washington County Regional Planning  
15 Council (collectively, “Intervenors”) regarding the proposed Customer-Owned Lighting  
16 Rate S-05 tariff (“Rate S-05 tariff”).

17

18 **III. Response to Issues Raised by Intervenors**

19 **Q. Can you please comment on the Intervenors and the Rhode Island Office of Energy  
20 Resources (“OER”) concerns regarding the Company’s Rate S-05 tariff and their  
21 statements that it is the Company’s intent to “discourage municipal participation”**

1           **or “dissuade municipalities from changing the status quo.”<sup>1</sup>**

2    A.     The Company has no intention of either preventing or dissuading any city or town from  
3           purchasing the Company’s street lighting assets as permitted by the Municipal Streetlight  
4           Investment Act, R.I.G.L. § 39-29-1, *et. seq.* (the “Act”). Through the Rate S-05 tariff,  
5           as required by the Act, the Company is proposing to provide service to customer-owned  
6           street lighting in a consistent, nondiscriminatory, and administratively efficient manner.  
7           The Company will consider customer-owned street lighting equipment that is mounted or  
8           otherwise attached to a Company-owned distribution pole or any other Company-owned  
9           structures as attachments. Therefore, the Company will treat such street lighting  
10          equipment similar to other electrified and non-electrified attachments requiring the use of  
11          the Company’s electric distribution infrastructure to operate.

12  
13    **Q.     In his testimony, Mr. Carrigg states that greater flexibility in the Rate S-05 tariff**  
14          **would not cause undo administrative burden or require a costly update to existing**  
15          **billing software.<sup>2</sup> Why didn’t the Company change the billing system limitation to**  
16          **allow for a greater number of annual operating schedules?**

17    A.     Contrary to Mr. Carrigg’s above-described testimony, greater flexibility in the tariff  
18          would in fact result in costly updates to the Company’s existing billing system to allow  
19          for the storage and billing of the multitude of options presented by Mr. Carrigg.

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<sup>1</sup> See Intervener’s October 31, 2013 Memorandum of Law (“League/WCRPC Comments”) at p.1; OER’s Memorandum of Law (“OER Comments”) at p. 1.

<sup>2</sup> See Direct Testimony of Daniel T. Carrigg (“Carrigg Testimony”) at p. 4, lines 5-6.

1 Indeed, the Company did not modify its billing system to allow for the flexibility of a  
2 greater number of annual operating schedules because such a modification would  
3 involve significant cost and time. Therefore, the Company's Rate S-05 tariff includes  
4 proposed schedules that can be implemented within the constraints of the billing system  
5 that meet the requirements of the Act. Additionally, the concept of providing numerous  
6 annual operating schedule applications to address the nearly limitless variability from  
7 which customers could choose would create an excessive administrative complexity and  
8 burden to manage the communication of changes in billing inventory, the  
9 comprehensiveness and ongoing changes to the billing database for normal rate and  
10 service changes, and compliance with record retention requirements of such a dynamic  
11 and vast menu of operating choices. Furthermore, Mr. Carrigg has no knowledge of or  
12 experience with the Company's billing system and, therefore, is not qualified and cannot  
13 support his comments regarding the costs that would be incurred by the Company to  
14 update its billing system.

15  
16 **Q. In his testimony, Mr. Carrigg discusses the need for greater flexibility of the**  
17 **dimming and part-night schedules.<sup>3</sup> Please describe the Company's limitations**  
18 **that exist even with promoting only two modified operating schedules.**

19 A. On pages 4–14 of my pre-filed direct testimony (“Walter Testimony”), I provide detailed  
20 reasoning for the operating schedules proposed in the Rate S-05 tariff. Notably, the

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<sup>3</sup> See Carrigg Testimony at p. 4, lines 5-6.

1 Company's proposal to offer both a part-night and dimming schedule exceeds the  
2 mandate of the Act to provide "...schedule based dimming *or* on/off controls that dim *or*  
3 turn off street lights . . . ." R.I.G.L. § 39-29-1, *et. seq.* The two proposed schedules,  
4 which represent annual operating hour conditions less than the standard dusk-to-dawn  
5 schedule (i.e., the burning time of the street light is less under the two proposed  
6 operating schedules than the dusk-to-dawn operating schedule), were developed based  
7 upon reasonable usage applications through the use of cost appropriate control devices  
8 that would promote a practical differentiation between annual operating hour billing  
9 thresholds or limits. Additionally, the Company's billing system has a fixed limitation  
10 of independent annual operating schedules that can be implemented.

11 **Q. On pages 5–7 of his testimony, Mr. Carrigg questions the Company's selection of**  
12 **the single dimming rate of 70% over a greater cost-saving dimming rate of 50%.**  
13 **Please explain the Company's reasons for selecting the 70% dimming rate.**

14 A. The Company considered and analyzed the energy consumption values for both the 50%  
15 and 70% dimming rates. The Company conducted research and polled LED luminaire  
16 manufacturers to identify any large scale dimming applications as presented in my pre-  
17 filed direct testimony.<sup>4</sup> Additionally, in response to feedback received from the OER,  
18 the Company selected the 70% dimming rate (30% energy reduction). This dimming  
19 operating schedule provides for a reduction in annual kWh consumption based upon a  
20 reasonable application of dimming usage. Conversely, if the Company adopted the 50%

---

<sup>4</sup> See Walter Testimony at p. 11, lines 15-19.

1 dimming rate supported by Mr. Carrigg, the associated annual kWh consumption  
2 threshold level would not account for any related energy savings if the customer applies  
3 a dimming rate greater than 50%.

4  
5 **Q. In his testimony, Mr. Carrigg states that the method of energy consumption**  
6 **determination is inconsistent when applying hours of operation for a dimming**  
7 **period.<sup>5</sup> Is the Company's method for determining energy consumption for all**  
8 **operating schedules consistent?**

9 A. Yes. The calculation methodology remains consistent for all operating schedule  
10 conditions. The methodology utilizes the defined total lamp source wattage value based  
11 upon energy consumption at 100% output during the defined operating schedule. In the  
12 case of dimming applications, an additional step in the calculation is required to convert  
13 operating hours at a specific dimming output to an operating hour equivalent at 100%  
14 output. This 100% wattage output criterion is a requirement of the Company's billing  
15 system and is one of its limitations.

16  
17 **Q. The Company has stated that it did not identify any municipality that has adopted**  
18 **large scale dimming applications. However, in his testimony, Mr. Carrigg describes**  
19 **various jurisdiction applications.<sup>6</sup> Please explain.**

20 A. As explained in my pre-filed direct testimony (*See* Walter Testimony at p. 11), the

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<sup>5</sup> *See* Carrigg Testimony at p. 4, line 15.

<sup>6</sup> *See* Carrigg Testimony at p. 6, lines 4-5.

1 research I performed in support of the Rate S-05 tariff identified no tariffs or  
2 municipalities in the United States that have adopted large scale dimming applications.  
3 This research was specific to investor-owned utility tariffs across the United States  
4 because the legislative, regulatory, industry codes and standards, lighting system  
5 configuration, and functional operation are relatively consistent throughout the United  
6 States. Conversely, the application of unique lighting operating characteristics in foreign  
7 countries may not be consistent with established standards in the United States.  
8 Therefore, I did not incorporate information concerning tariffs in foreign countries  
9 because such information can be misleading based on underlying business and  
10 operational differences.

11  
12 **Q. In his testimony, Mr. Carrigg questions the accuracy of the hours of operation**  
13 **(“burn hours”) specified for the dimming operating schedule in the Rate S-05**  
14 **tariff.<sup>7</sup> Please explain the accuracy of the Company’s proposed operating hours.**

15 A. The value of the annual dimming period operating hours affected by the reduced energy  
16 consumption was assigned to be 1,874 hours to meet specific established monthly  
17 operating hour values. The resulting equivalent annual dimming operating hour schedule  
18 total is 3,615 hours, which includes the operating hours at 100% output and the adjusted  
19 hours at 70% output. The Company’s position relative to the determination of the  
20 unmetered street lighting energy consumption (kWh) is based upon a fundamental

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<sup>7</sup> See Carrigg Testimony at p. 4, line 22 and p. 5, line 2.

1 premise that the actual operation of the light over an annual period is only an  
2 approximation due to natural conditions. The stated kWh values are estimates  
3 determined from a variety of accepted approximations based upon historical data and  
4 generalized industry assumptions. In addition to the approximate nature of the  
5 component values, the mathematical calculation incorporates a significant amount of  
6 compounded rounding error, which impacts the final value. Finally, the calculation of  
7 the presented values in the Rate S-05 tariff must correlate with existing factual  
8 information previously approved by the Commission relating to the Rate S-14 and Rate  
9 S-06 tariffs.

10  
11 **Q. In his testimony, Mr. Carrigg identifies an inconsistency in Schedule JAL-1, sheet 2**  
12 **of the Rate section of the proposed tariff. Please explain these values.**

13 A. The Company has reviewed the calculation of the Annual Billable kWh Delivered for the  
14 Dimming and Part-Night Operating Schedules and determined that the values originally  
15 presented in the referenced schedule are in error. Unfortunately, the Company did not  
16 observe this error given that it made modifications following the collaborative meeting  
17 with the OER just prior to when it filed the proposed Rate S-05 tariff with the  
18 Commission. However, the correct values were provided on page 1 of Schedule JEW-5  
19 in the Company's September 16, 2013 filing. The Company will reflect the correct  
20 values in its compliance filing in this proceeding.

21

1 **Q. If the Company provides street light maintenance service to customer-owned**  
2 **lighting equipment in Massachusetts as referenced by the pre-filed testimony of Mr.**  
3 **Woodbury (“Woodbury Testimony”) on page 6 lines 14-15, will the Company**  
4 **provide street light maintenance services for purchased customer-owned street**  
5 **lights in Rhode Island?**

6 A. No, the Company has no intention of providing maintenance services for customer-  
7 owned street and area lighting. The current rate of development of new street lighting  
8 product technology does not promote consistencies the Company can leverage as it can  
9 in maintaining its own street lighting equipment to facilitate product or process  
10 efficiencies of scale to offer a reasonable market price for the maintenance service.  
11 Additionally, the Act specifically states that the proposed energy charge filed in the Rate  
12 S-05 tariff must not include facility, support, *maintenance*, or accessory charges. *See*  
13 R.I.G.L. § 39-29-3(1). (emphasis added).

14  
15 The Company does provide limited maintenance service to customer-owned street light  
16 equipment as referenced in the applicable Massachusetts Electric Company tariffs, Rate  
17 S-2 (Customer-Owned Streetlighting Service – Overhead Service) and Rate S-3, Option  
18 B (Customer-Owned Streetlighting Service – Underground Service). However, this  
19 maintenance service is specific to street light equipment in-service prior to 1998 when  
20 these tariffs were closed to new customers. This service is not available to new  
21 customers and/or new equipment installations for existing customers. The Company

1 envisions a plan to file for sunset dates effectively terminating these tariffs and  
2 transitioning all existing customer-owned equipment to the appropriate active tariffs,  
3 under which customers will be required to perform all maintenance on their street  
4 lighting equipment.

5  
6 **Q. Did National Grid consider incorporating the new “smart photocell” or adaptive  
7 “control” technology in the Rate S-05 tariff, as Mr. Woodbury asks in his  
8 testimony?**<sup>8</sup>

9 A. National Grid did not consider incorporating either smart photocell or adaptive control  
10 technology in the Rate S-05 tariff based upon several factors, including the present  
11 development status of the technology, uncertain procurement, deployment, and operating  
12 costs that would need to be included in the determination of the rate. In addition, given  
13 the expedited approval schedule set forth in the Act, the Company would not have the  
14 control functionality available for customers on the effective date of the tariff. The  
15 Company monitors the continuous advancements associated with the street light control  
16 technology and is active in industry organizations involved in evaluating the feasibility  
17 and adoption of the technology in addition to promoting product and communication  
18 protocol standardization. Currently, the technology lacks interoperability, facility  
19 compatibility, function variability, communication protocol standards, operation  
20 programming, and data communications security, along with impacting the Company’s

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<sup>8</sup> See Woodbury Testimony at p. 6, lines 18-20.

1 data collection processes and protocols, system interfaces, and billing system  
2 configuration and processing. Additionally, metering accuracy has not been verified  
3 and/or deemed compliant with applicable regulatory requirements.  
4

5 **Q. On pages 16-17 of their comments, the Interveners reference the termination of**  
6 **service provision under the Rate S-05 tariff and the transfer of the street lighting**  
7 **equipment to an applicable metered service due to a municipal customer's failure to**  
8 **meet the reporting requirements or the identification of unreported lights. Please**  
9 **explain the reason for this termination of service provision.**

10 A. Through this proposed provision, the Company is preserving its right and defining the  
11 actions it will take if a customer follows a practice that does not conform with the  
12 communication requirements established in the Rate S-05 tariff, which will enable the  
13 Company to properly bill customer-owned lights. The provision further defines an  
14 alternate service under which the lights can continue to operate rather than having  
15 distribution service terminated. The Company has historically reached amicable  
16 resolutions of these types of billing matters with customers within service areas of the  
17 Company's affiliates that have customer-owned lighting tariffs. The Company fully  
18 expects that this practice of resolving billable inventory disputes will continue.  
19

20 **Q. In his testimony, Mr. Woodbury provides information describing overbilling of**  
21 **lower wattage LED street lights based upon the Company's proposed wattage**

1        **ranges.<sup>9</sup> Please provide the Company's response to this claim.**

2        A.        As described on pages 15 - 17 of my direct pre-filed testimony in this docket and as  
3                graphically presented in Schedule JEW-4 of that testimony, the Company evaluated a  
4                large sampling of varied manufacturers' LED luminaires to identify the range of efficacy  
5                (lumens/watt). The observation of luminaire data considered within the lowest wattage  
6                range identified the average luminaire wattage to be greater than the Company's  
7                proposed designated billable wattage of 25 watts. The Company is unable to specify  
8                what types/wattage of luminaires will be available to customers for purchase, and,  
9                therefore, must consider a reasonable and rational approach to address the current  
10               product variation, lack of industry standardization, and changing market conditions. The  
11               Company is aware of the over/under billing condition but has applied the accepted  
12               standard bell curve rate, making model assumptions due to the lack of actual in-service  
13               customer-owned LED luminaire information. Over time, an assessment of the range  
14               model performance can be performed and adjustments can be made to better align the  
15               billable wattage with the wattages of existing customer-owned LED luminaires.

16  
17        **Q.        In their testimonies, Mr. Carrigg and Mr. Woodbury discuss the Company's**  
18                **labeling and tagging requirements<sup>10</sup> Please explain and clarify the Company's**  
19                **labeling and tagging requirements.**

20        A.        The Company's labeling requirement is to provide sufficient information for the billing

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<sup>9</sup> See Woodbury Testimony at pages 9-10.

<sup>10</sup> See Carrigg Testimony at p. 8, lines 10-18; Woodbury Testimony, at p. 11, line 9.

1 determination of the installed light source. All new luminaires must have the designated  
2 ANSI-NEMA industry standard labels attached to the exterior of the luminaire. The  
3 Company will utilize the inventory database information presently used for billing  
4 purposes to denote the wattage associated with all existing luminaires purchased by the  
5 municipality. If, in the course of performing routine maintenance, a customer  
6 determines that a label on an existing luminaire is unclear, illegible, or missing, the  
7 customer must replace the label.

8  
9 In addition, the Company's tagging requirement provides adequate ownership  
10 identification of a street lighting assembly or other related street lighting equipment when  
11 the equipment is in close proximity with other electric distribution or Company-owned  
12 lighting equipment. In this manner, all parties should be reasonably aware of lighting  
13 equipment ownership in the field. Although the municipalities are required to purchase  
14 all street and area lighting equipment that currently provides them street lighting service,  
15 including any inactive lights that they would like to become operational after a purchase,  
16 other Company-owned lighting equipment associated with other customers will remain  
17 within the municipal boundary. Mr. Woodbury's reference to the red oval used in  
18 Massachusetts designates the Company's maintenance requirement for specific customer-  
19 owned luminaires.

20

21

1 **Q. In his testimony, Mr. Woodbury states that fusing is not a standard practice and**  
2 **should not be imposed on communities.<sup>11</sup> Please explain why the Company is**  
3 **requiring municipal customers to install fuses?**

4 A. The Company requires that the customer install a “disconnect device” for the purpose of  
5 allowing separation (not demarcation) of the street light from the electric distribution  
6 system. This device, once installed, promotes the safe operation and maintenance of the  
7 customer’s street lighting system and minimizes the need for Company resources to  
8 perform activities associated with the customer’s work on the light and associated  
9 customer expense. Although this requirement was not specified in the Company’s  
10 earlier License Agreements, the latest revisions of the Agreements (on file with the  
11 Commission in this docket) include this requirement. The use of the disconnect device is  
12 consistent with all other Company standards and policies associated with electrified  
13 attachments. The use of the “in-line fuse” is a relatively inexpensive, easy to install,  
14 minimum disconnect device and is also consistent with minimal National Electric Safety  
15 Code (“NESC”) requirements.

16 **Q. In his testimony, Mr. Carrigg states that the application of the Lighting Service**  
17 **Charge at \$130 per occurrence for the customer to perform routine maintenance**  
18 **before a fuse is installed is especially onerous.<sup>12</sup> Please explain the Company’s**  
19 **position regarding the assignment of the Lighting Service Charge for routine**  
20 **maintenance.**

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<sup>11</sup> See Woodbury Testimony at p. 8, line 7.

<sup>12</sup> See Carrigg Testimony at p. 7, lines 12-14.

1 A. As explained in my pre-filed direct testimony on page 18, lines 17 - 19, the Company  
2 anticipates applying the Lighting Service Charge for all customer work requiring the  
3 Company to perform connection-related work at the electric distribution secondary  
4 connection point. This will only be required during material changes (e.g. luminaire  
5 replacement) in which the street lighting equipment must be de-energized and prior to  
6 the installation of the customer's disconnect device. Routine maintenance, including  
7 luminaire cleaning, and lamp or photocontrol replacement, will not require the luminaire  
8 to be de-energized.

9

10 **Q. In his testimony, Mr. Woodbury explains that the applications of Material Change**  
11 **and Make Ready work are a means of unfairly imposing unnecessary fees.<sup>13</sup> Please**  
12 **clarify the application requirements for Material Change and Make Ready work.**

13 A. The Company requests that any customer-owned street lighting asset change (except in-  
14 kind replacements) or physical relocation or realignment upon Company distribution  
15 infrastructure, must be communicated to the Company by the customer with the  
16 appropriate technical/engineering data as typically found on a manufacturer's product  
17 specification sheet. Following a brief engineering review by the Company, the Company  
18 issues a notice to the customer that it may proceed with its work and no charges or fees  
19 are assessed. Should the review require further investigation based upon the asset  
20 change information or physical attachment change, a Field Survey Charge may be

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<sup>13</sup> See Woodbury Testimony at p. 8, lines 8-9.

1           assessed to collect the needed information and perform a formal engineering study. In  
2           the event that the electric distribution system facilities or other existing third party  
3           attachers are impacted by the proposed change, the Company will provide the customer  
4           with an estimate of Make Ready work charges.

5  
6   **Q.    In his testimony, Mr. Woodbury describes why National Grid should not be allowed**  
7   **to terminate a license at will.<sup>14</sup> Please provide the Company’s reason for specifying**  
8   **the right to terminate an attachment license at any time.**

9   A.    The Company reserves its right to terminate individual attachment licenses to address  
10       continued safe, reliable, economic, and environmentally responsible electric transmission  
11       and distribution system business needs. It is neither the Company’s practice nor policy  
12       to terminate an individual attachment license without just cause. This provision is  
13       typically utilized when an existing distribution pole requires relocation in compliance  
14       with other superseding land use conditions, causing all attachments to be relocated to the  
15       new structure.

16  
17   **IV.   Conclusion**

18   **Q.    Does this conclude your testimony?**

19   A.    Yes.

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<sup>14</sup> See Woodbury Testimony at p. 11, lines 11-15.