

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

IN RE: THE NARRAGANSETT ELECTRIC COMPANY	:	
D/B/A NATIONAL GRID TARIFF ADVICE FILING	:	DOCKET NO. 4442
FOR CUSTOMER-OWNED STREET AND AREA	:	
LIGHTING PROPOSAL	:	

REPORT AND ORDER

I. Background

On July 15, 2013, the Municipal Streetlight Investment Act (Act) was signed by Governor Lincoln D. Chafee. Codified at R.I. Gen. Laws § 39-30-1-5, the Act allows cities and towns to purchase the street lights for which it is currently billed by The Narragansett Electric Company d/b/a National Grid (National Grid), subject to certain conditions.¹ The premise behind the Act was that if cities and towns own the street lighting, they would be better able to control their costs by controlling the lighting schedule and maintenance.² The Act required National Grid, in consultation with the Office of Energy Resources, to “file the new tariff with the public utilities commission [PUC] within sixty (60) days of the effective date of this chapter and the commission shall then issue a decision within sixty (60) days after the filing to effectuate

¹ R.I. Gen. Laws § 39-30-3; <http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-30/39-30-3.HTM> Section 39-30-3(a)(3) states: “[a]fter due diligence, including an analysis of the cost impact to the municipality, [the municipality may] acquire all of the public street and area lighting equipment of the electric distribution company in the municipality, compensating the electric distribution company as necessary, in accordance with subsection (b).” R.I. Gen. Laws § 39-30-3(b) states that: “[a]ny municipality exercising the option to convert its lighting equipment pursuant to subsection (a) must compensate the electric distribution company for the original cost, less depreciation and less amortization, of any active or inactive existing public lighting equipment owned by the electric distribution company and installed in the municipality as of the date the municipality exercises its right of acquisition pursuant to subsection (a), net of any salvage value. Upon such payment, the municipality shall have the right to use, alter, remove, or replace such acquired lighting equipment in any way the municipality deems appropriate. Any contract a municipality enters for such services must require appropriate levels of training and certification of personnel providing pole service for public and worker safety, evidence of twenty-four (24) hour call capacity and a committed timely response schedule for both emergency and routine outages. The municipality may also request that the electric company remove any part of such lighting equipment that it does not acquire from the electric distribution company in which case the municipality shall reimburse the electric distribution company the cost of removal by the electric distribution company, along with the original cost, less depreciation, of the removed part, net of any salvage value.”

² R.I. Gen. Laws § 39-30-1; <http://webserver.rilin.state.ri.us/Statutes/TITLE39/39-30/39-30-1.HTM>

the purposes and provisions of this chapter.”³ The result would be that National Grid would have one set of tariffs for National Grid owned street lights and another for customer-owned street lights. After approval by the PUC of the alternative tariff, the Act provided that:

[a]ny dispute regarding the terms of the alternative tariff, the compensation to be paid the electric distribution company, or any other matter arising in connection with the exercise of the option provided in subsection (a), including, but not limited to, the terms on which space is to be provided to the municipality in accordance with subsection (c), shall be resolved by the division of public utilities and carriers [Division] within ninety (90) days of any request for such resolution by the municipality or any person involved in such dispute.⁴

Therefore, the role of the PUC under the Act is to review and approve tariffs and the role of the Division is to resolve disputes that might arise between the cities and towns and National Grid following approval of the tariffs.

II. National Grid’s Initial Filings

On September 17, 2013, National Grid filed with the PUC a Customer-owned Street & Area Lighting Proposal together with the direct testimony and schedules of its employees, Jeanne A. Lloyd, Manager of Electric Pricing, New England and John E. Walter, Principal Engineer in the outdoor Lighting & Attachments Group.⁵ The filing included the proposed Street and Area Lighting – Customer-Owned Equipment Rate S-05 tariff (proposed tariff), with supporting calculations and a new distribution rate for customers taking service under the proposed tariff.⁶

In her testimony, Ms. Lloyd indicated that the proposed tariff would apply to those municipal customers who choose to purchase all of the street and area lighting equipment currently leased to that municipality. National Grid would provide delivery service to the street lights while maintenance of the street lighting equipment would now be the municipal

³ R.I. Gen. Laws § 39-30-3(a)(1).

⁴ R.I. Gen. Laws § 39-30-3(e).

⁵ National Grid’s Tariff Advice Filing for Customer-Owned Street & Area Lighting Proposal; [http://www.ripuc.org/eventsactions/docket/4442-NGrid-LED-Tariff\(9-16-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-LED-Tariff(9-16-13).pdf) (hyperlink also includes National Grid Ex. 1 and 2).

⁶ National Grid Ex. 1 (Prefiled Test. of Jeanne A. Lloyd) at 2 and Sched. JAL-1 (Sept. 17, 2013).

customer's responsibility.⁷ Ms. Lloyd explained that unlike the existing General Street and Area Lighting tariff, Rate S-14 and the Decorative Street and Area Lighting Service tariff Rate S-06, of which both include a luminaire charge to recover the costs associated with delivery of electricity, capital investment, street light-specific operation, and maintenance costs, the proposed tariff would not include the luminaire charge due to the transfer of responsibility from National Grid to cities and towns for ownership. Rather, under the proposed tariff, "customers would be charged a per-kWh distribution charge designed to recover only the cost of delivering electricity to customer-owned lighting equipment."⁸ The proposed per-kWh distribution charge would include recovery of investment in distribution system infrastructure, operations and maintenance, administrative and general costs, but not meters. In order to calculate the charge, Ms. Lloyd determined the revenue requirement associated only with the delivery of electricity to outdoor lighting customers using National Grid's allocated cost of service study approved by the PUC in 2012.⁹ According to Ms. Lloyd, any lost revenues to National Grid as a result of the installation of LEDs would be recovered through the revenue decoupling mechanism.¹⁰

Similar to the current lighting tariffs, under the proposed tariff, the rate would be an unmetered service, with an annual energy usage charge based on the type of light source and one of four different operating schedules. In addition to the current continuous and traditional dusk-to-dawn service, National Grid proposed two additional operating schedules allowing for reduced energy consumption based on customer installation of adequate control technology. The "[a]nnual energy associated with each operating schedule [would be] calculated based upon

⁷ *Id.* at 4.

⁸ *Id.* at 4-5.

⁹ *Id.* at 12-14.

¹⁰ *Id.* at 14-15.

assumed hours of operation and the light source/luminaire billable wattage.”¹¹ In addition, National Grid proposed a rate for LED luminaires based on one of six different wattage ranges that would be assigned to each installed LED luminaire based on its nominal wattage.¹²

Discussing the purchase of assets required in order to take service under the proposed tariff, Ms. Lloyd stated that in addition to the luminaires, lamps, photocells, and brackets, customers “would also be required to purchase any dedicated poles (and related foundations) upon which the only attached equipment is a street light, conductor (wire) installed exclusively for providing street lighting service, and underground street lighting equipment, such as conductor and conduit.”¹³ According to Ms. Lloyd, once assets are transferred to a municipality, the municipality would be responsible for maintaining a location identification reference of the lighting equipment and ensure industry standard labeling regarding wattage is affixed to the equipment.¹⁴ Ms. Lloyd anticipated that the municipality would notify residents and businesses of the change in ownership of the street lights and provide appropriate contact information regarding repair or maintenance. In the event National Grid were to receive a call regarding a transferred light, the customer service representative would advise the caller that he or she should contact the municipality to report the problem.¹⁵ National Grid proposed to allow cities and towns to transfer ownership back to National Grid at no cost upon providing six months’ notice.¹⁶ Finally, Ms. Lloyd indicated that National Grid “will require the customer to execute a license agreement that identifies, in greater detail, the rights and responsibilities associated with service under the [proposed tariff].”¹⁷

¹¹ *Id.* at 5.

¹² *Id.* at 7-8. LED stands for light emitting diode.

¹³ *Id.* at 8-9 (parentheses in original).

¹⁴ *Id.* at 10.

¹⁵ *Id.* at 10-11.

¹⁶ *Id.* at 11.

¹⁷ *Id.* at 12.

Mr. Walter discussed the development of the operating schedules in the proposed tariff. He explained the hours of operation schedule as being defined by “several approximate annual operating hour values which represent upper bound operating time limitations required to determine unmetered energy consumption of individual lights.”¹⁸ Acknowledging that the schedules were “arbitrarily developed” using reasonably priced control technology that is readily available in the market, Mr. Walter believed the schedules to be “rational.”¹⁹ In addition to the current dusk-to-dawn and continuous operating schedules, National Grid proposed a dimming schedule where the lights would stay on for the same period as the dusk-to-dawn schedule, but at a reduced level for five and a half hours, returning to full output one half hour before dawn and part-night schedule where the lights would turn off at the midpoint for five and a half hours, returning to full output one half hour before dawn.²⁰ Because the lights would continue to be unmetered, the billing would be based on a total number of annual hours divided by the days in the billing cycle.

According to Mr. Walter, National Grid recognized that customers may desire more operating schedules and technology choices but, he stated, “the administration of the proposed limited number of operating schedules in addition to the traditional schedules for the prospective population of customer owned street and area lights is manageable without incurring excessive costs.”²¹ However, Mr. Walter indicated that if, in the future, there is sufficient customer demand for a product that has reached a reasonable level of industry standardization the tariff could be amended to include those products.²² For LED lighting which, due to continual efficiency gains, has not yet reached an adequate level of industry standardization, Mr. Walter

¹⁸ National Grid Ex. 1 (Prefiled Test. of John E. Walter) at 5.

¹⁹ *Id.* at 5-6.

²⁰ *Id.* at 6-8.

~~at 8-14.~~

²² *Id.* at 14.

explained that National Grid's proposal is to "use [six] moderate wattage ranges to normalize these variables" based on a sampling of available products. The billing would be based on the midpoint of each of the six wattage ranges which, Mr. Walter indicated, would "generally yield[] a somewhat lower wattage amount, thereby providing some recognition of the continually improving efficacy and efficiency performance of LED technology."²³

Discussing other charges in the proposed tariff, Mr. Walter indicated that the Lighting Service Charge is a charge to customers when National Grid needs to energize, re-energize or de-energize the customer's equipment. According to Mr. Walter, this charge would be necessary until the customer installs a fuse device.²⁴ A proposed field survey charge was proposed to compensate National Grid for expenses incurred during a site visit determining the feasibility of an attachment or underground service connection to National Grid's distribution system.²⁵ Finally, because the assets would be transferred "as is", make ready charges were proposed where current installations conform to older standards which need to be upgraded for new installations.²⁶ Customers would be required to execute a License Agreement to "address the roles and responsibilities of both parties relative to the identified issues"²⁷

III. Intervenor's Initial Filings

A. Municipalities' Prefiled Testimony

On October 31, 2014, the Rhode Island League of Cities and Towns and Washington County Resources Planning Council (collectively, Municipalities) submitted a memorandum of law and the Prefiled testimony of Daniel T. Carrigg, of Belenus LLC, a consultant and George A. Woodbury, a consultant with a background in public works. In his testimony, Mr. Carrigg

²³ *Id.* at 15-16.

²⁴ *Id.* at 18, 21-22.

²⁵ *Id.* at 18-19.

²⁶ *Id.* at 19-20.

²⁷ *Id.* at 20.

questioned the method of calculating hours of operation in the dimming schedules. Performing the calculations described by National Grid's witnesses did not equate to the rates in the proposed tariff.²⁸ Mr. Carrigg indicated that a single dimming schedule would cause the Municipalities to lose out on certain safety, energy, and cost savings available by various technologies, but if only one dimming schedule were approved, it should be for a 50% dimming schedule rather than a 70% dimming schedule.²⁹ Next, Mr. Carrigg took issue with the proposed requirement that the customer install fuses on each fixture and immediately replace the National Grid property tags with municipal property tags as excessively expensive.³⁰ Finally, Mr. Carrigg questioned the accuracy of National Grid's inventory listing and related pricing provided to the PUC during discovery.³¹

Mr. Woodbury summarized the process by which communities decide whether to purchase the street lights in Massachusetts. He then indicated that in Massachusetts, there are no pole attachment fees for poles where there is more than one attacher. According to Mr. Woodbury, if the street lighting rate is set properly, the utility would capture the costs of the pole in that rate, thus making a separate attachment fee unnecessary.³² Mr. Woodbury advocated for the addition of a rate that would allow a customer to utilize individual street light controls, allowing not just for the control of the light, but for metered usage.³³

Similar to Mr. Carrigg, Mr. Woodbury believed there should be no requirement that street lights be fused. He stated that "[i]n [fifteen communities in] Massachusetts over 100,000 street

²⁸ Municipalities Ex. 3 (Prefiled Test. of Daniel T. Carrigg) at 4-5; [http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-ExhA-Carrigg\(10-31-13\)..pdf](http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-ExhA-Carrigg(10-31-13)..pdf)

²⁹ *Id.* at 6.

³⁰ *Id.* at 7-8.

³¹ *Id.* at 9-10.

³² Municipalities Ex. 5 (Prefiled Test. of George Woodbury) at 5-6. [http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-ExhC-Woodbury\(10-31-13\)..pdf](http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-ExhC-Woodbury(10-31-13)..pdf)

³³ *Id.* at 6-7, 12-13.

lights without fuses are maintained by either contractors or municipal employees.”³⁴ Next, Mr. Woodbury maintained that the definition of material change has been too broadly defined to require “make ready” work when none is truly necessary and “make ready” work should be limited to alterations of street lights that will increase the load on the pole.³⁵ Mr. Woodbury indicated that if a proposed installation is lighter or equal in weight, has a same or better power factor, and a lower cross section wind area, it should be considered an in kind replacement only requiring notification to National Grid with the new wattage and fixture type.³⁶ According to Mr. Woodbury, requiring “make ready” work to de-energize and energize the circuit prior to the installation of a fuse is a new practice by National Grid and increases the cost to the customer, which he contended is an unnecessary practice and not in accordance with industry standards.³⁷

Addressing the proposed LED rates, Mr. Woodbury opined that the proposal would cause customers to be overcharged based on a 1998 Massachusetts study which showed that the most common streetlight in National Grid’s territory is 3500 to 4000 lumens. According to Mr. Woodbury, assuming the distribution to be similar in RI, the majority of the street lights would be replaced with an LED ranging from 14.61 watts to 24 watts. However, under National Grid’s proposal that would bill a 0-50 watt LED lamp at 25 watts, the light would be billed higher than its rating. The second most common 100 watt street light would be replaced with a 53 watt LED and would be billed at 75 watts.³⁸ In support of his contention that the customers would be overcharged, he stated that he “believe[d] the inventory in RI will reflect a similar distribution of lamp types and wattages [as in Massachusetts].”³⁹ Furthermore, Mr. Woodbury echoed Mr.

³⁴ *Id.* at 7-8.

³⁵ *Id.* at 8.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.* at 9-10.

³⁹ *Id.* at 9.

Walter's testimony that the LED efficiencies are increasing rapidly, thus concluding that the over-charges would be exacerbated over time.⁴⁰ He also indicated that he was unable to understand the calculation of the proposed distribution charges and was seeking additional information.⁴¹

Next, Mr. Woodbury asserted that in Rhode Island, there is no need for tagging of equipment where communities are required to purchase all of the street lights. He compared this to Massachusetts where communities can choose to purchase a portion of the street lights. He agreed that in these instances, tagging is important so that ownership and responsibility is clearly demarcated.⁴² However, he stated that "[t]agging should be limited to the minimum necessary for outage reporting. Beyond that the persons working on the system have more than adequate knowledge to understand the division of ownership."⁴³ According to Mr. Woodbury, ownership and the related responsibilities can be explained to customers by National Grid and/or the municipality when calls from customers are received.⁴⁴

Finally, Mr. Woodbury stated that National Grid should not be allowed to terminate a license for the street lights at will. Nor, according to Mr. Woodbury, is National Grid's refusal to assign easements reasonable. He compared this to NSTAR which allows for assignment of any easements in Massachusetts.⁴⁵

B. Energy Efficiency & Resources Management Council's (EERMC) Comments

On November 1, 2014, EERMC submitted comments of its consultant team, highlighting the goals it believed the tariff should meet and the extent to which it believed the tariff did not

⁴⁰ *Id.* at 10.

⁴¹ *Id.* at 13.

⁴² *Id.* at 10.

⁴³ *Id.* at 11.

⁴⁴ *Id.*

⁴⁵ *Id.* at 11-12.

meet the goals. EERMC indicated that if all street lights were converted to LED technology, approximately 49,200 MWh of energy would be saved annually, with an additional 20% if individual control technology were employed.⁴⁶ The goals of the tariff, according to EERMC should be to “[o]ffer a fair and reasonable process for [cities and towns] to pursue improved street lighting energy efficiency, including the use of LED street lighting and controls [and] [p]rovide [cities and towns] the true economic and environmental benefit of more energy efficient street lighting and controls.”⁴⁷ EERMC determined that the proposed tariff partially met these goals, but contained an unduly burdensome process for the cities and towns to follow, did not include adequate flexibility in the operating schedules, and did not allow for maximization of the economic benefits that could be gained from certain types of advanced lighting controls.⁴⁸

C. Office of Energy Resources’ (OER) Memorandum

OER expressed concern that the proposed tariff and standard agreement “would effectively dissuade cities and towns from changing the status quo and pursuing their statutory option to own street lighting.”⁴⁹ OER urged the PUC to consider as part of its review, not just the proposed tariff, but also the proposed contract terms, including the closing documents. According to OER, the proposed standard contract and licensing agreements includes fees and embedded costs along with other provisions that may be burdensome or unreasonable. Therefore, OER maintained that they were intertwined with the tariff and should be considered

⁴⁶ EERMC Ex. 1 at 1; <http://www.ripuc.org/eventsactions/docket/4442-EERMC-Comments.pdf>

⁴⁷ *Id.* at 2.

⁴⁸ *Id.*

⁴⁹ OER Ex. 1 at 1; http://www.ripuc.org/eventsactions/docket/4442-OER-Memorandum_11-1-13.pdf

together. OER recommended the PUC order the parties to negotiate the contract terms and return with either negotiated documents or a list issues in dispute to be decided by the PUC.⁵⁰

Attached to and referenced in its memorandum was a copy of OER's comments on National Grid's proposed tariff made prior to filing with the PUC to which National Grid responded, indicating that it could not incorporate any of OER's suggestions but for a change in the dimming percentage. OER included this material because pursuant to R.I. Gen. Laws § 39-30-3(a)(1), National Grid was required to consult with OER regarding its tariff prior to filing it with the PUC.⁵¹

IV. National Grid's Rebuttal Testimony

On November 21, 2014, National Grid filed the rebuttal testimonies of Ms. Lloyd and Mr. Walter in response to the issues raised by the Municipalities in their Prefiled testimony. Ms. Lloyd explained that the asset management system "can provide an accurate value for all lighting assets currently in service. However, this system cannot determine the location and value associated with any individual light that is currently in service."⁵² She also explained that the purchase price provided in National Grid's response to PUC data request 1-7(a) was illustrative, premised on all cities and towns purchasing the street lights at once. If a municipality wished to purchase the street lights, it would have to notify National Grid and at that time, National Grid would determine the actual net book value of the assets in that community based on the actual billing accounts. Currently, the asset management system includes in municipal accounts housing authorities, parks departments, cemeteries and regional school districts which may be billing entities separate from the municipal government, but coded the same for inventory

⁵⁰ *Id.* at 2-5.

⁵¹ OER Ex. 1 at 3.

⁵² National Grid Ex. 4 (Rebuttal Test. of Jeanne A. Lloyd) at 2; [http://www.ripuc.org/eventsactions/docket/4442-NGrid-Rebuttal\(11-21-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-Rebuttal(11-21-13).pdf)

purposes.⁵³ Finally, Ms. Lloyd explained in more detail the allocation of plant and costs used to derive the revenue requirement for the street lighting rates.⁵⁴

Mr. Walter responded to the concern that the proposed tariff was designed to dissuade cities and towns from purchasing the street lights by indicating that once the street lights are purchased, they will be treated as any other pole attachment.⁵⁵ Mr. Walter reiterated that the operating schedules included in the proposed tariff “can be implemented within the constraints of the billing system [and] meet the requirements of the Act.” Additional schedules, according to Mr. Walter, would require costly and time consuming upgrades to National Grid’s billing system.⁵⁶ Responding to Mr. Carrigg’s criticism of the dimming rate, Mr. Walter noted that National Grid had selected the 70% dimming rate in lieu of the 50% dimming rate in response to comments from OER. He claimed that if National Grid uses a 50% dimming rate, customers would not receive a benefit if they choose to dim further.⁵⁷

Addressing the accuracy of hours of operation, Mr. Woodbury explained that National Grid’s premise is that with an unmetered service, the actual hours of operation are necessarily estimated. He explained that in developing the values for the proposed tariff, National Grid needed to ensure consistency with previously approved street lighting tariffs. However, he did concede that there was an inconsistency in Ms. Lloyd’s rate section of the proposed tariff and indicated the correct value, as reflected in Mr. Walter’s schedules, would be reflected in the compliance tariff.⁵⁸ Mr. Woodbury recognized the concern that, due to the manner in which National Grid proposed to bill LEDs, using a mid-range for each type of LED listed, customers

⁵³ *Id.* at 3-5.

⁵⁴ *Id.* at 6-9.

⁵⁵ National Grid Ex. 5 (Rebuttal Testimony of John E. Walter) at 2.

[http://www.ripuc.org/eventsactions/docket/4442-NGrid-Rebuttal\(11-21-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-Rebuttal(11-21-13).pdf)

⁵⁶ *Id.* at 2-3.

⁵⁷ *Id.* at 4-5.

⁵⁸ *Id.* at 6-7.

may be over-billed while others under-billed. Therefore, he proposed that as customers begin using LEDs, an assessment of the performance of the LEDs can be conducted so that billable wattages can be better aligned to actual performance.⁵⁹ Addressing “smart photocell” or adaptive “control” technology, Mr. Woodbury stated, “[c]urrently, the technology lacks interoperability, facility compatibility, function variability, communication protocol standards, operating programming, and data communications security, along with impacting the Company’s data collection processes and protocols, system interfaces, and billing system configuration and processing. Additionally, metering accuracy has not been verified and/or deemed compliant with applicable regulatory requirements.”⁶⁰

V. Negotiations – November 5, 2013 Report

On November 5, 2013, at a pre-hearing conference, the parties were directed by PUC and Division counsel to meet over the following two weeks to engage in good faith negotiations regarding (1) tariff provisions and (2) closing documents. A status report was to be filed following the negotiations to advise the PUC and Division of where agreement had been reached and where agreement had not been reached. In the event tariff provisions were changing as a result of negotiations, a redlined version was to accompany the report. The scope of the PUC’s review had not been formally finalized and thus, the parties were encouraged to attempt to work out as many details as possible prior to the hearing. The Municipalities, OER and EERMC had not waived their right to argue for an expanded scope and National Grid had not waived any right to object to the scope of the PUC’s review at the hearing in this matter.⁶¹

On November 21, 2013, National Grid filed its status report of the negotiation meetings relative to tariff issues and to the closing documents, which include an agreement of sale, an

⁵⁹ *Id.* at 10-11.

⁶⁰ *Id.* at 9-10.

⁶¹ Second Procedural Schedule; <http://www.ripuc.org/eventsactions/docket/4442-ps-revised.pdf>

overhead license agreement, and an underground license agreement. First addressing the tariff issues, specifically starting with the metering issue, National Grid stated that it was not feasible to offer metering in the proposed tariff because it would be a fundamental shift in the type of service offered and would raise many questions of implementation. Additionally, National Grid indicated that its systems are not configured to capture metered usage data and bill for that usage. Finally, National Grid expressed concerns about cost recovery related to such a change. However, National Grid expressed a willingness to discuss a limited pilot program, “and in that discussion, evaluate the cost, processes, practicality, and timing (start and end date) of various options that may be identified during those discussions.”⁶²

With regard to the inventory issue, National Grid indicated that it provided the most accurate data available and would provide more accurate inventories when a municipality provides notice to National Grid that it wishes to commence the purchase process. However, National Grid noted that it will be the municipality’s responsibility to confirm the inventory. National Grid did agree to revise proposed tariff language related to penalties to cities and towns for not reporting all changes to inventory.⁶³

National Grid refused to modify the dimming and part-night schedules in the proposed tariff arguing that it would have to consider capital investments in the billing system to make such changes.⁶⁴ However, with regard to the proposed wattage billing, National Grid requested a counterproposal from the Municipalities for consideration.⁶⁵ Finally, National Grid indicated

⁶² National Grid’s Status Rep. at 2 (Nov. 21, 2013); [http://www.ripuc.org/eventsactions/docket/4442-NGrid-StatusRept\(11-21-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-StatusRept(11-21-13).pdf)

⁶³ *Id.*

⁶⁴ *Id.* at 3.

⁶⁵ *Id.*

that Ms. Lloyd and Mr. Woodbury would be meeting to discuss the operation and maintenance allocation used in developing the proposed rates.⁶⁶

Turning to the issues related to the closing documents, National Grid agreed to review revised indemnification language to be proposed by the Municipalities.⁶⁷ National Grid maintained its original position regarding work required by National Grid when a municipality will work on its customer-owned lights. However, National Grid did agree to further discuss the intervenors' concerns to possibly amend the language in the agreement.⁶⁸ National Grid also did not agree to any changes related to the process for removal of poles and related infrastructure.⁶⁹ The parties did not reach resolution on the provision related to National Grid's ability to terminate a license at will.⁷⁰ Addressing the assignment of easements, approvals, and warranties, National Grid maintained it would not be practical to assign all easements and approvals due to the cost associated with identifying each one and negotiating individual transfers of each agreement. However, National Grid agreed to look at the issue further.⁷¹ National Grid stated that labeling will be required, but that National Grid would "work with the [M]unicipalities to develop a mutually acceptable ownership labeling system."⁷² Finally, while continuing to assert that the closing documents are outside the scope of the PUC proceeding and while reserving the objection, National Grid indicated that it would review the closing documents to determine if and how they might be simplified.⁷³

⁶⁶ *Id.* at 4.

⁶⁷ *Id.*

⁶⁸ *Id.* at 5.

⁶⁹ *Id.*

⁷⁰ *Id.* at 6.

⁷¹ *Id.*

⁷² *Id.* at 7.

⁷³ *Id.*

VI. Division of Public Utilities and Carriers' Initial Review

On November 26, 2014, the Division submitted a memorandum from its consultant, Richard Hahn from La Capra Associates. Mr. Hahn made one downward adjustment to National Grid's proposed delivery-only rate such that the rate would be established in a manner consistent with the other rates charged by National Grid. He noted that National Grid had proposed setting a rate based upon the full cost of service for the rate class, but that this would result in only one rate being set based on the full cost of service while leaving the other rates unchanged.⁷⁴ He believed that requiring metering services immediately would be premature and that a limited pilot program represents a reasonable approach to "evaluate the practicality, timing, and cost of such metering services." Mr. Hahn opined that "adding metering capability to this rate will increase costs and result in a higher rate being charged by [National Grid]."⁷⁵

Addressing the scope of the proceeding, Mr. Hahn believed that the "closing documents" should be reviewed in the PUC proceeding to minimize future disputes.⁷⁶ Mr. Hahn supported the negotiated change to the inventory penalty from termination to a recalculated charge with interest. He also supported National Grid's requirement that fused disconnects should be installed, noting that "[a]ll other devices connected to a utilities [sic] distribution system but not owned by the utility...require some disconnection device" and he found no reason to require less from the street light attachments.⁷⁷ He did not support National Grid's ability to remove poles that are no longer of use to National Grid, but which may have a light attached to it. Rather, he suggested requiring National Grid to offer to sell the pole to the municipality prior to removal.⁷⁸

⁷⁴ Division Ex. 2 (Mem. of Richard Hahn) at 3-5; http://www.ripuc.org/eventsactions/docket/4442-DPU-Hahn-Memo_11-26-13.pdf

⁷⁵ *Id.* at 6.

⁷⁶ *Id.* at 5.

⁷⁷ *Id.*

⁷⁸ *Id.* at 7.

He maintained that National Grid “should be required to attempt to transfer [attachment rights, easements, and regulatory approvals] if cost of acquiring these rights were included in the plant costs of the lighting facilities being purchased. However, it would be reasonable for [National Grid] to recover any reasonable costs as part of the purchase price.”⁷⁹ Finally, Mr. Hahn supported National Grid’s requirement for labeling, noting that National Grid had agreed to work with the [M]unicipalities on the issue.⁸⁰

VII. Municipalities’ Surrebuttal Testimony

On November 27, 2014, the Municipalities filed Mr. Carrigg’s surrebuttal testimony in response to National Grid’s rebuttal. In his surrebuttal, Mr. Carrigg expressed concern that cities and towns have already paid for the street lights. He based this on his calculation that one year of lost revenue is higher than the estimated sale price of the street lighting assets.⁸¹ Mr. Carrigg also explained that he had performed calculations that indicated cities and towns would realize a minimum of 15% savings on street lighting costs by purchasing the assets and arranging for private maintenance.⁸² Mr. Carrigg alleged that there was a discrepancy between National Grid’s costs and the revenue from the towns which was not addressed by the PUC in rate cases.⁸³ Finally, Mr. Carrigg reiterated the Municipalities’ concern with the Lighting Service Charge, requiring National Grid’s presence where work is being done on street lights without a disconnect device attached, maintaining that the proposed fees would add \$20 million to the cost to the Municipalities, outweighing the savings the Municipalities expect to realize from the purchase of the assets.⁸⁴

⁷⁹ *Id.* at 7.

⁸⁰ *Id.* at 8.

⁸¹ Municipalities Ex. 6 (Surrebuttal Test. of Danial T. Carrigg) at 3.

[http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-Surrebuttal\(11-27-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-Surrebuttal(11-27-13).pdf)

⁸² *Id.* at 4.

⁸³ *Id.* at 5.

⁸⁴ *Id.*

VIII. Hearing⁸⁵

A. Motion to Compel

The PUC allowed oral argument on the Municipalities' Motion to Compel certain information and National Grid's objection. The issue was a dispute over the scope of the PUC's review, namely, whether ancillary documents should be incorporated into the tariff, subject to review and approval by the PUC. After considering the arguments from the Municipalities and National Grid, the PUC overruled National Grid's objection and granted the Motion to Compel, stating that the PUC could not determine the scope of its jurisdiction in the proceeding until completion of the hearing. Therefore, the PUC would keep the scope broad to include consideration of the agreements as part of the hearing.⁸⁶

B. Evidentiary Hearing

National Grid presented Ms. Lloyd and Mr. Walter in support of the proposed tariff. Ms. Lloyd made corrections to the delivery service tariff to account for a formula and spreadsheet error. She indicated that those corrections would appear in the compliance tariffs. She also provided a general overview of the tariffs.⁸⁷ Mr. Walter explained that the billing model for street lights using the existing technology is the same as in the current street lighting tariffs. Discussing LED technology, he stated that because of the number of manufacturers of various components, there is not the same level of standardization of output as with the traditional lighting options. Therefore, the tariff contains various operating schedule thresholds such that the customer may choose to operate their lights in any manner they desire. The threshold

⁸⁵ Raquel Webster, Esq. and Thomas Teehan, Esq. appeared on behalf of National Grid. Seth Handy, Esq. appeared on behalf of the Municipalities. Daniel Majcher, Esq. represented OER while Leo Wold, Esq., Assistant Attorney General, represented the Division and Cynthia Wilson-Frias, Esq., represented the PUC.

⁸⁶ Tr. 12/3/13 at 36-39.

⁸⁷ *Id.* at 41-43, 46-48.

operating schedule would govern the number of hours for which the customer is billed.⁸⁸ This was important because of the speed by which the LED technology is advancing, to the extent that within one single year, the same product will be likely able to produce the same amount of lumens using lower wattage. Therefore, because of the uncertainty in the products that will ultimately be chosen over time by cities and towns, the adoption of wattage ranges, or the threshold operating schedule, is the most administratively efficient means of calculating an accurate unmetered bill.⁸⁹

Discussing the Division's recommendation that National Grid should offer to sell a distribution pole containing a municipally-owned light to the municipality if National Grid no longer needs it for the distribution system, Mr. Walter indicated that National Grid agreed to consider the proposal on a case-by-case basis.⁹⁰ Next, Mr. Walter explained that National Grid had agreed to change the "inventory penalty provision" to a billing adjustment.⁹¹ The tariff would also be modified to include seven wattage ranges rather than six to reflect the lower wattage options in the market. In other words, National Grid would include an additional range between the 0.1 and 300 watts after receiving feedback from the Municipalities.⁹² National Grid agreed to work with the parties to address the labeling of customer-owned street lights.⁹³ Specifically, National Grid agreed to allow the labeling to be replaced within a ten year time frame to be performed simultaneously with the installation of the disconnect device. Mr. Walter stated that it would make sense for the labeling to be performed when a customer conducts a visit to each streetlight.⁹⁴ Finally, National Grid agreed to allow the disconnect devices to be installed

⁸⁸ *Id.* at 52-54.

⁸⁹ *Id.* at 91.

⁹⁰ *Id.* at 57-58.

⁹¹ *Id.* at 58-59.

⁹² *Id.* at 59-60, 118.

⁹³ *Id.* at 60.

⁹⁴ *Id.* at 108-10.

under live conditions as long as the municipality can provide certification that the contractor performing the work is sufficiently qualified.⁹⁵

National Grid also agreed to consider a limited pilot to review the adaptive controls to determine the “relevancy of the metering capability.”⁹⁶ In response to cross examination, he stated that he personally assumed that the technology will advance sufficiently in the future and will be adopted in some form such that accurate and actual consumption can be recorded.⁹⁷ However, he reiterated that National Grid’s management systems, infrastructure, billing models and regulatory perspective do not support processing usage information provided by the customer.⁹⁸ He opined, “from a strictly personal perspective,” sufficient advancement of the technology is still five years out.⁹⁹ He stated that National Grid is willing to discuss a pilot to define the roles of the parties involved.¹⁰⁰

Turning to the sales agreement and licensing agreements (attachment agreements), Mr. Walter characterized the licensing agreements as a document which specifies the roles and responsibilities of National Grid and the customer associated with the street light attachments.¹⁰¹ As part of the transfer of assets, Mr. Walter explained that National Grid will transfer easements, rights and warranties, but cannot provide documentation.¹⁰² According to Mr. Walter, the Company is generally proposing to apply the same attachment standards to cities and towns purchasing the street lights as other third parties with pole attachments. However, he described the street light attachments as somewhat unique because the specific designated space on the

⁹⁵ *Id.* at 60-61.

⁹⁶ *Id.* at 60, 209. On redirect, Mr. Walter indicated that it would not be efficient to deploy adaptive technology or metering in a piecemeal application. *Id.* at 209.

⁹⁷ *Id.* at 95.

⁹⁸ *Id.* at 98.

⁹⁹ *Id.* at 149.

¹⁰⁰ *Id.* at 151.

¹⁰¹ *Id.* at 110.

¹⁰² *Id.* at 113-16.

poles is in very close proximity to the power lines. Therefore, he stated that there are unique provisions of the attachment agreements for street lights that would not be included in the communications' attachment agreements.¹⁰³

With regard to make ready work and field charges, Mr. Walter stated that the street light owner/municipality will be subject to the same policies and procedures as other third party attachment owners.¹⁰⁴ He clarified that in general, if a municipality is proposing to change an asset that does not appear to have an impact on the pole, then a field study would not be necessary. He stated that the charges are to capture the cost that "isn't part of our daily business that's captured and encompassed within the cost of doing business that's associated with delivering electricity to all other customers."¹⁰⁵ The cost is specific to the customer seeking the attachment to National Grid's infrastructure where an engineering assessment is required.¹⁰⁶

Specifically discussing the requirement in the attachment agreements that there be a disconnect device installed, Mr. Walter indicated that a disconnect device is required for all other attachments.¹⁰⁷ He maintained that such a requirement is in compliance with the National Electric Safety Code.¹⁰⁸ He disputed Mr. Walter's testimony that disconnect devices are not required in Massachusetts, indicating that all current license agreements require the installation of disconnect devices over a ten-year period.¹⁰⁹ He explained that a customer could change a light bulb without contacting National Grid or installing a disconnect device, but that a material

¹⁰³ *Id.* at 128-29, 134-35.

¹⁰⁴ *Id.* at 141.

¹⁰⁵ *Id.* at 202.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 160, 168.

¹⁰⁸ *Id.* at 163. Mr. Walter explained that street lights do not currently have disconnect devices because they are owned and maintained by National Grid using personnel qualified to work under live situations. *Id.* at 160-61.

¹⁰⁹ *Id.* at 172.

change, such as changing out a physical asset, such as a luminaire or bracket, would necessitate installation of the disconnect device.¹¹⁰

Addressing the rate design of the proposed distribution rate, Ms. Lloyd explained that she had proposed a rate that would move the class toward its true cost of service. She made an allocation of the low income subsidy and other adjustments based on the rate cap increase resulting from the approved settlement in National Grid's most recent base rate case.¹¹¹ Noting that the Division's recommended adjustments were reasonable, Ms. Lloyd nonetheless maintained that it would be reasonable to introduce a new rate on an optional service on a cost-based application. The result would be less lost revenue to recover from all customers in the decoupling mechanism as a result of the loss of revenue from this rate class.¹¹²

The Municipalities presented Mr. Carrigg and Mr. Woodbury for cross examination. Mr. Woodbury explained that a city or town can save money by owning street lights due to the reduced cost of providing maintenance through a third-party contractor. Additionally, Mr. Woodbury indicated that the city or town can exercise greater control over restoration or repair of lighting through the use of a dedicated contractor.¹¹³ He stated that he was unaware of any safety issues with the use of an independent contractor.¹¹⁴

Mr. Woodbury recognized that a utility may not embrace LED lighting at this time due to the rapid growth in the industry with yet unproven results.¹¹⁵ Despite the recent drop in cost,

¹¹⁰ *Id.* at 166, 203-04.

¹¹¹ *Id.* at 185-86. *See* Docket No. 4323 (In re: Application of The Narragansett Electric Company d/b/a National Grid for Approval of Change in Electric and Gas Base Distribution Rates), Settlement Agreement at 8. [http://www.ripuc.org/eventsactions/docket/4323-NGrid-Settlement-Book1\(10-19-12\).pdf](http://www.ripuc.org/eventsactions/docket/4323-NGrid-Settlement-Book1(10-19-12).pdf) (limiting the percentage rate increases for certain customer classes).

¹¹² Tr. 12/3/13 at 186-87.

¹¹³ *Id.* at 224-25.

¹¹⁴ *Id.* at 225.

¹¹⁵ *Id.* at 226-27.

LED lighting is still more expensive to install than the current lighting technology.¹¹⁶ He noted that it could be difficult for a utility to appropriately structure its rates to recover the costs.¹¹⁷ However, according to Mr. Woodbury, a city or town will assume the risk of the technology but can take advantage of a “ten-year warranty by having their maintenance provider be the installer and guarant[or] of that warranty so that they are protected both from the labor portion as well as the premature failure portion of that streetlight.”¹¹⁸ He indicated that the dynamic is different for a municipality than a utility, making it more attractive to the municipality to own the street lights.¹¹⁹

Addressing the control technology, Mr. Woodbury stated that it has existed for approximately four years for the purpose of monitoring the status of the light. Approximately two years ago, data was extracted from the controls to compute the amount of usage, but at the time, the data was proved to be inaccurate. However, according to Mr. Woodbury, the flaws in the technology have since been addressed and is now exceeding industry standards for accuracy.¹²⁰ He indicated that it is most efficient for the municipality to purchase and install the street lights and controls together at the same time as the nodes which are what collect the data from a certain number of street lights in an area. The data is transmitted wirelessly to the utility via an internet site. He stated that the device mounted on the street light is designed to control the operation of the street light while the measuring of electricity is a side benefit.¹²¹ He agreed that National Grid would have to figure out how to integrate the data into its billing system and

¹¹⁶ *Id.* at 227.

¹¹⁷ *Id.* at 227-28.

¹¹⁸ *Id.* at 228-29.

¹¹⁹ *Id.* at 229.

¹²⁰ *Id.* at 239-40.

¹²¹ *Id.* at 242, 254-55.

stated that he was not aware of any quantification of the costs incurred by utilities in order to do that.¹²²

Gabriel E. Arnold, with Optimal Energy, one of the authors of EERMC's comments, provided further comments on the proposed tariff. He stated that cities and towns can achieve savings through street light ownership by replacing the street lights with more energy efficient LEDs. They can further achieve savings by controlling the operation of the lights, but that this savings cannot be realized if the reduced usage is not reflected in the tariff. For example, because only one dimming schedule is offered, EERMC does not believe cities and towns will have any incentive to reduce their lighting further. While dimming further would utilize less overall electricity, the financial incentive will not be there in the form of rates.¹²³ Mr. Arnold recommended an additional dimming schedule and an additional schedule for turning off the lights for a period of time during the night.¹²⁴

With regard to metering, Mr. Arnold supported a pilot program stating that "[t]he standards are not caught up yet. It is a new technology and the longer we wait to get experience with that technology, the longer it's going to take before we can really offer it to everybody out there. And so this pilot...is a very important aspect that [] coincides [with] this tariff."¹²⁵ Further discussing a pilot, Mr. Arnold opined that it should include a sufficient number of street lights, perhaps 10,000, offered on a first come, first serve basis to five cities and towns. The study should not be over too long of a timeframe. He stated that the pilot needs to be long enough to get the information that is needed, but short enough that a full program can be implemented.

¹²² *Id.* at 266.

¹²³ *Id.* at 288-92.

¹²⁴ *Id.* at 293.

¹²⁵ *Id.* at 295.

Noting that a pilot would need to be paid for, he further opined that savings from the pilot could be leveraged along with energy efficiency funds.¹²⁶

The Division presented Mr. Hahn for cross examination. In response to a question from the PUC, Mr. Hahn testified that his review of National Grid's current street light rates showed that they were "established by what [Mr. Hahn] would consider to be industry standard cost of service principles, and in fact, the last case was settled at something below full cost of service."¹²⁷ After explaining the ratemaking process for street lights, he concluded that he was "not sure how that could be construed as overcharging."¹²⁸ Further, after explaining generally how depreciation rates can affect the retail rate, Mr. Hahn reiterated that different depreciation rates on different assets do not necessarily result in an overcharging of a customer class.¹²⁹

IX. Status of Second Round of Negotiations – March 17, 2014 Reports¹³⁰

A. National Grid

In its March 17, 2014 status report on negotiations, National Grid indicated that it was unsuccessful in reaching a settlement with the Municipalities on all outstanding issues related to the proposed tariff and closing documents. National Grid requested that the PUC approve a modified tariff included with the report, decline to approve the closing documents, find that National Grid not be required to incorporate the closing documents into the tariff, find that a

¹²⁶ *Id.* at 297-99.

¹²⁷ *Id.* at 303-04.

¹²⁸ *Id.* at 304.

¹²⁹ *Id.* at 306. At the conclusion of the hearing, the parties conceded to allowing additional time to the PUC to consider the matter in light of the ten outstanding record requests that had been made during the proceeding in addition to the fact that testimony received at the hearing suggested further room for movement toward settlement. Therefore, with agreement of the parties, the PUC set a schedule for further negotiations to conclude with a report or reports filed by December 16, 2013. Memorandum to Parties from Cynthia G. Wilson-Frias, Senior Legal Counsel, 12/4/13.

¹³⁰ On December 17, 2013, National Grid submitted a Joint Status Report, noting that discussions were still ongoing and seeking an extension of time to complete negotiations. Appended to that report were National Grid's current proposed tariff and a redlined version to show the Town's proposed changes which were still subject to discussion. [http://www.ripuc.org/eventsactions/docket/4442-NGrid-JointtStatusRept\(12-17-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-JointtStatusRept(12-17-13).pdf) Requests for extensions of time to complete negotiations were granted such that the final status report or reports were to be filed by March 17, 2014.

second dimming schedule is not required, find that a metering option is not required in the proposed tariff, and decline to include a metering pilot program in the scope of this docket.¹³¹ In Attachment D to the status report, National Grid outlined twenty-one key differences between the parties regarding the closing documents. In its status report, National Grid summarized four areas of disagreement related to the tariff and five areas of disagreement related to the closing documents.

National Grid reiterated its position that the closing documents should not be incorporated into the proposed tariff because they “are legal contractual documents between the individual city or town and [National Grid] for the purchase and transfer of the street and area lighting assets and should be separate from the [p]roposed [t]ariff.”¹³² Additionally, similar to the practice in other jurisdictions, National Grid proposed that the attachment agreement be a separate and unregulated document.¹³³

National Grid premised its discussion on the fact that it will be required to provide each element of service listed in the tariff upon its effective date. The parties agreed to an additional

¹³¹ National Grid Ex. 5 (National Grid’s status report) at 21-22. http://www.ripuc.org/eventsactions/docket/4442-NGrid-Status-Report_%203-17-14.pdf

¹³² *Id.* at 3-4. National Grid likened this to the line extension policies and other appendices to the Terms and Conditions for Distribution Service, such as the Standards for Interconnecting Distribution Generation. The line extension policy has been subject to PUC review and approval to the extent the charges changed. See Order No. 18775 (issued Nov. 17, 2006). [http://www.ripuc.org/eventsactions/docket/3716-NGrid-Ord18775\(11-17-06\).pdf](http://www.ripuc.org/eventsactions/docket/3716-NGrid-Ord18775(11-17-06).pdf) Additionally, the line extension policy has been subject to PUC review and approval. See Order No. 18101 (issued Dec. 22, 2004) at 3. [http://www.ripuc.org/eventsactions/docket/3643-PollardvsNECOrd18101\(12.22.04\).pdf](http://www.ripuc.org/eventsactions/docket/3643-PollardvsNECOrd18101(12.22.04).pdf) The Standards for Interconnecting Distribution Generation, albeit a stand-alone tariff provision, was approved by the PUC, as required by R.I. Gen. Laws § 39-26.3-3(g). Order No. 20610 (issued Jan. 5, 2012). [http://www.ripuc.org/eventsactions/docket/4276-NGrid-Ord20610\(1-5-12\).pdf](http://www.ripuc.org/eventsactions/docket/4276-NGrid-Ord20610(1-5-12).pdf)

¹³³ *Id.* On November 7, 2013, National Grid had filed with the PUC an opposition to the Municipalities’ Motion to Compel certain data responses on the basis that it had already supplied the requested information. However, National Grid had also requested the PUC find that the closing documents were outside of the scope of the proceeding. On November 27, 2013, National Grid filed with the PUC a letter from the Chief of Staff of the Massachusetts Department of Public Utilities (Department) wherein the Department explained that its jurisdiction was not over the details of the purchase, but was limited to resolving disputes that arise over the level of compensation to be paid for the street lights and approving the tariff for delivery service after the sale had been completed. (Motion to Compel): [http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-CompelMotion\(10-28-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-RILCT-WCRPC-CompelMotion(10-28-13).pdf) (Opposition): [http://www.ripuc.org/eventsactions/docket/4442-NGrid-Opposition-Compel\(11-7-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-Opposition-Compel(11-7-13).pdf) (Supplemental to Opposition): [http://www.ripuc.org/eventsactions/docket/4442-NGrid-Letter\(11-27-13\).pdf](http://www.ripuc.org/eventsactions/docket/4442-NGrid-Letter(11-27-13).pdf)

LED wattage range, but National Grid stated that it is unable to accommodate the request for an additional dimming schedule due to limitations in the billing code tables. National Grid asserted that its proposed tariff meets or exceeds the requirements of the Act because it allows a customer to use control devices to operate the street lights and contains schedules for both conventional dusk/dawn operation and schedule-based dimming.¹³⁴

According to National Grid, the parties continued to disagree on metering, with the Municipalities desiring metering immediately, and National Grid recognizing future benefits of metering, but claiming they are unable to offer it as an option in the proposed tariff. However, again, National Grid stated that it would be “willing to explore a limited pilot to examine the feasibility of metering technology for street and area lighting customers.”¹³⁵ These issues would include ownership, regulatory testing requirements, standardization of technology, cost, and data accuracy and security prior to submission to National Grid.¹³⁶ Therefore, National Grid proposed a separate tariff related to metering, but did not want the PUC to open such a docket to address a pilot until the parties agreed on one.¹³⁷ In further support of its position, National Grid maintained that the Act does not require the proposed tariff to include a metering option, but rather, references “schedule-based” dimming or part-night options, which do not require meters.¹³⁸

Noting that the closing documents are referenced in the Massachusetts customer owned street lighting tariff, but were not subject to the Massachusetts Department of Public Utility approval, National Grid nonetheless requested PUC approval of the closing documents attached to its status report. National Grid noted that all entities attaching equipment to National Grid’s

¹³⁴ National Grid’s Status Rep. at 7.

¹³⁵ *Id.* at 8-9.

¹³⁶ *Id.* at 10-12.

¹³⁷ *Id.* at 12-14.

¹³⁸ *Id.* at 9-10.

poles must execute an attachment agreement and the Act requires the cities and towns to be subject to the same terms and conditions as other attachers.¹³⁹

With regard to warranties, National Grid stated that it does not possess documentation regarding warranty information and thus, is selling the assets on an “as is, where is” basis.¹⁴⁰ Addressing the Municipalities’ assertion that they have the right to assign their attachment rights without approval from National Grid, citation was again made to the language of the Act that requires cities and towns to be subject to the same terms and conditions as other attachers, such terms and conditions which require written approval from National Grid.¹⁴¹

National Grid continued to assert that it may terminate a license of any attachment with 15 days’ written notice to the municipality, stating that while it “cannot conceive of many situations that would require it to terminate the municipal customer’s attachment rights, [National Grid] must maintain such termination rights in the event that circumstances arise that warrant termination.”¹⁴² National Grid declined to remove or modify to make reciprocal the liability and insurance provisions of the attachment agreement, stating that the sale of assets on an “as is, where is” basis will negate or limit negligence claims against National Grid which may arise from the purchased street lighting attachments.¹⁴³

National Grid listed four reasons why it could not transfer all easement rights associated with existing street lighting facilities to the Cities and towns, indicating that the existence of easements within the street lighting systems is very limited and there is no definitive record to identify or locate those instances where an easement exists. Further, “the majority of easements applicable to street and area lighting are associated with public property that is owned and

¹³⁹ *Id.* at 14-15.

¹⁴⁰ *Id.* at 17-18.

¹⁴¹ *Id.*

¹⁴² *Id.* at 18.

¹⁴³ *Id.* at 20-21.

managed by the [t]owns.”¹⁴⁴ The only other easements would have been established through regulatory tariffs.¹⁴⁵ National Grid provided four reasons that it could not assign all of its rights. First, National Grid must be able to maintain its own facilities and equipment. Next, National Grid asserted that it could not grant easement rights to a town for property owned by a third person without exposure to liability. Additionally, National Grid maintained that the Act does not require assignment of all rights to the cities and towns, but specifically provides for the cities and towns to have the right to use the space on the pole currently used by National Grid for lighting, making assignment unnecessary. Finally, National grid argued that it is up to the purchasing municipality to conduct due diligence, such as a title search, as part of the sales transaction.¹⁴⁶

B. Municipalities

In their March 17, 2014 status memorandum on negotiations, the Municipalities indicated that the parties had worked hard to identify and resolve issues, making progress toward resolution. However, because of the extent of the outstanding issues, the Municipalities submitted their own memorandum along with redlined drafts of the proposed tariff and closing documents.¹⁴⁷ According to the Municipalities, their proposed “form of agreement is simpler, more straightforward and equitable than” National Grid’s proposal.¹⁴⁸

First addressing specifics of the tariff, the Municipalities argued that the word “controls” in the Act not only refers to controls which dim or shut off lights, but to meters as well.

¹⁴⁴ *Id.* at 20.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 19-20.

¹⁴⁷ Municipalities’ Ex. 7 (Status Mem. – Proposed and Redlined Attachments). (Redlined tariff): http://www.ripuc.org/eventsactions/docket/4442-RILCT-RedLined-Tariff_3-17-14.pdf; (Municipalities’ proposed form of Licensing & Sales Agreement): http://www.ripuc.org/eventsactions/docket/4442-RILCT-ExhA_3-17-14.pdf; (Redlined Agreement of Sale Form): http://www.ripuc.org/eventsactions/docket/4442-RILCT-Redline-Agreement_3-17-14.pdf; (Redlined attachment agreement): http://www.ripuc.org/eventsactions/docket/4442-RILCT-Attachment-Agmnt_3-17-14.pdf

¹⁴⁸ Municipalities’ Ex. 7 at 2.

Therefore, the Municipalities proposed to National Grid that the proposed tariff should include metered and non-metered rates to be approved by the PUC. The Municipalities would agree not to deploy any meters for three months and then to only deploy no more than 2,000 meters in two cities and towns in the following three months. At the end of the three months during which meters were deployed, but not metered for billing purposes, but only read for comparison, any town would be entitled to deploy meters to be used for billing purposes. According to the Municipalities, National Grid had not responded to the proposal.¹⁴⁹ Finally, the Municipalities continued to request the tariff allow for a second dimming option beyond the one contained in the proposed tariff.¹⁵⁰

Turning to the Agreement of Sale, the Municipalities continued to express concern with the inventory identification and pricing methodology. They noted that the documents do not address the process for pricing disputes to be filed with the PUC [sic] for resolution within 60 days and sought clarification in the order.¹⁵¹ According to the Municipalities, like National Grid, they believe the Act allows the Municipalities to occupy the space on the poles previously used by National Grid for street lights. However, according to the Municipalities, “these access rights are essential values of the assets proposed to be sold and National Grid has custody of such information so any such agreements must be shared and inadequacies resolved or properly discounted from the price before sale.”¹⁵² It should not be up to the Municipalities to

¹⁴⁹ *Id.* at 3-4.

¹⁵⁰ *Id.* at 4.

¹⁵¹ *Id.* at 5. R.I. Gen. Laws § 39-30-3(e) states: “[a]ny dispute regarding the terms of the alternative tariff, the compensation to be paid to the electric distribution company, or any other matter arising in connection with the exercise of the option provided in subsection (a), including, but not limited to, the terms on which space is to be provided to the municipality in accordance with subsection (c), shall be resolved by the *division of public utilities and carriers* within *ninety (90) days* of any request for such resolution by the municipality or any person involved in such dispute.” (emphasis added).

¹⁵² Municipalities’ Ex. 7 at 5.

independently verify the rights.¹⁵³ Additionally, the Municipalities are seeking assignment of existing equipment warranties, but state that National Grid claims such a requirement conflicts with the proposed “as is, where is” sale.¹⁵⁴

Addressing the attachment agreement, the Municipalities continued to express concern with the ability to terminate the license without prior approval of the towns. The Municipalities also disagree with National Grid’s interpretation of the Act inasmuch as National Grid’s attachment agreement only allows for attachment of street light infrastructure and would require an additional agreement for additional attachments. The Municipalities assert that the municipality may use the equipment “for any purpose they see fit, including the installation of new metering equipment and or security or traffic cameras.”¹⁵⁵ According to the Municipalities, it should be sufficient that National Grid be notified and that approval should only be required if impacting the load or requiring a new electrical connection.¹⁵⁶

According to the Municipalities, the parties had reached agreement on labeling which was not reflected in National Grid’s most recent filing. Additionally, the Municipalities maintain that National Grid does not need to be informed if a town works on equipment if the work will not impact the load on National Grid’s pole or distribution system. The Municipalities assert that National Grid has proposed to require “much more of National Grid’s supervision at substantial and unwarranted costs to the [t]owns.”¹⁵⁷ Finally, the Municipalities state that they have not received a copy of “Company Requirements” referenced in the attachment agreement.¹⁵⁸

X. OER and EERMC Comments

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 5-6.

¹⁵⁵ *Id.* at 7.

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at 8.

On March 31, 2014, OER filed a letter from Commissioner Marion S. Gold, Ph.D, in support of the implementation of a phased-in metering program for the street lights as proposed by the Municipalities.¹⁵⁹ On May 5, 2014, EERMC filed additional comments with the PUC in support of a metering pilot, stating, “[g]iven the uncertain costs and other complexities associated with metering, . . . efforts to further explore opportunities through a well-designed pilot test of metered controls is a reliable and prudent way to improve [] understanding of the costs and benefits of metering.”¹⁶⁰ EERMC committed to supporting this energy savings option through filings scheduled to be made by EERMC in 2014, including the 3-Year Plan and 2015 Annual Energy Efficiency Program Plan.¹⁶¹

XI. Technical Record Session

On May 6, 2014, the PUC conducted a technical record session on the issue of metering. The Municipalities presented Mr. Woodbury to discuss reasons metering makes sense for the cities and towns. They also presented Sean Tippet from Silver Spring Networks, a company that produces automated metering information systems— also known as smart meters — that can communicate with utility companies. Silver Spring provides communication modules that are installed into the smart meter as well as the networking and back-end data center services.¹⁶² Mr. Tippet explained that street lighting automation has been a niche market, but he expects 2014 to 2015 to be a transition point for more robust adoption of the networks.¹⁶³ Mr. Tippet described how meter- and network-related information is relayed over wireless networks. He opined that establishing a streetlight network is easier than a residential rollout due to locational issues. He

¹⁵⁹ OER Ex. 2 (Letter from Marion S. Gold to Ms. Massaro). [http://www.ripuc.org/eventsactions/docket/4442-OER-Letter\(03-31-14\).pdf](http://www.ripuc.org/eventsactions/docket/4442-OER-Letter(03-31-14).pdf)

¹⁶⁰ EERMC Ex. 2 (Comments of Scudder Parker), at 2. http://www.ripuc.org/eventsactions/docket/4442-EERMC-Tariff-Comments_5-1-14_.pdf.

¹⁶¹ *Id.*

¹⁶² Tr. 5/7/14 at 14-15, 20.

¹⁶³ *Id.* at 21.

stated that the smart meters in the street lights are approximately \$120 to \$130 while the software costs vary based on whether the licenses are purchased or used as a service with a monthly fee. The owner of the facility can have access to control the lighting.¹⁶⁴ Mr. Woodbury clarified that the cost cited by Mr. Tippet for the smart photo control is in addition to the \$204 cost of the 42-watt, LED dimmable ballast.¹⁶⁵ Mr. Tippet noted that while there are several different networking vendors in the field currently, there is no significant amount of interoperability; accordingly, “everyone is pretty much – needs to be a complete island into itself.” However, he remarked that over time, like in the smart grid arena, there likely will be consolidation in the industry.¹⁶⁶ Mr. Woodbury added that while the customer would own the intelligent control, it would be reasonable for National Grid to set the standard for the devices in terms of accuracy and compatibility with its own meter-data-management system.¹⁶⁷

Mr. Woodbury explained that the new American National Standards Institute (ANSI) standard photocell receptacle can be activated to be driven by local ambient light or by a centrally-distributed control. Florida Power and Light, deploying smart photocells for street lights, will only use the photocell for metering and diagnostics. It will not dim them or operate them on a schedule. The utility there will have the photocells operated by the ambient light.¹⁶⁸

The Municipalities presented Susan Zamos from Sunrise Technologies, a manufacturer of photo controls located in Raynham, Massachusetts. She explained that her company has partnered with Silver Spring Networks to include the interface card in its photo control in order to operate the light and record metering information.¹⁶⁹ While the photo control has been in use

¹⁶⁴ *Id.* at 24-31.

¹⁶⁵ *Id.* at 40-41.

¹⁶⁶ *Id.* at 37-38.

¹⁶⁷ *Id.* at 65-66.

¹⁶⁸ *Id.* at 31-35.

¹⁶⁹ *Id.* at 46-51.

for approximately twenty years, the company began deploying the combined package of photo control and interface card in 2014. The expected life of the product is approximately fifteen to twenty years.¹⁷⁰

Jeffrey Broadhead of the WCRPC pointed out that, from an economic standpoint, it would make more sense for cities and towns to purchase both the smart control and the metering technology at the same time, for a single installation. But that would most likely only happen if the PUC were to require metering.¹⁷¹ According to Mr. Broadhead, the intelligent controls would give the cities and towns more control and flexibility to respond to situations such as customer concerns with lighting levels, emergencies, and weather-related issues. Mr. Woodbury opined that because street lights comprise very little of a distribution company's load, such control should not adversely impact the utility.¹⁷²

National Grid presented Jeff Martin, from Billing Operations; Ms. Lloyd; and Mr. Walter to discuss the Company's position on the metering issue. Ms. Lloyd reiterated that even without metering being included, customers will still be able to take advantage of dimming and part-night schedules through the proposed tariff.¹⁷³ Ms. Lloyd and Mr. Walter indicated that National Grid would prefer the PUC not order a metered tariff until issues of accuracy, testing, cost, ownership, billing, and interoperability could be addressed. Ms. Lloyd explained that metering of street lights would be a significant shift for National Grid's operations and ought to be fully investigated prior to deployment.¹⁷⁴ Finally, National Grid questioned whether the benefits to the cities and towns would outweigh the costs of metering.¹⁷⁵ National Grid advocated for

¹⁷⁰ *Id.* at 53-54.

¹⁷¹ *Id.* at 74-77.

¹⁷² *Id.* at 79-81.

¹⁷³ *Id.* at 88-89, 111-12.

¹⁷⁴ *Id.* at 89-92, 96-97, 100-02, 105-10, 113-14, 116-17, 121-38.

¹⁷⁵ *Id.* at 148-179. As more fully set forth in the following section of this Order, the Municipalities disagreed with National Grid's representation. *See infra* Part XII.

approval of the proposed tariff with a limited pilot, although neither Mr. Walter nor Ms. Lloyd provided many details of such pilot's design.¹⁷⁶ Mr. Walter opined that if National Grid had made the decision to proceed with deployment of meters on 100,000 lights, it would take a minimum of six months to a year to begin deployment with a completion of that deployment in approximately five years.¹⁷⁷

XII. Municipalities' Response to National Grid - Technical Session

On May 16, 2014, the Municipalities filed a response to the documents and arguments presented by National Grid at the Technical Record Session.¹⁷⁸ Addressing meter ownership, the Municipalities argued that customer-owned meters would be consistent with National Grid's desire to have a clear point of demarcation and that National Grid ownership would conflict with that position for meters mounted on customer-owned assets.¹⁷⁹ The Municipalities expressed concern that National Grid might choose a meter incompatible with a particular town's choice of lights or operating parameters.¹⁸⁰ Recognizing the necessity of meter accuracy and testing, the Municipalities proposed that they would coordinate with National Grid such that each year, National Grid would advise them of the number of meters required for testing. The cities and towns would then provide the meters to National Grid for testing, swapping out replacement meters at the same time, and the costs could be passed through distribution rates.¹⁸¹

Next, addressing the timing of metering, the Municipalities discouraged a separate proceeding or pilot program for metering. According to the Municipalities, while they were initially interested in a pilot, further research led them to believe that they "must be able to

¹⁷⁶ *Id.* at 82-86, 143-48.

¹⁷⁷ Tr. 5/7/14 at 139-40.

¹⁷⁸ [http://www.ripuc.org/eventsactions/docket/4442-Town-Municipal-TechReponse%20\(5-16-14\).pdf](http://www.ripuc.org/eventsactions/docket/4442-Town-Municipal-TechReponse%20(5-16-14).pdf)

¹⁷⁹ Letter from Municipalities to Margaret Curran at 1-2.

¹⁸⁰ *Id.* at 2.

¹⁸¹ *Id.*

evaluate an investment in a comprehensive streetlight package now rather than phasing such an investment in pending another tariff proceeding.”¹⁸² The Municipalities provided a cost-effectiveness analysis related to metering and also opined that metering would provide a more efficient and accurate measure of lighting usage than the current unmetered tariff.¹⁸³

XIII. Division’s Final Review and Recommendations

The Division filed a second memorandum from Mr. Hahn, dated May 30, 2014, itemizing his earlier recommendations, discussing his review of the status reports from National Grid and the Municipalities, and offering his recommendation regarding metering. Mr. Hahn contended the closing documents should be separate from the tariff. He pointed out that “[t]he closing documents facilitate the transfer of the ownership of the assets” while “[t]he tariff provides the terms and conditions under which the Company will deliver electric energy to the street lighting assets once they are owned by the [cities and towns].”¹⁸⁴ He noted that the tariff cannot apply until after the sale of assets. Therefore, while he continued to support the concept of reviewing them as part of the docket “to avoid as many disputes down the road as possible,” he recommended they be separate from the tariff.¹⁸⁵

Addressing the request for a separate dimming schedule, Mr. Hahn admitted to not reviewing National Grid’s billing system capabilities first-hand, but indicated that such a limitation is not unusual in other venues. Because it may take time and funds to implement changes to the system, if the capability does not currently exist, he asserted, National Grid should not be required to include it in the current tariff.¹⁸⁶ Similarly, according to Mr. Hahn, if National

¹⁸² *Id.* at 3.

¹⁸³ *Id.* at 3-7.

¹⁸⁴ Division Mem. dated May 30, 2014 at 3; http://www.ripuc.org/eventsactions/docket/4442-DPU-Hahn-Memo_5-30-14.pdf

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

Grid is not in possession of warranty documentation, it should not be required to transfer them to the Cities and towns.¹⁸⁷ Noting that National Grid had represented that most easements are associated with public property owned and managed by the towns, and citing to National Grid's list of reasons not to transfer, as noted above, Mr. Hahn agreed that National Grid should retain ownership of easements and rights as necessary to operate the electric distribution system.¹⁸⁸

National Grid having failed to identify circumstances that would warrant at-will termination of any attachment licenses, Mr. Hahn agreed with the Municipalities that such a right should not be allowed. With regard to the assignment of attachment rights, Mr. Hahn agreed with National Grid that since the statute and the proposed tariff concern ownership and operation of street lights by Cities and towns only, there should be no need for a right to assign.¹⁸⁹

Addressing the liability and insurance provisions in National Grid's proposed attachment agreement, Mr. Hahn indicated that these provisions are consistent with attachment agreements for cable television, competitive local exchange carriers, and other municipal attachments. Therefore, he believed it reasonable to retain the proposed provision. Similarly, he noted that other attachment agreements are specific to the purpose of the attachment, such as National Grid's requirement that the purchased equipment be used solely for street lighting. He stated that this is consistent and should be maintained, recognizing that additional licensing would be required for added infrastructure.¹⁹⁰ However, according to Mr. Hahn, "other attachment agreements do not require the attachers to notify the Company anytime they perform work on their attachments." In his experience, third party attachers do not make that notification. Therefore, Mr. Hahn opined that "[o]nce the [cities and towns] acquire ownership of the street

¹⁸⁷ *Id.* at 4.

¹⁸⁸ *Id.* at 4-5.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.* at 5-6. Mr. Hahn again referenced language in cable television and competitive telecommunications attachment agreements. *Id.* at 6.

lights, they should be able to work on their facilities as long as they do not interfere with the delivery of electricity, comply with safety requirements, and indemnify [National Grid] against any damage that might be caused.”¹⁹¹

Turning to meters, Mr. Hahn concluded that it is still premature to require metering services at this time, and a limited pilot would be appropriate. He expressed concern that metering, such as that discussed at the technical session, showed promise but was not yet advanced enough for a large-scale rollout. He questioned the wisdom of relying on a single vendor in such a new market where there might be no comparable, replacement product or vendor available in the event of a failure. A pilot, however, would allow the parties to implement a new system on a small scale, with limited monetary risk. Mr. Hahn also suggested such a pilot be developed outside of this docket.

Mr. Hahn identified the issues that need to be addressed in any discussion of metering services for street lights: whether street lights should be metered; if they are to be metered, how that should be done; who should own the metering equipment; and should a full-scale metering system be installed at the outset or should a metering pilot be conducted first.¹⁹² He noted that historically, street lights have not been metered because the usage was relatively low and predictable through the use of photocells. While he acknowledged Ms. Lloyd’s calculations suggested that most of the streetlight savings would be realized by the conversion to LEDs, he maintained that “if the cities and towns wish to utilize non-standard, difficult-to-predict operating schedules and desire the streetlight usage to be metered, then the cities and towns should have that right.”¹⁹³ That right, however, according to Mr. Hahn, should be provided

¹⁹¹ *Id.*

¹⁹² *Id.* at 7.

¹⁹³ *Id.* at 8.

through a National Grid-owned metering system with a PUC-approved rate.¹⁹⁴ Mr. Hahn proposed a method by which National Grid could install and read meters using current technology with the caveat that municipal customers be allowed “access to this system to control the output of the lights and receive notification of the lamp being burnt out.” Absent such a compromise, he stated that separate systems for metering and control could be employed, but at a higher cost.¹⁹⁵

XIV. Commission Findings

A. Closing Documents

At an open meeting on July 25, 2014, the PUC discussed the scope of its review over the various documents in this docket, to wit, the closing documents comprising the sales agreement and attachment agreements, both overhead and underground, and whether the documents are subject to PUC review under the Act. Further, the PUC discussed whether the documents should be incorporated into the new tariff. Under the Act, in addition to setting rates, the alternative tariff must provide

for delivery service by the electric distribution company of electric energy, whether or not supplied by the electric distribution company, over distribution facilities and wires owned by the electric distribution company to lighting equipment *owned or leased by the municipality*, and further provid[e] for the use by such municipality of the space on any pole, lamp post, or other mounting surface previously used by the electric distribution company for the mounting of the lighting equipment.¹⁹⁶

The PUC determined that the execution of a sales agreement between National Grid and a town was not covered by the above-referenced language but was, in fact, a mechanism to become eligible for the alternative tariff contemplated by the statute. The alternative tariff will only be available to a municipality that has already purchased the street lights. A sales

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at 8-9.

¹⁹⁶ R.I. Gen. Laws § 39-30-3(a)(1) (emphasis added).

agreement will be subject to negotiation between the parties. And the Act contemplates the Division will resolve disputes related to “the compensation to be paid the electric distribution company, or any other matter arising in connection with the exercise of the” purchase of the street lights by the municipality.¹⁹⁷ Therefore, the PUC determined that approval of a sales agreement is outside of the scope of the PUC’s jurisdiction.

Turning to the attachment agreements, the PUC noted that there was a great deal of evidence presented on this subject. The PUC found that while the attachment agreements could also be viewed as mechanisms to become eligible for the rate, the signing of which would constitute a condition precedent to closing under National Grid’s proposed sales agreement, they were less final and static than the sales agreement. The attachment agreements contain terms and conditions of attachment and set forth ongoing rights and obligations of the parties. Furthermore, the above-referenced language requires the alternative tariff to allow for a municipality’s use of space which was previously used by National Grid for attachment of lighting. The alternative tariff requires the execution of an attachment agreement that allow for the use of space on the poles prior to being eligible for service under the alternative tariff. Thus, the question becomes whether the attachment agreements are subject to PUC jurisdiction and, if so, whether they should be incorporated into the tariff.

While the Division may have jurisdiction over these documents under the Act, the broad reviewing authority granted in § 39-30-3(e) of the Act suggests that the Act also contemplates that the tariff reviewed by the PUC must allow for lighting owners’ use of space on the poles. The use of space on the poles by the cities and towns is governed by the attachment agreements. The attachment agreements, outlining ongoing rights and obligations of the parties, are akin to terms and conditions of distribution service for customer-owned street lighting. Therefore, it

¹⁹⁷ See R.I. Gen. Laws § 39-30-3(e).

appears that the PUC and Division share discrete jurisdiction over the attachment agreements. More specifically, the PUC reviews and approves them at the outset; the Division resolves any disputes that arise under them. This is consistent with the regulatory structure related to public utilities generally in Rhode Island. The PUC routinely reviews utilities' terms and conditions of service while the Division routinely resolves disputes between customers and utilities under the terms and condition of service.¹⁹⁸

The PUC recognizes that it has not heretofore reviewed attachment agreements between third-party attachment owners and National Grid.¹⁹⁹ However, the federal government, through

¹⁹⁸ See Docket No. 4402, In re: The Narragansett Electric Company, d/b/a National Grid Tariff Advice Filing to Amend RIPUC NG-GAS No. 101 (Modification of General Terms and Conditions, Section 1, Schedule A, Part 6.0 – Installation of Meters), Docket No. 4342, The Narragansett Electric Company d/b/a National Grid Tariff Advice Filing to Amend RIPUC NG-Gas No. 101 and R.I.P.U.C. No. 2072, Docket No. 4270, In Re: The Narragansett Electric Company, d/b/a National Grid Tariff Advice Regarding Terms and Conditions for Gas Marketers and Calculation of Gas Cost Recovery Rates – R.I.P.U.C. Ng-Gas No. 101, Sections 2, 5, 6, Docket Nos. 4251 & 4252, In Re: The Narragansett Electric Company, D/B/A National Grid Tariff Advice to Amend RIPUC NG-Gas No. 101 and R.I.P.U.C.-Electric No. 2072, Dkt No. 4200, In Re: The Narragansett Electric Company d/b/a National Grid's Filing To Amend Terms and Conditions for Distribution Service, Docket No. 3716, In Re: Narragansett Electric Company D/B/A National Grid's Proposed Revision To Line Extension Policies. See Division of Public Utilities Rules of Practice and Procedure (describing the agency as "a governmental body charged with the supervision and execution of all laws relating to public utilities and carriers and all regulations and orders of the [PUC] governing the conduct and charges of public utilities. These responsibilities include ... conducting investigations and holding hearings").

¹⁹⁹ National Grid's approved RIPUC No. 2130, Terms and Conditions for Distribution Service states, Attachments - 4. Any individual or organization who requests an attachment to distribution facilities, utility poles, or along any span between such poles, shall comply with the Company's specifications and policies governing the type of construction, metering, attachment fees, easements, permissions and electrical inspections required. Its approved Tariff RIPUC No. 2110 states: Attachments - The Company has exclusive rights of ownership of the facilities defined within this tariff and reserves the privilege and sole discretion to permit the use of such facilities for the support and physical attachment of other, non-company owned equipment *under the terms and conditions of a separate agreement or license*. The Company may, at its sole discretion, provide electric delivery service as applicable under another tariff. The Company will have no responsibility for the attachments except as defined *in the separate agreement or license*. The attachment will not adversely impact the street and area lighting as defined within this tariff. Its approved Tariff RIPUC No. 2111, Limited Service – Private Lighting states: Attachments - The Company has exclusive rights of ownership of the facilities defined within this tariff and reserves the privilege and sole discretion to permit the use of such facilities for the support and physical attachment of other, noncompany owned equipment *under the terms and conditions of a separate agreement or license*. The Company may, at its sole discretion, provide electric delivery service as applicable under another tariff. The Company will have no responsibility for the attachments except *as defined in the separate agreement or license*. The attachment will not adversely impact the street and area lighting as defined within this tariff. Its approved Tariff RIPUC No. 2112, General Street and Area Lighting Service states: Attachments: The Company has exclusive rights of ownership of the facilities defined within this tariff and reserves the privilege and sole discretion to permit the use of such facilities for the support and physical attachment of other, noncompany owned equipment *under the terms and conditions of a separate agreement or license*. The Company may, at its sole discretion, provide electric delivery

delegation to the Federal Communications Commission, has, to some extent, pre-empted the field.²⁰⁰ Furthermore, there is no other state mandate requiring the PUC to approve a tariff that requires National Grid to have provisions in place allowing for the use of the space on poles to other customers.

Division witness Mr. Hahn suggested that the attachment agreements be reviewed in this proceeding, but not be incorporated into the tariff. The PUC agrees. Indeed, the Act specifically refers to “terms and conditions” in reference to the rights and obligations of cities and towns to pole owners.²⁰¹ Addressing the substance of the attachment agreements, as described herein previously, Mr. Hahn provided very well-reasoned recommendations regarding the various provisions of the attachment agreements. His persuasive testimony consistently emphasized that cities and towns should be treated the same manner as other third-party attachment owners.²⁰² While the Act specifically requires pole owners other than National Grid to allow cities and towns to assume the rights and obligations of National Grid, those pole owners can subject cities and towns to only those same terms and conditions to which other third-party attachment owners are subject. There is no reason that National Grid should not be held to the same requirement as

service as applicable under another tariff. The Company will have no responsibility for the attachments except *as defined in the separate agreement or license*. The attachment will not adversely impact the street and area lighting as defined in this tariff.

²⁰⁰ The Federal Communications Commission has jurisdiction over the rates, terms and conditions of certain pole attachments under 47 U.S.C. § 224(b)(1) which states: “Subject to the provisions of subsection (c) of this section, the [Federal Communications] Commission shall regulate the rates, terms, and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable, and shall adopt procedures necessary and appropriate to hear and resolve complaints concerning such rates, terms, and conditions.” “The term “pole attachment” means any attachment by a cable television system or provider of telecommunications service to a pole, duct, conduit, or right-of-way owned or controlled by a utility.” 47 U.S.C. § 224(a)(4).

²⁰¹ See R.I. Gen. Laws § 39-30-3(d), stating that “the municipality is subject to the same terms and conditions that pole owners make to others that attach to the poles.”

²⁰² R.I. Gen. Laws § 39-30-3(d) states that “[w]hen a municipality exercises its option pursuant to subsection (a), anyone other than the electric distribution company controlling the right to use space on any pole, lamp post, or other mounting surface previously used by the electric distribution company in such municipality shall allow the municipality to assume the rights and obligations of the electric distribution company with respect to such space for the unexpired term of any lease, easement, or other agreement under which the electric distribution company used such space; provided, however, that: (i) *The municipality is subject to the same terms and conditions that pole owners make to others that attach to the poles.* (emphasis added).

other pole owners. It would make no sense for National Grid to subject cities and towns to harsher standards than it generally imposes other third party attachment owners. Therefore, the PUC unanimously approved National Grid's attachment agreements, filed on April 4, 2014, subject to the recommendations as set forth in Mr. Hahn's filed comments. The PUC directed National Grid to file revised attachment agreements in compliance with its determinations for further review and, ultimately, incorporation into National Grid's terms and conditions for distribution service.

On July 31, 2014, National Grid filed a revised Attachment Agreement which it contended complied with Mr. Hahn's recommendations. On August 5, 2014, the Municipalities objected. While acknowledging that National Grid had incorporated some recommended changes, the Municipalities argued that additional recommendations, including those previously set forth in their March 17, 2014 filing, still had to be considered by the PUC. On August 6, 2014, the Division filed an additional memorandum from Mr. Hahn in which he concluded that National Grid's revised attachment agreement was fully consistent with the recommendations in his May 30, 2014 memorandum.

At an open meeting conducted on August 7, 2014, the PUC approved the revised attachment agreement, finding that the changes made were consistent with Mr. Hahn's recommendations. Further, the PUC determined that the remaining language addressed in the Municipalities' objection was substantially similar to the language in licenses between National Grid and other, third-party owners of attachments. Therefore, the language was consistent with the PUC's prior determination that the cities and towns should be treated like all others with attachments to National Grid's poles.

B. Metering

A topic of much debate throughout the instant matter was whether the Act required metering. While all agreed that metering would be the most accurate measure of usage and is likely the future norm, the PUC found that the Act contains no specific reference to meters or metering. Controls — a term that does appear in the Act — are devices that control the lighting. They are distinct from meters, which are the measurement tools, the output of which is affected by the controls. Therefore, the PUC determined that metering is neither specifically mentioned in nor required by the statute. The PUC also found that metering technology for street lights is not yet available for a wide-scale rollout or even a substantial phase-in. It also found there are many unresolved questions concerning the ability of existing, or yet-to-be-developed, streetlight metering systems to interact with National Grid's billing system. Thus, the PUC concluded that the bulk of savings was most directly linked to the replacement of extant lighting with LEDs and the creation of maintenance contracts into which the cities and towns may enter. Accordingly, proceeding with municipal purchases of lighting while holding off on metering will allow cities and towns to move as soon as possible toward achieving the savings contemplated by the legislation.

Despite the fact that the PUC found that the evidence in the record did not support a finding of significant savings from metering, the PUC recognized that the cities and towns believe they will be able to achieve sufficient additional savings through investment in metering technology at the same time as a change-out of the lighting controls. Furthermore, the PUC appreciated the Municipalities' contention that if they will own the meters, it would be more cost effective to install a control device with a metering component at the outset, rather than having to retrofit the control device. Therefore, in response to this expectation, the PUC opened a new

docket and ordered National Grid to develop and file with the PUC a pilot program within 90 days, or by October 23, 2014, with municipal participation.

The PUC's jurisdiction to order such a pilot stems from its statutory mandate to ensure that the rates it sets are just and reasonable and from the stated purposes of the statute, namely that the municipal lighting costs should be reduced by "providing innovative and proven technologies for more efficient lighting."²⁰³ While seemingly oxymoronic to refer to proven and innovative technologies, the phrase aptly describes the replacement of old lights with LEDs. LEDs are innovative, indeed undergoing constant improvement. But they are also proven, having been around for more than fifty years. Similarly, customers and utilities have long been familiar with meters. But the technology as it relates to streetlighting, as a component of the photo control, is innovative and to some extent unproven in most of the United States. Therefore, establishing a pilot program is the most appropriate course of action to balance the interests of all parties.

A well-designed pilot should provide a wealth of useful information, including meter accuracy, ability to integrate with the billing system, and a comparison to the unmetered rates. The design should include a cost allocation. The proposal should not assume meter ownership on the part of either party. It must, at a minimum, include the technical issues that would need to be addressed, such as interfacing with National Grid's billing system, the types of meters that would be compatible, and access issues. The PUC notes that some customer-owned water meters do currently exist in Rhode Island under approved tariffs/terms and conditions, and thus, identity of ownership is not necessarily a barrier to metering. Moreover, while it may be reasonable to aspire to a pilot that includes cities and towns from various geographic areas of the state, such aspiration should not be a barrier to moving forward with a pilot. The pilot should be open to

²⁰³ R.I. Gen. Laws § 39-30-1(b)(4).

whichever cities and towns are ready, willing, and able to participate, at least up to some manageable number.²⁰⁴

C. S-05 Tariff

The Act requires the alternative tariff rate to

provide for monthly bills for street and area lighting that shall include a schedule of energy charges based on a determination [of] annual kilowatt-hour usage per lumen rating or nominal wattage of all types of lighting equipment, but shall not include facility, support, maintenance, or accessory charges. The new tariff shall use existing usage calculation methods and existing rates for any currently existing lighting equipment, only setting reasonable new rates for newly adopted lighting equipment. The new tariff shall be structured so as to allow options for various street lighting controls, including both conventional dusk/dawn operation using photocell or scheduling controls, as well as schedule-based dimming or on/off controls that dim or turn off street lights during periods of low activity.²⁰⁵

The PUC found that the proposed tariff filed by National Grid on April 4, 2014 complied with the Act. The PUC also, however, accepted the Municipalities' recommendation that the inventory required to be provided to National Grid annually be provided within thirty, rather than fifteen, days of the end of the calendar year. Accordingly, National Grid shall make this change in its compliance tariff filing.

In order to address the Municipalities' concern that the wattage ranges in the proposed unmetered tariff, though amended from the initial filing, may still result in rates that are too high or too low, the PUC ordered National Grid to file with the PUC, within ninety days of the annual inventory filing or by April 30, a report that provides the distribution of lighting inventory by wattage range with actual output information that may be available to National Grid. This will allow the PUC to determine whether any of the wattage ranges need to be reviewed for further accuracy to ensure continued just and reasonable rates.

²⁰⁴ The parties were advised of the new docket and the requirements by memorandum from PUC legal counsel on July 25, 2014. Docket No. 4513 can be accessed at: <http://www.ripuc.org/eventsactions/docket/4513page.html>.

²⁰⁵ R.I. Gen. Laws § 39-30-3(a)(1).

On July 31, 2014, National Grid filed a compliance tariff that made the change from fifteen days to thirty days in accordance with the PUC's directive. However, the Municipalities filed an objection on August 5, 2014, on the basis that the tariff did not include the related ninety-day compliance report. Typically, reporting requirements are not included in tariffs. Like terms and conditions of service, the tariffs govern the relationship between the utility and the customer while reporting requirements set forth a responsibility on the part of the utility to the PUC. These reporting requirements are enforced like any other order. Therefore, at the August 7, 2014 open meeting, finding that the reporting requirement does not need to be made part of the tariff, the PUC approved the S-05 compliance tariff filed on July 31, 2014.

D. Rates for Distribution Service

The S-05 tariff sets forth the charges that will apply to this class of customers and the basis upon which the charges will be calculated and billed, but it references the actual per-kWh delivery rates in National Grid's Retail Delivery Rate tariff, RIPUC No. 2095. In its filing, National Grid proposed a cost-based rate. The Division recommended a rate calculated in accordance with the same methodology followed for other rates set pursuant to the last base rate case. The witnesses agreed that the two proposals were accurately calculated and were each based on different, reasonable ratemaking methodologies. At the August 7, 2014 open meeting, the PUC approved the methodology proposed by the Division. Generally, the PUC favors cost-based rates when possible and only modifies them where such modification is in the public interest, such as to avoid rate shock. Where this is a new rate, arguably, there is no concern with rate shock. Therefore, National Grid's proposal to set a new rate based on cost was not unreasonable. However, this new rate will still apply to streetlights that will be owned by and paid for by the same customers now paying for them. Therefore, the PUC agrees with Mr. Hahn

that, in this case, setting a rate that is consistent with the other rates, so-recently approved by the PUC is more reasonable. Thus, the PUC approved a distribution charge of 2.654 cents per kWh.

Accordingly, it is hereby

(21704) ORDERED:

1. The Narragansett Electric Company d/b/a National Grid Tariff RIPUC No. 2142, filed on July 31, 2014, is hereby approved for effect on usage on and after August 1, 2014.
2. The Narragansett Electric Company d/b/a National Grid retail delivery rate under the S-05 Tariff shall be 3.825 cents per kWh effective on usage on and after August 7, 2014.
3. The Narragansett Electric Company d/b/a National Grid Compliance Tariff RIPUC No. 2095, filed on August 13, 2014, is hereby approved.
4. The Sale Agreement shall not be subject to approval by the PUC for the reasons discussed in this Order.
5. The revised attachment agreement, filed on July 31, 2014, is hereby approved, but shall not be incorporated into Tariff RIPUC No. 2142.
6. The Narragansett Electric Company d/b/a National Grid shall, within ninety days of the annual inventory filing or by April 30, file with the PUC a report that provides the distribution of lighting inventory by wattage range with actual output information that may be available to National Grid.
7. The Narragansett Electric Company d/b/a National Grid shall develop, with municipal participation, and file with the PUC, within ninety days or by October 23,

2014, a pilot program in accordance with this order and the memorandum of July 25, 2014, notifying the parties of the new docket.

8. Narragansett Electric Company d/b/a National Grid shall comply with all other instructions contained in this Order.

EFFECTIVE AT WARWICK, RHODE ISLAND ON AUGUST 1, 2014 AND AUGUST 7, 2014, PURSUANT TO OPEN MEETING DECISIONS ON JULY 25, 2014 AND AUGUST 7, 2014. WRITTEN ORDER ISSUED OCTOBER 31, 2014.

PUBLIC UTILITIES COMMISSION

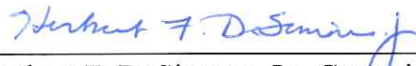




Margaret E. Curran, Chairperson



Paul J. Roberti, Commissioner



Herbert F. DeSimone, Jr., Commissioner

Notice of Right of Appeal: Pursuant to R.I. Gen. Laws § 39-5-1, any person aggrieved by a decision or order of the PUC may, within 7 days from the date of the Order, petition the Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision or Order.