

November 21, 2014

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4513 – Street light Metering Pilot Proposal
Response to PUC Data Requests – Set 1**

Dear Ms. Massaro:

I have enclosed National Grid's¹ responses to the first set of data requests issued by the Rhode on November 7, 2014 in the above-referenced docket.

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact me at (781) 907-2121.

Very truly yours,



Raquel J. Webster

Enclosure

cc: Docket 4513 Service List
Leo Wold, Esq.
Steve Scialabba, Division

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

Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically transmitted and sent via U.S. Mail to the individuals listed below.

Copies of this filing were hand delivered to the RI Public Utilities Commission and to the RI Division of Public Utilities Carriers.



Joanne M. Scanlon

November 21, 2014

Date

**Docket No. 4513 - National Grid – Streetlight Metering Pilot Proposal
Service List updated 10/30/14**

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PUC 1-1

Request:

What is the cost to the participating municipalities to perform a lighting study? What is the rationale for requiring the municipalities to perform and expend funds on this study? Does National Grid's response depend on the ultimate ownership of meters?

Response:

National Grid is not requiring the participating municipalities to perform a lighting study as part of the metering pilot; however, the Company is providing an opportunity for the selected participating municipalities to integrate a lighting study into the field application portion of the proposed metering pilot. The Company plans to collaborate with the municipality regarding the selection of street lights to be included in the metering pilot. As part of the metering pilot, the Company will host the necessary control system and the customer will be provided access to manage the operation of the specific lighting at no cost. Additionally, the Company proposes to utilize the consulting services of the Pacific Northwest National Laboratories (PNNL) during the meter pilot. The services of PNNL will also be made available to the participating municipalities at no cost. If the participating municipality chooses to perform a lighting study costs may be incurred for other ancillary equipment, field evaluation services, and/or communication functions needed to perform the lighting study, depending upon each municipality's defined lighting study scope.

A lighting study would provide the participating municipalities with an opportunity to test the operational performance of various products prior to committing to large scale procurement. Additionally, a study would allow various constituencies within the community to provide feedback on operational schedules and illumination levels within designated areas during the pilot period.

As directed by the PUC, National Grid's metering pilot proposal focuses on the reliability and quality of current metering technology for use in street lighting applications. The opportunity for a municipality to perform a lighting study for the community would be a direct benefit to the municipality that decides to conduct a study. As such, the Company believes it is fair for the municipality to fund any additional costs incurred to perform the study and not subsidize any municipality's efforts across all customer classes.

For the purposes of the metering pilot, National Grid proposes to procure and manage the necessary meter devices in order to maintain compatibility of all system elements, to assure integrity of the testing plan protocols and to ensure fairness in the metering protocol across all customers.

PUC 1-2

Request:

Please explain what “comments” the PUC will be providing on the pilot proposal. Are these different from PUC orders?

Response:

The use of the term “comments” with regard to the PUC represents any discussion contained in a PUC order on the Company's proposal.

PUC 1-3

Request:

On page 6 of the proposal, part 3.2 includes the following: "All IC metering applications the Company receives from manufacturers must be compliance with applicable industry standards, including but not limited to ANSI C12.20-20101. In addition, applicants will be required to submit supplemental qualifying independent laboratory test results." If independent laboratory test results are supplied, why would National Grid need to conduct further laboratory tests?

Response:

The Company developed the proposed meter test plan using the general principles identified in the meter accuracy and testing requirements specified in the Division's Rules Prescribing Standards for Electric Utilities (September 21, 2004) (Rules). Specifically, the pilot proposes to employ the selective test plan approach described in Section VII.C.2(ii) of the Rules to qualify each manufacturer's meter lot for accuracy range and deviation against both the manufacturer's and independent laboratory reported accuracy. Since the metering technology applicable to street lighting is relatively new, the Company is proposing this testing methodology as a means to ensure that meters meet ANSI standards as claimed by the manufacturer, but also to evaluate the industry testing procedures performed by independent laboratories hired by the manufacturer. Should this street lighting metering technology become an accepted practice, Section VII.C.1 of the Rules would apply.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4513
In Re: Street light Metering Pilot Proposal
Responses to Commission's First Set of Data Requests
Issued November 7, 2014

PUC 1-4

Request:

Please clarify the following sentence found on page 7 of the pilot proposal, noting if there are too many words or words missing: "The SSN network will also provide the Company with the ability the tools necessary to manage and assess the meter data management and associated billing processes."

Response:

The referenced sentence should read: "The SSN network will also provide the Company with the ability and tools necessary to manage and assess the meter data management and associated billing processes."

PUC 1-5

Request:

On page 9 of the pilot proposal, the Company represents that the municipal survey was sent out on October 6, 2014. The response deadline on the survey was October 10, 2014. Were municipalities really only given four days to respond and if so, why?

Response:

The questionnaire was developed by National Grid with feedback from the municipalities. The survey was managed by the Company's Customer Intelligence group, which defined a short turn-around time in an effort to motivate recipients to complete the survey immediately rather than wait a period of time before completing the survey and returning it to National Grid. The Company did not close access to the electronic questionnaire after October 10. A second notice to participate in the questionnaire was issued on October 23 with a requested return date of October 31, after which the electronic questionnaire was closed.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4513
In Re: Street light Metering Pilot Proposal
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PUC 1-6

Request:

How many municipalities received the survey? How many responded? Please provide a complete copy of the responses.

Response:

Representatives from 37 municipalities acknowledged receipt of the survey. The Company received 35 survey responses. Please see Attachment PUC 1-6 for the survey responses.

Survey Question 1

Would you like for your municipality to be considered for participation in National Grid's metering pilot project?

	ResponseID	Yes	No	Not Sure
1	R_ebnckse3rZsNG7j		No	
2	R_4NJ4RGgRMYkqLBz			Not Sure
3	R_9S3l0g11owfQt8h	Yes		
4	R_5BJqGEN8OxPgRKZ	Yes		
5	R_cx4XxaQrySBrrJX	Yes		
6	R_0Thr0jWTFaFmT8N	Yes		
7	R_54kdk8ipGcmUVz7	Yes		
8	R_3BGOyV0RUUJztTn			Not Sure
9	R_9AJwWxpDZJzEdoN	Yes		
10	R_87HiWiC3MFN7JOZ	Yes		
11	R_OriTgL6Saov8mbj		No	
12	R_4Oa48befc06icnP	Yes		
13	R_6sZptmaU4C1tL4F	Yes		
14	R_3RjYLwvi2k1a461	Yes		
15	R_9yFmiaZrNpWQ7LD			Not Sure
16	R_5u2etnr4y9i5QO1	Yes		
17	R_0UMPyX55LlyCQ3b	Yes		
18	R_bPfeBhPjIYmPOQt	Yes		
19	R_ePf4cXn0hf8Ktut			Not Sure
20	R_9vKFOI0PFpRoo2V	Yes		
21	R_eLMtGJIXxZ3BaVD			Not Sure
22	R_8izlunm2TsaWEiV	Yes		
23	R_bDRkbC9ABqA6PTn	Yes		
24	R_6ukPoxAc3A4HxiZ	Yes		
25	R_2sEyhsCNfN1Venj	Yes		
26	R_do0VuyRcR2dGfTT	Yes		
27	R_3jwi4AD8Jn0dKLP	Yes		
28	R_a2FQ2Qs2RSis2z3			Not Sure
29	R_3w3gRTCJccy9LYF		No	
30	R_OcsRk3m3c76a1aB			Not Sure
31	R_1H1oDEkGnDbjKzr	Yes		
32	R_0JqpLJxppZV8uTb	Yes		
33	R_d1iK5k50vzgMjtj	Yes		
34	R_9GLTIRzNVGuCjs1			Not Sure
35	R_1FdSSROaWlrKmQR			Not Sure

Survey Question 2

National Grid's metering pilot provides the opportunity for municipalities to assess both the quality of newer lighting technologies and the application of varied operating schedules and conditions.

Would you like your municipality to participate in a lighting quality study?

	ResponseID	Yes	No	Not Sure
1	R_ebnckse3rZsNG7j		No	
2	R_4NJ4RGgRMYkqLBz	Yes		
3	R_9S3l0g11owfQt8h	Yes		
4	R_5BJqGEN8OxPgRKZ	Yes		
5	R_cx4XxaQrySBrrJX		No	
6	R_0THr0jWTFafMt8N	Yes		
7	R_54kdk8ipGCmUVz7	Yes		
8	R_3BGOyV0RUUJZtTn	Yes		
9	R_9AJwWxpDZJzEdoN	Yes		
10	R_87HiWiC3MFN7JOZ	Yes		
11	R_OriTgL6Saov8mbj		No	
12	R_4Oa48befc06icnP	Yes		
13	R_6sZptmaU4C1tL4F			
14	R_3RjYLwvi2k1a461			Not Sure
15	R_9yFmiaZrNpWQ7LD			Not Sure
16	R_5u2etnr4y9i5QO1	Yes		
17	R_0UMPyX55LlyCQ3b	Yes		
18	R_bPfeBhPjIYmPOQt	Yes		
19	R_ePf4cXn0hf8Ktut			
20	R_9vKFOIOPFpRoo2V	Yes		
21	R_eLMtGJIXxZ3BaVD	Yes		
22	R_8izlunm2TsaWEiV	Yes		
23	R_bDRkbC9ABqA6PTn	Yes		
24	R_6ukPoxAc3A4HxiZ	Yes		
25	R_2sEyhsCNfN1Venj	Yes		
26	R_doOVuyRcR2dGfTT	Yes		
27	R_3jwi4AD8JnOdKLP	Yes		
28	R_a2FQ2Qs2RSis2z3			
29	R_3w3gRTCJccy9LYF		No	
30	R_0csRk3m3c76a1aB	Yes		
31	R_1H1oDEkGnDbjKzr			
32	R_0JqpLxppZV8uTb			
33	R_d1iK5k50vzgMjtj	Yes		
34	R_9GLTIRzNVGuCjs1		No	
35	R_1FdSSROaWlRkmQR			

Survey Question 3

Would you be willing to have your municipality participate in a lighting quality study connected to the metering pilot with municipal contribution for labor, product and/or financial resource support?

	ResponseID	Yes	No	Not Sure
1	R_ebnckse3rZsNG7j		No	
2	R_4NJ4RGgRMYkqLBz	Yes		
3	R_9S3l0g11owfQt8h	Yes		
4	R_5BJqGEN8OxPgRKZ			Not Sure
5	R_cx4XxaQrySBrrJX		No	
6	R_0THr0jWTFafMt8N			Not Sure
7	R_54kdk8ipGcmUVz7			Not Sure
8	R_3BGOyVORUUJZtTn	Yes		
9	R_9AJwWxpDZJzEdoN			Not Sure
10	R_87HiWiC3MFN7JOZ			Not Sure
11	R_0riTgL6Saov8mbj		No	
12	R_4Oa48befc06icnP	Yes		
13	R_6sZptmaU4C1tL4F			
14	R_3RjYLwvi2k1a461			Not Sure
15	R_9yFmiaZrNpWQ7LD			Not Sure
16	R_5u2etnr4y9i5QO1			Not Sure
17	R_0UMPyX55LIyCQ3b			Not Sure
18	R_bPfeBhPjIYmPOQt		No	
19	R_ePf4cXn0hf8Ktut			
20	R_9vKFOI0PFpRoo2V	Yes		
21	R_eLMtGJIXz3BaVD	Yes		
22	R_8izlunm2TsaWEiV	Yes		
23	R_bDRkbC9ABqA6PTn			Not Sure
24	R_6ukPoxAc3A4HxiZ			Not Sure
25	R_2sEyhsCNfN1Venj			Not Sure
26	R_do0VuyRcR2dGfTT			Not Sure
27	R_3jwi4AD8Jn0dKLP			Not Sure
28	R_a2FQ2Qs2RSis2z3			
29	R_3w3gRTCjccy9LYF		No	
30	R_0csRk3m3c76a1aB			Not Sure
31	R_1H1oDEkGnDbjKzr			
32	R_0JqpLJxppZV8uTb			
33	R_d1iK5k50vzgMjtj			Not Sure
34	R_9GLTIRzNVGuCjs1		No	
35	R_1FdSSROaWlrKmQR			

Survey Question 4

If you purchase your lights, you may have more options in managing your lighting system than have previously been available. Please select the 3 factors that are most important when you make decisions about outdoor lighting issues for your municipality by dragging them from the left column into the box on the right.

	ResponseID	Most Important Factor #1	Most Important Factor #2	Most Important Factor #3
1	R_ebnckse3rZsNG7j	Dark Sky compliance	Public welfare (safety / security)	Energy efficiency
2	R_4NJ4RGgRMYkqLBz	Public welfare (safety / security)	Energy efficiency	Cost
3	R_9S3l0g11owfQt8h	Public welfare (safety / security)	Cost	Light performance (design)
4	R_5BJqGEN8OxPgRKZ	Other (Municipal ownership)	Public welfare (safety / security)	Energy efficiency
5	R_cx4XxaQrySBrrJX	Actual energy consumption (metered)	Maintenance	Light performance (design)
6	R_0THr0jWTFafMt8N	Actual energy consumption (metered)	Public welfare (safety / security)	Energy efficiency
7	R_54kdk8ipGCmUVz7	Public welfare (safety / security)	Cost	Energy efficiency
8	R_3BGOyV0RUUJZtTn	Public welfare (safety / security)	Cost	Energy efficiency
9	R_9AJwWxpDZJzEdoN	Public welfare (safety / security)	Liability (risk avoidance)	Energy efficiency
10	R_87HiWiC3MFN7JOZ	Public welfare (safety / security)	Energy efficiency	Cost
11	R_OriTgL6Saov8mbj	Actual energy consumption (metered)	Energy efficiency	Public welfare (safety / security)
12	R_4Oa48befc06icnP	Actual energy consumption (metered)	Light performance (design)	Technology
13	R_6sZptmaU4C1tL4F			
14	R_3RjYLwvi2k1a461			
15	R_9yFmiaZrNpWQ7LD			
16	R_5u2etnr4y9i5QO1	Liability (risk avoidance)	Cost	Energy efficiency
17	R_0UMPYx55LlyCQ3b	Public welfare (safety / security)	Cost	Energy efficiency
18	R_bPfeBhPjIYmPOQt	Actual energy consumption (metered)	Energy efficiency	Public welfare (safety / security)
19	R_ePf4cXn0hf8Ktut			
20	R_9vKFOlOPFpRoo2V	Public welfare (safety / security)	Cost	Lighting controls
21	R_eLMtGJIXxZ3BaVD	Public welfare (safety / security)	Lighting controls	Energy efficiency

Survey Question 4

If you purchase your lights, you may have more options in managing your lighting system than have previously been available. Please select the 3 factors that are most important when you make decisions about outdoor lighting issues for your municipality by dragging them from the left column into the box on the right.

	ResponseID	Most Important Factor #1	Most Important Factor #2	Most Important Factor #3
22	R_8izlunm2TsaWEiV	Cost	Energy efficiency	Lighting controls
23	R_bDRkbC9ABqA6PTn	Public welfare (safety / security)	Actual energy consumption (metered)	Energy efficiency
24	R_6ukPoxAc3A4HxiZ	Actual energy consumption (metered)	Cost	Maintenance
25	R_2sEyhsCNfN1Venj	Public welfare (safety / security)	Actual energy consumption (metered)	Lighting controls
26	R_do0VuyRcR2dGfTT	Cost	Public welfare (safety / security)	Maintenance
27	R_3jwi4AD8JnOdKLP	Public welfare (safety / security)	Cost	Actual energy consumption (metered)
28	R_a2FQ2Qs2RSis2z3			
29	R_3w3gRTCJccy9LYF			
30	R_0csRk3m3c76a1aB			
31	R_1H1oDEkGnDbjKzr			
32	R_0JqpLJxppZV8uTb			
33	R_d1iK5k50vzgMjtj			
34	R_9GLTIRzNVGuCjs1			
35	R_1FdSSROaWlrKmQR			

Response Options:
Public welfare (safety / security)
Liability (risk avoidance)
Actual energy consumption (metered)
Energy efficiency
Light performance (design)
Compliance with industry codes/standards
Product options/procurement
Cost
Aesthetics
Maintenance
Outage reporting
Technology
Lighting controls
Dark Sky compliance
Other, please specify

Survey Question 5

How familiar are you regarding the following new lighting sources and control technologies associated with street lighting? (Responses use the following scale: Not At All Familiar; Somewhat Unfamiliar; Neither Familiar or Unfamiliar; Somewhat Familiar; Very Familiar)

	ResponseID	Adaptive operating controls and schedules	Communications networks	Solid State Lighting, such as Light Emitting Diode, (LED)	Human health effects of lighting	Meter standards and testing	Physiological and vision effects	Lighting metric standards
1	R_ebnckse3rZsNG7j	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Familiar
2	R_4NJ4RGgRMYkqLbZ	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar
3	R_9S3l0g11owfQt8h	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Very Familiar	Somewhat Familiar	Somewhat Familiar
4	R_5BJqGEN8OxPgRKZ	Neither Familiar or Unfamiliar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar
5	R_cx4XxaQrySBrrJX	Very Familiar	Very Familiar	Very Familiar	Somewhat Familiar	Very Familiar	Somewhat Familiar	Somewhat Familiar
6	R_0THr0jWTFafMt8N	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar
7	R_54kdk8ipGCmUVz7	Not At All Familiar	Not At All Familiar	Somewhat Unfamiliar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar
8	R_3BGOyV0RUUJztTn	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar
9	R_9AJwWxpDZJzEdoN	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar
10	R_87HiWiC3MFN7JOZ	Not At All Familiar	Somewhat Familiar	Somewhat Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar
11	R_0riTgL6Saov8mbj	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar
12	R_4Oa48befc06icnP	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar
13	R_6sZptmaU4C1tL4F							
14	R_3RjYLwvi2k1a461							
15	R_9yFmiaZrNpWQ7LD							
16	R_5u2etnr4y9i5QO1	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Unfamiliar
17	R_0UMPyx55LlyCQ3b	Not At All Familiar	Not At All Familiar	Somewhat Unfamiliar	Somewhat Unfamiliar	Not At All Familiar	Not At All Familiar	Not At All Familiar
18	R_bPfeBhPjYmPOQt	Not At All Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Neither Familiar or Unfamiliar	Not At All Familiar	Neither Familiar or Unfamiliar
19	R_ePf4cXn0hf8Ktut							
20	R_9vKFOI0PFpRoo2V	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar	Not At All Familiar
21	R_eLMtGJIXz3BaVD	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar
22	R_8izlunm2TsaWEIV	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Unfamiliar	Somewhat Unfamiliar	Not At All Familiar	Not At All Familiar
23	R_bDRkbC9ABqA6PTn	Somewhat Familiar	Somewhat Familiar	Somewhat Familiar	Somewhat Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Somewhat Familiar
24	R_6ukPoxAc3A4HxiZ	Somewhat Familiar	Somewhat Unfamiliar	Somewhat Familiar	Somewhat Unfamiliar	Somewhat Familiar	Somewhat Unfamiliar	Somewhat Unfamiliar

Survey Question 5

How familiar are you regarding the following new lighting sources and control technologies associated with street lighting? (Responses use the following scale: Not At All Familiar; Somewhat Unfamiliar; Neither Familiar or Unfamiliar; Somewhat Familiar; Very Familiar)

	ResponseID	Adaptive operating controls and schedules	Communications networks	Solid State Lighting, such as Light Emitting Diode, (LED)	Human health effects of lighting	Meter standards and testing	Physiological and vision effects	Lighting metric standards
25	R_2sEyhsCNfN1Venj	Not At All Familiar	Not At All Familiar	Somewhat Unfamiliar	Somewhat Unfamiliar	Somewhat Unfamiliar	Somewhat Unfamiliar	Not At All Familiar
26	R_do0VuyRcR2dGFTT	Somewhat Unfamiliar	Somewhat Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar	Not At All Familiar	Neither Familiar or Unfamiliar	Not At All Familiar
27	R_3jwi4AD8Jn0dKLP	Somewhat Familiar	Neither Familiar or Unfamiliar	Somewhat Familiar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar	Neither Familiar or Unfamiliar
28	R_a2FQ2Qs2RSis2z3							
29	R_3w3gRTCJccy9LYF							
30	R_0csRk3m3c76a1aB							
31	R_1H1oDEkGnDbjKzr							
32	R_0JqpLJxppZV8uTb							
33	R_d1iK5k50vzgMjtj							
34	R_9GLTIRzNVGuCjs1							
35	R_1FdSSROaWlrKmQR							

Survey Question 6

How likely would you be to reduce light output or turn off streetlights during the night in your municipality if it resulted in overall cost savings?

	ResponseID	Not Likely At All	Somewhat Unlikely	Neither Likely Nor Unlikely	Somewhat Likely	Very Likely
1	R_ebnckse3rZsNG7j			Neither Likely Nor Unlikely		
2	R_4NJ4RGgRMYkqLBz					Very Likely
3	R_9S3l0g11owfQt8h			Neither Likely Nor Unlikely		
4	R_5BJqGEN8OxPgRKZ			Neither Likely Nor Unlikely		
5	R_cx4XxaQrySBrrJX					Very Likely
6	R_0THr0jWTFafMt8N				Somewhat Likely	
7	R_54kdk8ipGCmUVz7					Very Likely
8	R_3BGOyV0RUUJZtTn				Somewhat Likely	
9	R_9AJwWxpDZJzEdoN	Not Likely At All				
10	R_87HiWiC3MFN7JOZ	Not Likely At All				
11	R_0riTgL6Saov8mbj	Not Likely At All				
12	R_40a48befc06icnP			Neither Likely Nor Unlikely		
13	R_6sZptmaU4C1tL4F					
14	R_3RjYLwvi2k1a461					
15	R_9yFmiaZrNpWQ7LD					
16	R_5u2etnr4y9i5QO1			Neither Likely Nor Unlikely		
17	R_0UMPyX55LlyCQ3b					
18	R_bPfeBhPjIYmPOQt					
19	R_ePf4cXn0hf8Ktut					
20	R_9vKFOI0PFpRoo2V			Neither Likely Nor Unlikely		
21	R_eLMtGJIXxZ3BaVD					Very Likely
22	R_8izlunm2TsaWEiV					
23	R_bDRkbc9ABqA6PTn					Very Likely
24	R_6ukPoxAc3A4HxiZ				Somewhat Likely	

Survey Question 6

How likely would you be to reduce light output or turn off streetlights during the night in your municipality if it resulted in overall cost savings?

	ResponseID	Not Likely At All	Somewhat Unlikely	Neither Likely Nor Unlikely	Somewhat Likely	Very Likely
25	R_2sEyhsCNfN1Venj		Somewhat Unlikely			
26	R_do0VuyRcR2dGfTT					Very Likely
27	R_3jwi4AD8Jn0dKLP		Somewhat Unlikely			
28	R_a2FQ2Qs2RSis2z3					
29	R_3w3gRTCJccy9LYF					
30	R_0csRk3m3c76a1aB					
31	R_1H1oDEkGnDbjKzr					
32	R_0JqpLxppZV8uTb					
33	R_d1iK5k50vzgMjtj					
34	R_9GLTIRzNVGuCjs1					
35	R_1FdSSROaWlrKmQR					

Survey Question 7

Does your municipality currently have customer-owned street lights attached to a conventional electric meter (similar to that on a residential or commercial building)?

	ResponseID	Yes	No	Not Sure
1	R_ebnckse3rZsNG7j	Yes		
2	R_4NJ4RGgRMYkqLBz			Not Sure
3	R_9S3l0g11owfQt8h	Yes		
4	R_5BJqGEN8OxPgRKZ		No	
5	R_cx4XxaQrySBrrJX	Yes		
6	R_0THr0jWTFaFmT8N	Yes		
7	R_54kdk8ipGCmUVz7	Yes		
8	R_3BGOyV0RUUJZtTn		No	
9	R_9AJwWxpDZJzEdoN	Yes		
10	R_87HiWiC3MFN7JOZ	Yes		
11	R_0riTgL6Saov8mbj	Yes		
12	R_4Oa48befc06icnP	Yes		
13	R_6sZptmaU4C1tL4F			
14	R_3RjYLwvi2k1a461			
15	R_9yFmiaZrNpWQ7LD			
16	R_5u2etnr4y9i5QO1			Not Sure
17	R_0UMPyX55LlyCQ3b			
18	R_bPfeBhPjIYmPOQt			
19	R_ePf4cXn0hf8Ktut			
20	R_9vKFOlOPFpRoo2V		No	
21	R_eLMtGJIXxZ3BaVD		No	
22	R_8izlunm2TsaWEIV			
23	R_bDRkbC9ABqA6PTn		No	
24	R_6ukPoxAc3A4HxiZ			Not Sure
25	R_2sEyhsCNfN1Venj	Yes		
26	R_do0VuyRcR2dGfTT	Yes		
27	R_3jwi4AD8JnOdKLP		No	
28	R_a2FQ2Qs2RSis2z3			
29	R_3w3gRTCJccy9LYF			
30	R_0csRk3m3c76a1aB			
31	R_1H1oDEkGnDbjKzr			
32	R_0JqpLJxppZV8uTb			
33	R_d1iK5k50vzgMjtj			
34	R_9GLTIRzNVGuCjs1			
35	R_1FdSSROaWlrKmQR			

Survey Question 8

Approximately how many metered streetlights do you have in your municipality?

	ResponseID	Quantity
1	R_ebnckse3rZsNG7j	300
2	R_4NJ4RGgRMYkqLBz	0
3	R_9S3l0g11owfQt8h	500
4	R_5BJqGEN8OxPgRKZ	0
5	R_cx4XxaQrySBrrJX	1500
6	R_0THr0jWTFaMt8N	65
7	R_54kdk8ipGCmUVz7	10
8	R_3BGOyV0RUUJZtTn	0
9	R_9AJwWxpDZJzEdoN	200
10	R_87HiWiC3MFN7JOZ	100
11	R_0riTgL6Saov8mbj	0
12	R_4Oa48befc06icnP	1500
13	R_6sZptmaU4C1tL4F	
14	R_3RjYLwvi2k1a461	
15	R_9yFmiaZrNpWQ7LD	
16	R_5u2etnr4y9i5QO1	200
17	R_0UMPyX55LlyCQ3b	
18	R_bPfeBhPjIYmPOQt	
19	R_ePf4cXn0hf8Ktut	
20	R_9vKFOlOPfpRoo2V	231
21	R_eLMtGJIXxZ3BaVD	5
22	R_8izlunm2TsaWEiV	
23	R_bDRkbC9ABqA6PTn	450
24	R_6ukPoxAc3A4HxiZ	0
25	R_2sEyhsCNfN1Venj	150
26	R_do0VuyRcR2dGfTT	200
27	R_3jwi4AD8JnOdKLP	0
28	R_a2FQ2Qs2RSis2z3	
29	R_3w3gRTCJccy9LYF	
30	R_0csRk3m3c76a1aB	
31	R_1H1oDEkGnDbjKzr	
32	R_0JqpLJxppZV8uTb	
33	R_d1iK5k50vzgMjtj	
34	R_9GLTIRzNVGuCjs1	
35	R_1FdSSROaWlrKmQR	

Survey Question 9

How familiar are you with the Rhode Island General Law § 39-30-1, the Municipal Streetlights Investment Act, which allows a city or town to purchase the streetlight system from the electric utility?

	ResponseID	Not At All Familiar	Somewhat Unfamiliar	Neither Familiar Nor Unfamiliar	Somewhat Familiar	Very Familiar
1	R_ebnckse3rZsNG7j				Somewhat Familiar	
2	R_4NJ4RGgRMYkqLBz	Not At All Familiar				
3	R_9S3l0g11owfQt8h				Somewhat Familiar	
4	R_5BJqGEN8OxPgRKZ				Somewhat Familiar	
5	R_cx4XxaQrySBrrJX				Somewhat Familiar	
6	R_0THr0jWTFafMt8N				Somewhat Familiar	
7	R_54kdk8ipGCmUVz7				Somewhat Familiar	
8	R_3BGOyV0RUUJZtTn			Neither Familiar Nor Unfamiliar		
9	R_9AJwWxpDZJzEdoN	Not At All Familiar				
10	R_87HiWiC3MfN7JOZ		Somewhat Unfamiliar			
11	R_OriTgl6Saov8mbj	Not At All Familiar				
12	R_4Oa48befc06icnP					Very Familiar
13	R_6sZptmaU4C1tL4F					
14	R_3RjYLwvi2k1a461					
15	R_9yFmiaZrNpWQ7LD					
16	R_5u2etnr4y9i5QO1				Somewhat Familiar	
17	R_0UMPyX55LlyCQ3b					
18	R_bPfeBhPjYmPOQt					
19	R_ePf4cXn0hf8Ktut					
20	R_9vKFOIOPFpRoo2V	Not At All Familiar				
21	R_eLMtGJIXz3BaVD	Not At All Familiar				
22	R_8izlunm2TsaWEiV					
23	R_bDRkbC9ABqA6PTn				Somewhat Familiar	
24	R_6ukPoxAc3A4HxiZ				Somewhat Familiar	
25	R_2sEyhsCNfN1Venj		Somewhat Unfamiliar			
26	R_do0VuyRcR2dGfTT				Somewhat Familiar	
27	R_3jwi4AD8Jn0dKLP					Very Familiar
28	R_a2FQ2Qs2RSis2z3					
29	R_3w3gRTCJccy9LYF					
30	R_0csRk3m3c76a1aB					
31	R_1H1oDEkGnDbjKzr					
32	R_0JqpLxppZV8uTb					
33	R_d1iK5k50vzgMjtj					
34	R_9GLTIRzNVGuCjs1					
35	R_1FdSSROaWlrKmQR					

Survey Question 10

What is your municipality's plan regarding purchasing the utility street lighting system as allowed under R.I.G.L. § 39-30-1?

	ResponseID	Planning to purchase the system within a year	Planning to purchase the system within the next 2 years	Planning to purchase the system within the next 3 years	Evaluating the opportunity to purchase	Not planning to purchase the system within the next 3 years	Not sure
1	R_ebnckse3rzSNG7J	Planning to purchase the system within a year					
2	R_4NJ4RGgRMYkqLBz						Not sure
3	R_9S3l0g11owfQt8h				Evaluating the opportunity to purchase		
4	R_5BJqGEN8OxPgRKZ				Evaluating the opportunity to purchase		
5	R_cx4XxaQrySBrrJX	Planning to purchase the system within a year					
6	R_0THr0jWTFafMt8N	Planning to purchase the system within a year					
7	R_54kdk8ipGcmUVz7	Planning to purchase the system within a year					
8	R_3BGOyV0RUUJZtTn				Evaluating the opportunity to purchase		
9	R_9AJwWxpDZjzEdoN						Not sure
10	R_87HIWIC3MFN7JOZ			Planning to purchase the system within the next 3 years			
11	R_0riTgL6Saov8mbj					Not planning to purchase the system within the next 3 years	
12	R_4Oa48befc06icnP				Evaluating the opportunity to purchase		
13	R_6sZptmaU4C1tL4F						
14	R_3RjYLwvi2k1a461						
15	R_9yFmiaZrNpWQ7LD						
16	R_5u2etnr4y9i5QO1				Evaluating the opportunity to purchase		
17	R_0UMPyX55LlyCQ3b						
18	R_bPfeBhPjIYmPOQt						
19	R_ePf4cXn0hf8Ktut						
20	R_9vKFOl0PFpRoo2V				Evaluating the opportunity to purchase		
21	R_eLMTGJIxZ3BaVD						Not sure
22	R_8izlunm2TsaWEIV						
23	R_bDRkbC9ABqA6PTn	Planning to purchase the system within a year					
24	R_6ukPoxAc3A4HxiZ				Evaluating the opportunity to purchase		
25	R_2sEyhsCNfN1Venj				Evaluating the opportunity to purchase		
26	R_do0VuyRcR2dGFTT				Evaluating the opportunity to purchase		
27	R_3jwi4AD8In0dKLP				Evaluating the opportunity to purchase		
28	R_a2FQ2Qs2RSis2z3						
29	R_3w3gRTCjccy9LYF						
30	R_0csRk3m3c76a1aB						
31	R_1H1oDEKgnDbjKzr						
32	R_0JqpLjxppZV8uTb						
33	R_d1IK5k50vzgMjtj						
34	R_9GLTIRzNVGuCjs1						
35	R_1FdSSROaWirKmQR						

Survey Question 11

[Reference Note: Question only asked of those respondents that plan to purchase utility street light system.]

Which technology do you intend to install when you purchase the utility streetlight system? (Select all that apply.)

	ResponseID	Induction	LED	Plasma	Other technology (please specify)	I will evaluate all appropriate technologies	I do not plan to change the existing lighting equipment
1	R_ebnckse3rZsNG7j		LED				
2	R_4NJ4RGgRMYkqLBz						
3	R_9S3l0g11owfQt8h						
4	R_5BJqGEN8OxPgRKZ						
5	R_cx4XxaQrySBrrJX		LED				
6	R_0THr0jWTFafMt8N		LED			I will evaluate all appropriate technologies	
7	R_54kdk8ipGCmUVz7					I will evaluate all appropriate technologies	
8	R_3BGOyV0RUUJZtTn						
9	R_9AJwWxpDZJzEdoN						
10	R_87HiWiC3MFN7JOZ						
11	R_0riTgL6Saov8mbj						
12	R_4Oa48befc06icnP						
13	R_6sZptmaU4C1tL4F						
14	R_3RjYLwvi2k1a461						
15	R_9yFmiaZrNpWQ7LD						
16	R_5u2etnr4y9i5QO1						
17	R_0UMPyX55LlyCQ3b						
18	R_bPfeBhPjIYmPOQt						
19	R_ePf4cXn0hf8Ktut						
20	R_9vKFOlOPFpRoo2V						
21	R_eLMtGJIXz3BaVD						
22	R_8izlunm2TsaWEIV						
23	R_bDRkbC9ABqA6PTn		LED				
24	R_6ukPoxAc3A4HxiZ						
25	R_2sEyhsCNfn1Venj						
26	R_do0VuyRcR2dGfTT						
27	R_3jwi4AD8Jn0dKLP						
28	R_a2FQ2Qs2RSis2z3						
29	R_3w3gRTCJccy9LYF						
30	R_0csRk3m3c76a1aB						
31	R_1H1oDEkGnDbjKzr						
32	R_0JqpLJxppZV8uTb						
33	R_d1iK5k50vzgMjtj						
34	R_9GLTIRzNVGuCjs1						
35	R_1FdSSROaWlrKmQR						

Survey Question 12

[Reference Note: Questions only asked of those respondents that plan to purchase the utility streetlight system.]

How soon after the transfer of ownership do you expect the conversion to be completed?

	ResponseID	Number of months
1	R_ebnckse3rZsNG7j	12
2	R_4NJ4RGgRMYkqLBz	
3	R_9S3l0g11owfQt8h	
4	R_5BJqGEN8OxPgRKZ	
5	R_cx4XxaQrySBrrJX	12
6	R_0THr0jWTFafMt8N	36
7	R_54kdk8ipGCmUVz7	12
8	R_3BGOyVORUJZtTn	
9	R_9AJwWxpDZJzEdoN	
10	R_87HiWiC3MFN7JOZ	
11	R_0riTgL6Saov8mbj	
12	R_4Oa48befc06icnP	
13	R_6sZptmaU4C1tL4F	
14	R_3RjYlWvi2k1a461	
15	R_9yFmiaZrNpWQ7LD	
16	R_5u2etnr4y9i5QO1	
17	R_0UMPyX55LlyCQ3b	
18	R_bPfeBhPjIYmPOQt	
19	R_ePf4cXn0hf8Ktut	
20	R_9vKFOIOPfRoo2V	
21	R_eLMtGJIXxZ3BaVD	
22	R_8izlunm2TsaWEiV	
23	R_bDRkbC9ABqA6PTn	36
24	R_6ukPoxAc3A4HxiZ	
25	R_2sEyhsCNfN1Venj	
26	R_do0VuyRcR2dGfTT	
27	R_3jwi4AD8Jn0dKLP	
28	R_a2FQ2Qs2RSis2z3	
29	R_3w3gRTCJccy9LYF	
30	R_0csRk3m3c76a1aB	
31	R_1H1oDEkGnDbjKzr	
32	R_0JqpLxppZV8uTb	
33	R_d1iK5k50vzgMjtj	
34	R_9GLTIRzNVGuCjs1	
35	R_1FdSSROaWlrKmQR	

Survey Question 13

[Reference Note: Question only asked of those respondents that plan to purchase utility streetlight system.]

Many of the new street lighting technologies can accommodate dimming, with some having instant on/off capability. How likely are you to use these features in your municipality to save energy?

	ResponseID	Not Likely At All	Somewhat Unlikely	Neither Likely Nor Unlikely	Somewhat Likely	Very Likely
1	R_ebnckse3rZsNG7j		Somewhat Unlikely			
2	R_4NJ4RGgRMYkqLBz					Very Likely
3	R_9S3l0g11owfQt8h				Somewhat Likely	
4	R_5BJqGEN8OxPgRKZ				Somewhat Likely	
5	R_cx4XxaQrySBrrJX					Very Likely
6	R_0THr0jWTFafMt8N					Very Likely
7	R_54kdk8ipGCmUVz7				Somewhat Likely	
8	R_3BGOyV0RUUJZtTn				Somewhat Likely	
9	R_9AJwWxpDZJzEdoN					Very Likely
10	R_87HiWiC3MFN7JOZ			Neither Likely Nor Unlikely		
11	R_0riTgL6Saov8mbj	Not Likely At All				
12	R_4Oa48befc06icnP					Very Likely
13	R_6sZptmaU4C1tL4F					
14	R_3RjYLwvi2k1a461					
15	R_9yFmiaZrNpWQ7LD					
16	R_5u2etrn4y9i5QO1				Somewhat Likely	
17	R_0UMPyX55LlyCQ3b					
18	R_bPfeBhPjIYmPOQt					
19	R_ePf4cXn0hf8Ktut					
20	R_9vKFOlOPFpRoo2V		Somewhat Unlikely			
21	R_eLMtGJIXxZ3BaVD					
22	R_8izlunm2TsaWEiV					
23	R_bDRkbC9ABqA6PTn					Very Likely
24	R_6ukPoxAc3A4HxiZ				Somewhat Likely	
25	R_2sEyhsCNfN1Venj				Somewhat Likely	
26	R_do0VuyRcR2dGfTT					Very Likely
27	R_3jwi4AD8JnOdKLP			Neither Likely Nor Unlikely		
28	R_a2FQ2Qs2RSis2z3					
29	R_3w3gRTCjccy9LYF					
30	R_0csRk3m3c76a1aB					
31	R_1H1oDEkGnDbjKzr					
32	R_0JqpLJxppZV8uTb					
33	R_d1iK5k50vzgMjtj					
34	R_9GLTIRzNVGuCjs1					
35	R_1FdSSROaWlrKmQR					

Survey Question 14

[Reference Note: Question only asked of those respondents interested in a lighting quality study.]

Which of the following would you like to have included in a lighting quality study? (Select all that apply)

	ResponseID	Dimming operation	Public feedback instruments	Drive current evaluation	Motion sensor operation	Illumination level monitoring	Visual assessment	Illumination pattern monitoring	Part-Night operation (on/off)	Lighting layout design	Color temperature assessment	None of the above
1	R_ebnckse3rZsNG7J											
2	R_4NJ4RGgRMYkqLBz	Dimming operation			Motion sensor operation	Illumination level monitoring	Visual assessment			Lighting layout design		
3	R_9S3l0g11owfQt8h	Dimming operation	Public feedback instruments	Drive current evaluation	Motion sensor operation	Illumination level monitoring	Visual assessment	Illumination pattern monitoring		Lighting layout design	Color temperature assessment	
4	R_5BJqGEN8OxPgRKZ	Dimming operation	Public feedback instruments	Drive current evaluation	Motion sensor operation							
5	R_cx4XxaQrySBrrJX											
6	R_0THr0jWTFaFmT8N	Dimming operation	Public feedback instruments		Motion sensor operation	Illumination level monitoring		Illumination pattern monitoring		Lighting layout design		
7	R_54kdk8ipGCmUVz7	Dimming operation	Public feedback instruments			Illumination level monitoring				Lighting layout design		
8	R_3BGOyV0RUUJZtTn	Dimming operation	Public feedback instruments	Drive current evaluation	Motion sensor operation		Visual assessment					
9	R_9AJwWxpDZJzEdoN	Dimming operation		Drive current evaluation	Motion sensor operation	Illumination level monitoring	Visual assessment	Illumination pattern monitoring		Lighting layout design		
10	R_87HiWiC3MFN7JOZ											None of the above
11	R_OriTgL6Saov8mbj											
12	R_4Oa48befc06icnP	Dimming operation		Drive current evaluation		Illumination level monitoring	Visual assessment	Illumination pattern monitoring		Lighting layout design	Color temperature assessment	
13	R_6sZptmaU4C1tL4F											
14	R_3RjYLwvi2k1a461											
15	R_9yFmiaZrNpWQ7LD											
16	R_5u2etr4y9i5QO1	Dimming operation				Illumination level monitoring		Illumination pattern monitoring		Lighting layout design		
17	R_0UMPyX55LlyCQ3b											
18	R_bPfeBhPjIYmPOQt											
19	R_ePf4cxN0hf8Ktut											
20	R_9vKFOIOPfPoo2V											None of the above
21	R_eLMtGJIXxZ3BaVD											
22	R_8izlunm2TsaWEiV											
23	R_bDRkbc9ABqA6PTn		Public feedback instruments	Drive current evaluation	Motion sensor operation	Illumination level monitoring	Visual assessment	Illumination pattern monitoring		Lighting layout design		

Survey Question 16

Please use the space below to share any subjects or issues, other than the ones included in earlier questions, that your municipality would like included in the metering pilot.

	ResponseID	Response
1	R_ebnckse3rZsNG7j	
2	R_4NJ4RGgRMYkqLBz	
3	R_9S3l0g11owfQt8h	
4	R_5BJqGEN8OxPgRKZ	
5	R_cx4XxaQrySBrrJX	Resident reaction to dimming at various times, especially 2-5am
6	R_0THr0jWTFafMt8N	
7	R_54kdk8ipGCmUVz7	
8	R_3BGOyV0RUUJZtTn	
9	R_9AJwWxpDZJzEdoN	Detailed analysis of the cost of metered vs non metered. Any and all recommendations to improve the efficiency and effectiveness of the current lighting system.
10	R_87HiWiC3MFN7JOZ	
11	R_0riTgL6Saov8mbj	
12	R_4Oa48befc06icnP	
13	R_6sZptmaU4C1tL4F	
14	R_3RjYLwvi2k1a461	
15	R_9yFmiaZrNpWQ7LD	
16	R_5u2etnr4y9i5QO1	
17	R_0UMPyX55LlyCQ3b	
18	R_bPfeBhPjIYmPOQt	
19	R_ePf4cXn0hf8Ktut	
20	R_9vKFOI0PFpRoo2V	
21	R_eLMtGJIXxZ3BaVD	
22	R_8izlunm2TsaWEiV	
23	R_bDRkbC9ABqA6PTn	
24	R_6ukPoxAc3A4HxiZ	
25	R_2sEyhsCNfN1Venj	
26	R_do0VuyRcR2dGfTT	The primary concern regarding this alternative would be cost, both the initial capital cost and the maintenance cost. Please provide additional information regarding these items.
27	R_3jwi4AD8Jn0dKLP	
28	R_a2FQ2Qs2RSis2z3	
29	R_3w3gRTCJccy9LYF	
30	R_0csRk3m3c76a1aB	
31	R_1H1oDEkGnDbjKzr	
32	R_0JqpLjxppZV8uTb	
33	R_d1iK5k50vzgMjtj	
34	R_9GLTIRzNVGuCjs1	
35	R_1FdSSROaWlrKmQR	

Response Transaction Data Summary

	ResponseID	ResponseSet	Name	Status	StartDate	EndDate	Finished
1	R_ebnckse3rZsNG7j	Default Response Set	Anonymous	0	10/6/2014 13:42	10/6/2014 14:32	1
2	R_4NJ4RGgRMYkqLBz	Default Response Set	Anonymous	0	10/6/2014 16:09	10/6/2014 16:15	1
3	R_9S3l0g11owfQt8h	Default Response Set	Anonymous	0	10/7/2014 0:24	10/7/2014 0:29	1
4	R_5BJqGEN8OxPgRKZ	Default Response Set	Anonymous	0	10/6/2014 15:13	10/7/2014 8:31	1
5	R_cx4XxaQrySBrrJX	Default Response Set	Anonymous	0	10/7/2014 8:44	10/7/2014 10:18	1
6	R_0THr0jWTFafMt8N	Default Response Set	Anonymous	0	10/7/2014 10:58	10/7/2014 11:03	1
7	R_54kdk8ipGCmUVz7	Default Response Set	Anonymous	0	10/7/2014 11:03	10/7/2014 11:15	1
8	R_3BGOyV0RUUJZtTn	Default Response Set	Anonymous	0	10/7/2014 9:38	10/7/2014 17:34	1
9	R_9AJwWxpDZJzEdoN	Default Response Set	Anonymous	0	10/8/2014 8:14	10/8/2014 8:26	1
10	R_87HiWiC3MFN7JOZ	Default Response Set	Anonymous	0	10/8/2014 9:09	10/8/2014 9:17	1
11	R_OriTgL6Saov8mbj	Default Response Set	Anonymous	0	10/6/2014 14:38	10/9/2014 11:00	1
12	R_4Oa48befc06icnP	Default Response Set	Anonymous	0	10/9/2014 16:46	10/9/2014 16:53	1
13	R_6sZptmaU4C1tL4F	Default Response Set	Anonymous	0	10/6/2014 9:08	10/6/2014 9:13	0
14	R_3RjYLwvi2k1a461	Default Response Set	Anonymous	0	10/6/2014 13:23	10/6/2014 13:24	0
15	R_9yFmiaZrNpWQ7LD	Default Response Set	Anonymous	0	10/6/2014 13:24	10/6/2014 13:25	0
16	R_5u2etnr4y9i5QO1	Default Response Set	Anonymous	0	10/6/2014 13:10	10/7/2014 8:50	0
17	R_0UMPyX55LlyCQ3b	Default Response Set	Anonymous	0	10/7/2014 11:03	10/7/2014 11:11	0
18	R_bPfeBhPjIYmPOQt	Default Response Set	Anonymous	0	10/7/2014 12:51	10/7/2014 12:55	0
19	R_ePf4cXn0hf8Ktut	Default Response Set	Anonymous	0	10/7/2014 18:50	10/7/2014 18:50	0
20	R_9vKFOl0PFpRoo2V	Default Response Set	Anonymous	0	10/15/2014 9:12	10/15/2014 9:19	1
21	R_eLMtGJIXz3BaVD	Default Response Set	Anonymous	0	10/8/2014 12:11	10/8/2014 12:16	0
22	R_8izlunm2TsaWEiV	Default Response Set	Anonymous	0	10/9/2014 20:54	10/9/2014 21:05	0
23	R_bDRkbC9ABqA6PTn	Default Response Set	Anonymous	0	10/23/2014 8:47	10/23/2014 9:04	1
24	R_6ukPoxAc3A4HxiZ	Default Response Set	Anonymous	0	10/23/2014 11:09	10/23/2014 11:20	1
25	R_2sEyhsCNfn1Venj	Default Response Set	Anonymous	0	10/23/2014 11:34	10/23/2014 16:39	1
26	R_do0VuyRcR2dGfTT	Default Response Set	Anonymous	0	10/24/2014 8:33	10/24/2014 9:00	1

Response Transaction Data Summary

	ResponseID	ResponseSet	Name	Status	StartDate	EndDate	Finished
27	R_3jwi4AD8Jn0dKLP	Default Response Set	Anonymous	0	10/24/2014 10:46	10/24/2014 10:56	1
28	R_a2FQ2Qs2RSis2z3	Default Response Set	Anonymous	0	10/22/2014 18:17	10/22/2014 18:18	0
29	R_3w3gRTCJccy9LYF	Default Response Set	Anonymous	0	10/23/2014 8:56	10/23/2014 8:58	0
30	R_0csRk3m3c76a1aB	Default Response Set	Anonymous	0	10/23/2014 12:37	10/23/2014 12:39	0
31	R_1H1oDEkGnDbjKzr	Default Response Set	Anonymous	0	10/23/2014 14:45	10/23/2014 14:45	0
32	R_0JqpLJxppZV8uTb	Default Response Set	Anonymous	0	10/23/2014 15:10	10/23/2014 15:11	0
33	R_d1iK5k50vzgMjtj	Default Response Set	Anonymous	0	10/27/2014 10:44	10/27/2014 14:04	0
34	R_9GLTIRzNVGuCjs1	Default Response Set	Anonymous	0	10/27/2014 11:48	10/27/2014 15:48	0
35	R_1FdSSROaWlrKmQR	Default Response Set	Anonymous	0	10/23/2014 14:55	11/4/2014 6:51	0

PUC 1-7

Request:

Please explain in detail how the Company involved the municipalities in the development of the pilot proposal.

Response:

National Grid developed an initial pilot scope to comply with the specific requirements as stated in the PUC's July 25, 2014 memorandum in this docket. Following the establishment of internal department responsibilities and external partnerships with supporting organizations, the Company held a meeting on September 3, 2014 to discuss the Company's ideas for the pilot proposal with the municipalities. During this meeting, the Company identified the various functional elements of the pilot and the responsibilities of the applicable pilot participants. The Company identified and communicated that the municipalities had minimal contributory involvement in the actual meter testing and information system assessment. The Company proposed that the participation of selected municipalities should be focused on the LED lighting technology and the associated controllability through the use of a communication network.

The meter technology that will be examined in the proposed metering pilot requires specific compatibility with the selected communication network, and therefore, only a limited quantity of products is available for testing. These constraints did not afford an opportunity for municipal customers to be involved in the development of this portion of the pilot.

The determination of municipal participation requires an understanding of the objectives and commitment of the project by all interested municipalities. The Company developed a questionnaire to be administered electronically to various representatives in each municipality. On September 21, 2014, the Company provided the draft survey questions to all involved parties for review. The Company then incorporated comments and other revisions from the parties during the period of September 21, 2014 – October 3, 2014. On October 6, 2014, the Company electronically transmitted the internet-based questionnaire to approximately 130 municipal leaders. In the October 6 transmittal, the Company requested a timely response to the questionnaire. On October 7, the Company provided the parties with the distribution contact list it used for the questionnaire. After 14 days, the survey response rate was less than anticipated. Therefore, on October 23, the Company sent a second questionnaire communication to the municipal leaders with an extended survey response time of October 31, 2014. Once municipalities are selected to participate in the pilot, their participation will focus on deployment of the meter/control technology for the purpose of studying lighting operation and illumination quality under varied operating conditions. The orientation of the control/meter device will be

PUC 1-7, page 2

known after the Company identifies the participating municipalities, selected locations, and the ownership and nature of the equipment that will be used in the metering pilot.

On October 16, 2014, the Company sent a draft of the metering pilot proposal to the parties in the proceeding for review and comment. On October 21, 2014, the Company sent another draft of the metering pilot to the parties in advance of the October 23 filing date. The Company did not receive any comments or feedback to the metering pilot proposal before it filed the proposal on October 23.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4513
In Re: Street light Metering Pilot Proposal
Responses to Commission's First Set of Data Requests
Issued November 7, 2014

PUC 1-8

Request:

Please provide additional detail to support the cost estimates on page 17 of the pilot proposal. Please detail the applicable Company adders and overhead.

Response:

Additional estimate detail is provided on Attachments PUC 1-8a and 1-8b. The detail for Company adders and overhead factors is provided below:

Company Adders and Overhead applicable to the pilot cost estimate.
Values represent latest available information, October 2014.

Narragansett Electric Adders & Overheads (October 2014)	Rate
Stores Handling	11%
Supervision & Administration	29.67%
Capital Overhead (Distribution)	30.35%

Labor (October 2014)	Narragansett Electric	NG USA Service Company
401K Match	3.23%	5.00%
Group Insurance	1.26%	2.00%
Healthcare	14.21%	17.00%
FAS112	1.53%	0.00%
Payroll Taxes	8.70%	9.00%
Time Not Worked	19.64%	16.00%
Variable Pay Incentive Mgmt	15.50%	17.00%
Variable Pay Gainshare Non-Mgmt	4.00%	2.50%
Workers Compensation	0.03%	3.0%
Total	68.10%	71.50%

Locations Using Company LED Luminaires										
Function	Function Cost Description	FTE Time	Annual FTE Cost	Quantity	Cost	Adders	Lbr SubTotal	Cost Est. Total	Proposed Budget	Details
Project Management	2 @ 0.5FTE + Expenses	1	\$100,000			70%	\$100,000	\$170,000	\$200,000	Project Manager, engineer to manage all aspects of the project (internally and externally)
Laboratory Testing Services	TESCO - Contract Services				\$86,000			\$86,000	\$100,000	TESCO email 10/21 - \$28K Testing/Validation / \$42K Comm/Software testing / 100 hrs consultation @ \$160/hr = \$16K (Total \$86K)
Communications Network (SSN)	Silver Spring Network - Contract Services				\$300,000			\$300,000	\$300,000	Silver Spring Network - 2,000 node system including access points, communication and associated backhaul and front end systems for 6 months
Materials - Control Device Nodes	SunTech/SELCO control device purchase			2000	\$70	11%		\$155,400	\$150,000	Material procurement
Materials - LED Luminaires	Various Vendors			~ 2000	~ \$150	11%		\$333,000	\$360,000	Material procurement
Materials - Ancillary Equipment	Various Vendors			20	\$800	11%		\$17,760	\$20,000	Miscellaneous materials - meter channels, wire, brackets, etc.
Equipment Installation	LED Install/Control System			2000	\$325	30%		\$845,000	\$800,000	Design-Const Order Misc Material Remove-Install Lbr/Transportation
Equipment Removal	LED Remove/HPS Install			2000	\$400	30%		\$1,040,000	\$1,000,000	Design-Const/Retirement Order Material (~\$100) Remove-Install Lbr/Transportation
Information Systems Studies	3 @ 0.25FTE + Expenses	0.75	\$80,000			70%	\$60,000	\$102,000	\$100,000	Analysts: Billing system, Lighting management system, MDMS, IS Security, (IBM Contracted Programming Services)
Administrative & General	2 @ 0.25 FTE + Expenses	0.5	\$50,000			70%	\$25,000	\$42,500	\$50,000	Analysts, Clerical supporting startup, procurement, deployment, testing, removal and reporting
Project Total								\$3,091,660	\$3,080,000	

Note:
Corporate overhead and adders for labor and material are represented as an estimate.

Locations Using Municipal LED Luminaires										
Function	Function Cost Description	FTE Time	Annual FTE Cost	Quantity	Cost	Adders	Lbr SubTotal	Cost Est.Total	Proposed Budget	Details
Project Management	2 @ 0.5FTE + Expenses	1	\$100,000			70%	\$100,000	\$170,000	\$200,000	Project Manager, engineer to manage all aspects of the project (internally and externally)
Laboratory Testing Services	TESCO - Contract Services				\$86,000			\$86,000	\$100,000	TESCO email 10/21 - \$28K Testing/Validation / \$42K Comm/Software testing / 100 hrs consultation @ \$160/hr = \$16K (Total \$86K)
Communications Network (SSN)	Silver Spring Network - Contract Services				\$300,000			\$300,000	\$300,000	Silver Spring Network - 2,000 node system including access points, communication and associated backhaul and front end systems for 6 months
Materials - Control Device Nodes	SunTech/SELCO control device purchase			2000	\$70	11%		\$155,400	\$150,000	Material procurement
Materials - LED Luminaires	Municipal Owned								\$0	
Materials - Ancillary Equipment	Various Vendors			20	\$800	11%		\$17,760	\$20,000	Miscellaneous materials - meter channels, wire, brackets, etc.
Equipment Installation	Control System Installation			2000	\$75	30%		\$195,000	\$180,000	Design-Const Order Misc Material Remove-Install Lbr/Transportation
Equipment Removal	Control System/Meter Removal			25	\$700	30%		\$22,750	\$20,000	Design-Const/Retirement Order Material (~\$100) Remove-Install Lbr/Transportation
Information Systems Studies	3 @ 0.25FTE + Expenses	0.75	\$80,000			70%	\$60,000	\$102,000	\$100,000	Analysts: Billing system, Lighting management system, MDMS, IS Security, (IBM Contracted Programming Services)
Administrative & General	2 @ 0.25 FTE + Expenses	0.5	\$50,000			70%	\$25,000	\$42,500	\$50,000	Analysts, Clerical supporting startup, procurement, deployment, testing, removal and reporting
Project Total								\$1,091,410	\$1,120,000	

Note:
Corporate overhead and adders for labor and material are represented as an estimate.

PUC 1-9

Request:

Please identify the sponsor of each portion of the pilot proposal.

Response:

On or before December 10, 2014, the Company will submit the direct testimony of four witnesses in support of the proposed metering pilot. The Company anticipates that the following witnesses will submit testimony concerning the metering pilot proposal:

Witness	Title	Topic
John E. Walter	Principle Engineer, Outdoor Lighting and Attachments	Pilot Design and Management
Alan M. Salk	Protection and Telecommunications Engineering	Meter Testing
Jeffrey Martin	Director, Billing Operations	Billing System/Information System Integration
Jeanne A. Lloyd	Principle Project Manager, Regulation and Pricing	Bill Comparison and Cost Recovery