Raquel J. Webster
Senior Counsel

January 10, 2014

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4237-A - Commission Investigation Relating to Stray and Contact Voltage Occurring in The Narragansett Electric Company Territories
National Grid Annual Contact Voltage Compliance Report
Reply Comments

Dear Ms. Massaro:

I have enclosed for filing in the above-referenced matter The Narragansett Electric Company's ("National Grid" or the "Company") Reply Comments to Mr. Gregory L. Booth, PE's Recommendations and Review Comments of December 19, 2013 concerning the Company's Annual Contact Voltage Compliance Report, dated August 29, 2013 ("August 29, 2013 Compliance Report"). Mr. Booth submitted the December 19, 2013 Recommendations and Review Comments on behalf of the Rhode Island Division of Public Utilities and Carriers. The Company's reply comments include two attachments, numbered as Attachments 1 and 2.

In addition to the Company's reply comments, I have also enclosed a revised Exhibit 1 to the August 29, 2013 Compliance Report. This revised Exhibit 1 reflects corrections to the Latitude entries for the events with identification numbers 25 through 33. (*See* columns numbered 27-35, row I, of the attached Exhibit 1). Specifically, the Company changed the Latitude numbers from 41.xxxxx to 42.xxxxx to correct the typographical errors discovered in the previous version of Exhibit 1, which was attached to its August 29, 2013 Compliance Report. The Company did not find any additional errors in Exhibit 1.

Overall, as reflected in the enclosed reply comments, the Company agrees with most of Mr. Booth's recommendations, and, where appropriate, will make the necessary adjustments to its contact voltage program and reporting.

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

Enclosures

cc: Docket 4237-A Service List
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Certificate of Service

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

Joanne M. Scanlon

January 10, 2014
Date

Docket No. 4237 – Commission's Proceeding Relating to Stray and Contact Voltage Pursuant to Enacted Legislation Service List updated 1/6/14

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

RHODE ISLAND PUBLIC UTILITIES COMMISSION

Commission Investigation Relating to Stray and Contact Voltage Occurring in The Narragansett Electric Company Territories **Docket No. 4237-A**
National Grid Annual Contact Voltage Compliance Report

REPLY COMMENTS OF THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID TO THE RHODE ISLAND DIVISION'S RECOMMENDATIONS AND REVIEW COMMENTS OF DECEMBER 19, 2013

I. INTRODUCTION

On December 19, 2013, the Rhode Island Division of Public Utilities and Carriers (the "Division") filed with the Rhode Island Public Utilities Commission (the "Commission") a memorandum from its consultant, Gregory L. Booth, PE commenting on the Narragansett Electric Company's ("National Grid" or the "Company") Annual Contact Voltage Compliance Report ("Annual Report") dated August 29, 2013. In the memorandum, Mr. Booth, on behalf of the Division, states that 1) the Company's Annual Contact Voltage Compliance Report meets the statutory and Commission's requirements[1] for reporting; 2) concurs with the Company's proposal to again survey 100% of the Designated Contact Voltage Risk Areas ("DCVRA") in 2014; 3) agrees with the Company's recommendation to continue in 2014 to record and evaluate the use of Total Harmonic Distortion ("TDH") readings, both above and below ten percent; and 4) agrees that the Company should add a DCVRA for High Street in Westerly, Rhode Island to be surveyed in 2014. Additionally, Mr. Booth makes a number of comments and recommendations for future reports that he maintains would further clarify and explain the mobile and manual contact voltage survey and testing processes. This includes five specific comments on the structure and format of future annual reports and five additional recommendations to modify or add to the current mobile and manual contact voltage programs. The Company addresses each of Mr. Booth's comments and recommendations below.

[1] R.I.G.L. §39-2-25(b)(6) requires the Company to file an annual report on contact voltage findings, including, but not limited to, the number and type of energized objects on both company-owned and customer-owned assets, voltage levels, specific corrective action taken, information on incidents that occur to members of the public or to pets owned by members of the public, and any other information that the Commission required in Docket No. 4237.

II. REPORTING RECOMMENDATIONS

Overall, the Company agrees with Mr. Booth that it would be beneficial to include more clarification and explanation of specific areas in future annual contact voltage reports. More uniform definitions and standard formats would assist the Commission, Division, and interested third-parties in the review of future filings. To that end, the Company offers the following comments:

1. The Company should include in the reporting table the estimated number of mobile survey stops.

   The Company agrees with this recommendation and is willing to expand the table[2] of future Annual Reports to include the estimated number of investigatory mobile survey stops during a survey by DCVRAs. To address Mr. Booth's recommendation that the Company should include a glossary or list of terminology used in the Annual Report (discussed in more detail in comment two (2) below), this table will also include a definition of the terms "Investigatory Mobile Survey Stop" and "Mobile Event". In addition, the Company is willing to include mobile events with readings of less than one volt by DCVRAs, which will have the table show all mobile events. A copy of the revised table is included in Attachment 1 to this filing.

2. The Company should include a glossary or listing of terminology used in the document to differentiate between the various use of "events" and "readings" which reference mobile, manual, and Total Harmonic Distortion ("TDH") methods similar to the guidance offered in Company's report in footnote to the table on page 8 of 28.

   The Company agrees with this recommendation and is willing to provide a glossary of the terminology used in future Annual Reports. In addition, as discussed in comment one (1) above, where appropriate, the Company will include the relevant definitions on the tables in the report.

3. The Company should provide a summary table of events and readings by asset types.

   The Company agrees with this recommendation and is willing to provide a new table to the Annual Report that will provide a summary of events and readings by asset type. A copy of the new table is included in Attachment 2 to this filing.

4. The Company should include representative pictures showing the as-found condition and current state of facilities after corrective action for various types of facilities.

   The Company is unclear about what additional information or benefit is sought by this recommendation. For example, many of the repairs performed in the first year of the program were to replace streetlight heads and wiring. Pictures of the before and after conditions for these types of repairs would add little value and would place an additional administrative burden upon the crew performing the repairs. Obtaining pictures of

[2] Table as currently shown on page 8 of 28 in the National Grid Annual Contact Voltage Compliance Report filed on August 29, 2013.

repairs made on customer-owned equipment would require additional coordination and effort for very little benefit. Furthermore, the Company may not be able to specifically identify the actual asset or assets that may be causing the elevated voltage reading, and, in an abundance of caution, changes out the associated assets at the site. In this case, both the before and after repair pictures would look the same. The Company believes that the information provided in Exhibit 1, Column y, which provides details on what was repaired, is sufficient to understand the types of deterioration and necessary repairs. Accordingly, while the Company remains willing to discuss this matter further with the Division, for the reasons described above, the Company does not believe it is necessary to adopt this recommendation in its Annual Report at this time.

5. The Company should include before and after mitigation THD readings to the applicable contact voltage events.

   The Company agrees with this recommendation. As shown in Exhibit 1, the Company currently reports the *before* THD readings (Column m), but is willing to subsequently amend its processes to record the *after* mitigation THD reading. The Company will include this information in future Annual Reports.

III. PROGRAM RECOMMENDATIONS

Here again, in general, the Company agrees with Mr. Booth that improvements should continually be made to the existing Contact Voltage Program. To that end, the Company is willing to adopt the following recommendations:

1. The Company should implement follow-up scans in areas with remediation work prior to the annual scanning to verify that the object found and corrected completely addressed the mobile scan's elevated level and that no other underlying issues were present.

   The Company understands this recommendation to require implementation of follow-up *manual testing* in areas with remediation work prior to the following year's annual mobile testing so as to ensure that the asset was repaired and that no other underlying issues were present. Mr. Booth's recommendation to ensure that areas with remediation work are complete and that those repairs have addressed all underlying issues is reasonable and helps ensure public safety. Therefore, the Company is willing to modify its processes to manually test those areas where remediation work was completed prior to conducting its annual mobile testing survey.

2. The Company needs to implement a process where random objects are selected in each DCVRA and manually test for contact voltage to spot verify areas not indicated by mobile technology.

The Company agrees with this recommendation. The Company is willing to coordinate the timing and manual testing of random objects in each DCVRA shortly after the mobile testing each year to spot check the mobile testing.

With respect to Mr. Booth's final two recommendations, the Company offers the following:

3. The Company should manually measure voltage and visually inspect street light facilities in areas adjacent to streetlight assets requiring remediation efforts.

   The Company already manually measures voltages and visually inspects street light facilities in areas adjacent to streetlight assets requiring remediation efforts. As part of its existing processes, the Company manually tests all metallic objects within 30 feet of an asset found to have elevated voltage.

4. The Company should seek bids on a 2-year basis to ascertain if new processes and technology will offered by vendors to complete future scans, and if any competing vendor offering would be beneficial to the contact voltage program.

   While the Company concurs that a two-year bid cycle may be reasonable to possibly take advantage of changes in mobile technology or the marketplace, it is concerned that such a specific mandated timeframe may limit the benefits of the contact voltage program to customers. Under the Request-for-Proposal ("RFP") approved by the Commission in Docket No. 4237, the Company awarded the vendor a four-year contract, but reserved the right to rebid the contract after the first year. The Company did this in order to balance the need to address changes in mobile technology (i.e., rebid after one year) with the expectations that vendors would be willing to offer lower prices to customers for a longer term contract. (i.e., four years). The Company believes that this approach, which provides the Company the flexibility to rebid the contract while at the same time offering vendors an incentive to reduce prices with an extended term, more appropriately balances the benefits to customers and possible changes in mobile technology. Therefore, rather than adopt a specific RFP bid time, the Company would recommend continuing with the existing approach approved by the Commission that provides the Company the flexibility to respond to marketplace forces and changes in technology, while providing customers the cost benefits that may arise from vendors that are willing to lower their bid prices for an extended term contract.

Table from Rhode Island Annual Contact Voltage Report, Page 8 of 28, Revisions/New Information shown in red

DCVRA	Dates Tested	Estimated Investigatory Mobile Survey Stops (1)	Mobile Events(2)	Readings less than 1 Volt		Readings Greater than 1 Volt but less than 4.5 Volts		Readings Greater than 4.5 Volts	
				Customer Equipment	Company Equipment	Customer Equipment	Company Equipment	Customer Equipment	Company Equipment
PROVIDENCE									
College Hill	3/24 - 3/25		3		2				1
Downtown	3/18 - 3/22		46	15	27	1	1		2
Elmwood	3/27								
Federal Hill	3/26		1		1				
Lower So. Prov	3/27								
Olnyville	3/26		1		1				
Smith Hill	3/25		4	1	2		1		
Upper So. Prov	3/26 - 3/27								
Washington Park	3/27		1	1					
West End	3/27		6	1				2	3
NEWPORT	3/28 - 3/29		7		3		4		
PAWTUCKET	3/27		2					2	
WOONSOCKET	3/30		4		1				3
Total			**75**	**18**	**37**	**1**	**6**	**4**	**9**

(1) An Investigatory Mobile Survey Stop is where the mobile detection device indicated evidence of elevated voltage, (greater than zero (0) volts) and a stop was made to survey for elevated voltage with manual instruments (pen detector). All metallic devices within 30 feet are tested manually for elevated voltage at each stop. The Investigatory Mobile Survey Stop may or may not discover an asset with elevated voltage.

(2) A Mobile Event is defined as an Investigatory Mobile Survey Stop where elevated voltage (greater than zero 0 volts) was discovered on an asset (either company or customer owned). These Mobile Events are divided into three categories, those with readings below one (1) volt, those having elevated voltage between 1 volt and 4.5 volts, and those having elevated voltage readings 4.5 volts or greater. The readings above reflect the actual voltage determined by manual shunt meter testing of the asset.

This table is a proposed new table to be added to the report to provide a summary table of events and readings by asset type.

Asset Type	**Mobile Events(2)**	**Readings less than 1 Volt**		**Readings Greater than 1 Volt but less than 4.5 Volts**		**Readings Greater than 4.5 Volts**	
		Customer Equipment	Company Equipment	Customer Equipment	Company Equipment	Customer Equipment	Company Equipment
Streetlight	57	1	37		6	4	9
Traffic Control Box	11	11					
Private Lighting	2	2					
Traffic Standard	2	1		1			
No Parking Sign	1	1					
Store Fronts	1	1					
Other	1	1					
Total	**75**	**18**	**37**	**1**	**6**	**4**	**9**

(2) A Mobile Event is defined as an Investigatory Mobile Survey Stop where elevated voltage (greater than zero (0) volts) was discovered on an asset (either company or customer owned). These Mobile Events are divided into three categories, those with readings below one (1) volt, those having elevated voltage between 1 volt and 4.5 volts, and those having elevated voltage readings 4.5 volts or greater. The readings above reflect the actual voltage determined by manual shunt meter testing of the asset.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)	(z)	(aa)	(ad)	(ab)	(ac)
Event ID	**Date Found**	**Time Found**	**Zone Name**	**Action Taken**	**Address Number**	**Street**	**Cross Street**	**Latitude**	**Longitude**	**Voltage**	**Shunt Voltage**	**3rd Harmonic**	**Asset Type**	**Asset number**	**Asset Owner?**	**Ground Source**	**Work Order #**	**# of Customers Interrupted**	**Duration of Interruption**	**Prior EV Hit?**	**>= 4.5 Volts**	**Repair Crew**	**Repair Date**	**Type of Repair**	**Repair Due Date**	**Mitigated Repair Voltage**	**Repair Status**	**Shunt Voltage Category**	**Contacted 3rd Party (City, State, Owner)**
1	03/18/2013	22:04	Providence-Zone 2-Downtown	Below Threshold	78	Allens Ave	Henderson St	41.8125	-71.40535	0.91	0.21	0	Streetlight	15	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
2	03/18/2013	22:20	Providence-Zone 2-Downtown	Below Threshold	6	Allens Ave	Globe St	41.81452	-71.40632	0.56	0.26	0	Traffic Control Box	881	Customer	Sign Post	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
3	03/18/2013	22:25	Providence-Zone 2-Downtown	Below Threshold	6	Allens Ave	Globe St	41.81456	-71.40362	0.229	0.136	0	No Parking Sign	N/A	Customer	Sign Post	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
4	03/18/2013	22:40	Providence-Zone 2-Downtown	Below Threshold	439	Eddy St	Point St	41.81671	-71.40632	1.04	0.19	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
5	03/18/2013	22:55	Providence-Zone 2-Downtown	Below Threshold	392	Eddy St	South St	41.81767	-71.40692	0.502	0.502	0	Streetlight	21	Company	Fire Hydrant	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
6	03/18/2013	23:15	Providence-Zone 2-Downtown	Disconnected	UNK	Dyer St	319 Eddy St	41.81938	-71.40778	94.2	8.09	0	Streetlight	10	Company	Ground Rod	90000128963	0	N/A	No	At or Above 4.5 Volts	Internal	03/21/2013	Repaired/capped cable at adjacent hit pole (mva).	Thursday, May 02, 2013	0.20	Repair Complete	4.5 - 24.9 Volts	
7	03/18/2013	23:43	Providence-Zone 2-Downtown	Below Threshold	UNK	Dyer St	319 Eddy St	41.81963	-71.40752	4.11	0.525	0	Streetlight	9	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
8	03/19/2013	0:20	Providence-Zone 2-Downtown	Below Threshold	385	Eddy St	South St	41.81758	-71.40711	0.384	0.343	0	Streetlight	UNK	Company	Sign Post	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
9	03/19/2013	1:00	Providence-Zone 2-Downtown	Below Threshold	64	Point St	Eddy St	41.81692	-71.40591	1.2	0.82	0	Streetlight	4	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
10	03/19/2013	1:50	Providence-Zone 2-Downtown	Disconnected	100	South St	Parsonage St	41.81666	-71.40964	26	18.2	7.10%	Streetlight	3	Company	Ground Rod	90000128963	0	N/A	No	At or Above 4.5 Volts	Internal	04/25/2013	Replaced pole, head, wire, & service.	Friday, May 03, 2013	0.01	Repair Complete	4.5 - 24.9 Volts	
11	03/19/2013	23:45	Providence-Zone 2-Downtown	Below Threshold	282	Eddy St	Dyer St	41.81953	-71.40806	3.31	0.34	0	Streetlight	11	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
12	03/20/2013	0:34	Providence-Zone 2-Downtown	Below Threshold	196	Richmond St	Ship St	41.81934	-71.40938	0.461	0.158	0	Streetlight	5	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
13	03/20/2013	1:50	Providence-Zone 2-Downtown	Below Threshold	107	Pine St	Garnet St	41.82177	-71.41052	0.56	0.34	0	Streetlight	9	Company	Fire Hydrant	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
14	03/20/2013	1:56	Providence-Zone 2-Downtown	Below Threshold	107	Pine St	Garnet St	41.82196	-71.41042	0.421	0.17	0	Streetlight	8	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
15	03/20/2013	2:16	Providence-Zone 2-Downtown	Below Threshold	109	Pine St	Garnet St	41.82163	-71.41077	0.452	0.145	0	Other	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
16	03/20/2013	2:36	Providence-Zone 2-Downtown	Below Threshold	198	Weybosset St	Union St	41.822201	-71.41197	0.682	0.148	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
17	03/20/2013	3:30	Providence-Zone 2-Downtown	Below Threshold	47	Greene St	Washington St	41.8213	-71.417	0.48	0.38	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
18	03/20/2013	3:35	Providence-Zone 2-Downtown	Below Threshold	47	Greene St	Washington St	41.82135	-71.41704	0.142	0.12	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
19	03/20/2013	22:03	Providence-Zone 2-Downtown	Below Threshold	13	Greene St	Garden St	41.82084	-71.41673	0.145	0.123	0	Streetlight	N/A	Company	Metal Pipe	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
20	03/20/2133	22:21	Providence-Zone 2-Downtown	Below Threshold	8	Greene St	Garden St	41.82055	#NAME?	0.44	0.16	0	Traffic Standard	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
21	03/20/2013	22:45	Providence-Zone 2-Downtown	Below Threshold	UNK	Garden St	25 Greene St	41.82074	-71.41727	45.2	0.158	0	Private Lighting	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
22	03/20/2013	23:30	Providence-Zone 2-Downtown	Below Threshold	50	Empire St	Broad St	41.8201	-71.41458	0.48	0.22	0	Streetlight	1	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
23	3/20.2013	23:55	Providence-Zone 2-Downtown	Below Threshold	30	Chestnut St	Pine St	41.81958	-71.41292	0.6	0.48	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
24	03/21/2013	1:00	Providence-Zone 2-Downtown	Below Threshold	86	Snow St	Chapel St	41.82142	-71.41407	0.218	0.123	0	Streetlight	N/A	Company	Fire Hydrant	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
25	03/21/2013	1:00	Providence-Zone 2-Downtown	Below Threshold	86	Snow St	Chapel St	41.82132	-71.41403	0.52	0.322	0	Streetlight	N/A	Customer	Fire Hydrant	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
26	03/21/2013	2:05	Providence-Zone 2-Downtown	Installed Barriers	22	Fountain St	Dorrance St	41.82485	-71.41453	2.6	1.8	27.8	Traffic Standard	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts			Customer Owned			Repair Pending	1- 4.4 Volts	City DPW notified on 3/21/13. Left message with directors office. Tony Doddio trafic engineering has been notified.
27	03/21/2013	2:33	Providence-Zone 2-Downtown	Below Threshold	43	Dorrance St	Fulton St	41.82386	-71.41241	0.297	0.186	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
28	03/21/2013	2:33	Providence-Zone 2-Downtown	Below Threshold	43	Dorrance St	Fulton St	41.82397	-71.41234	0.194	0.06	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
29	03/21/2013	2:58	Providence-Zone 2-Downtown	Below Threshold	26	Friendship St	Dorrance St	41.82219	-71.4093	0.309	0.198	0	Streetlight	4	Company	Sign Post	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
30	03/21/2013	3:21	Providence-Zone 2-Downtown	Below Threshold	56	Fulton St	Arcade St	41.82466	-71.41165	2.6	0.4	0	Streetlight	N/A	Company	Metal Pipe	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
31	03/21/2013	3:43	Providence-Zone 2-Downtown	Below Threshold	34	Fulton St	Exchange St	41.82526	-71.41114	1.26	0.105	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
32	03/21/2013	4:15	Providence-Zone 2-Downtown	Below Threshold	28	Exchange Ter	Dorrance St	41.82553	-71.41364	3.55	0.5	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
33	03/21/2013	4:28	Providence-Zone 2-Downtown	Below Threshold	33	W Exchange St	Sabin St	41.82505	-71.41481	3.8	0.488	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
34	03/21/2013	22:57	Providence-Zone 2-Downtown	Below Threshold	17	Peck St	Pine St	41.82334	-71.40983	0.182	0.05	0	Streetlight	3	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
35	03/22/2013	0:37	Providence-Zone 2-Downtown	Below Threshold	500	S Main St	Transit St	41.8201	-71.40304	1.5	0.4	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
36	03/22/2013	0:47	Providence-Zone 2-Downtown	Below Threshold	459	S Main St	James St	41.82055	-71.40348	0.499	0.325	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
37	03/22/2013	0:54	Providence-Zone 2-Downtown	Below Threshold	343	S Main St	Williams St	41.82129	-71.40432	0.44	0.21	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
38	03/22/2013	1:49	Providence-Zone 2-Downtown	Below Threshold	98	S Main St	College St	41.82572	-71.40777	0.159	0.062	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
39	03/22/2013	2:46	Providence-Zone 2-Downtown	Below Threshold	126	Canal St	Elizabeth St	41.82737	-71.41027	1.2	0.2	0	Private Lighting	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
40	03/22/2013	3:30	Providence-Zone 2-Downtown	Below Threshold	199	Canal St	Park Row	41.82845	-71.41051	0.16	0.12	0	Streetlight	N/A	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
41	03/22/2013	3:50	Providence-Zone 2-Downtown	Below Threshold	39	Steeple St	Canal St	41.82726	-71.40949	0.54	0.32	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
42	03/22/2013	3:50	Providence-Zone 2-Downtown	Below Threshold	39	Steeple St	Canal St	41.82734	-71.40964	0.62	0.58	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
43	03/22/2013	3:51	Providence-Zone 2-Downtown	Below Threshold	39	Steeple St	Canal St	41.82729	-71.40965	0.62	0.54	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
44	03/22/2013	3:52	Providence-Zone 2-Downtown	Below Threshold	39	Steeple St	Canal St	41.82714	-71.40972	0.63	0.55	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
45	03/22/2013	4:30	Providence-Zone 2-Downtown	Installed Barriers	55	College St	Benefit St	41.82614	-71.40655	2.65	1.64	11.4	Streetlight	2	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts	Internal	04/23/2013	Replaced Head and Wire.	Monday, May 06, 2013	0.20	Repair Complete	1- 4.4 Volts	
46	03/24/2013	23:50	Providence-Zone 1-College Hill	Disconnected	420	Taber Ave	Angell St	41.82966	-71.39083	30.7	12.7	12.4	Streetlight	38	Company	Ground Rod	90000128961	0	N/A	No	At or Above 4.5 Volts	Internal	04/15/2013	Replaced pole, head, wire, & service.	Wednesday, May 08, 2013	0.20	Repair Complete	4.5 - 24.9 Volts	
47	03/25/2013	0:25	Providence-Zone 1-College Hill	Below Threshold	112	Waterman St	Brook St	41.82746	-71.39967	0.12	0.1	0	Streetlight	17	Company	Ground Rod	90000128961	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
48	03/25/2013	2:02	Providence-Zone 1-College Hill	Below Threshold	165	Hope St	George St	41.82585	-71.39733	4.6	0.5	0	Streetlight	19	Company	Ground Rod	90000128961	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
49	03/25/2013	4:04	Providence-Zone 2-Downtown	Below Threshold	96	Sabin St	Empire St	41.82301	-71.41731	2.19	0.58	0	Streetlight	8	Company	Ground Rod	90000128963	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
50	03/25/2013	21:15	Providence-Zone 7-Smith Hill	Below Threshold	584	Smith St	Route 44	41.8314	-71.4111	0.4	0.32	0	Streetlight	1	Company	Ground Rod	90000128968	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
51	03/25/2013	22:58	Providence-Zone 7-Smith Hill	Below Threshold	160	Chalkstone Ave	Randall St	41.83635	-71.41331	1.47	0.564	0	Streetlight	3	Company	Ground Rod	90000128968	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
52	03/25/2013	23:14	Providence-Zone 7-Smith Hill	Below Threshold	145	Charles St	Randall St	41.83603	-71.41238	1.26	0.04	0	Traffic Control Box	820	Customer	Ground Rod	90000128968	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
53	03/25/2013	23:15	Providence-Zone 7-Smith Hill	Disconnected	145	Charles St	Randall St	41.836	-71.41232	1.33	1.28	6.4	Streetlight	18	Company	Ground Rod	90000128968	0	N/A	No	Below 4.5 Volts	Internal	04/15/2013	Remade All Connections	Thursday, May 09, 2013	0.06	Repair Complete	1- 4.4 Volts	
54	03/26/2013	1:03	Providence-Zone 4-Federal Hill	Below Threshold	265	Depasquate Ave	Atwells Ave	41.82357	-71.42006	0.78	0.43	0	Streetlight	N/A	Company	Ground Rod	90000128965	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)	(z)	(aa)	(ad)	(ab)	(ac)
Event ID	Date Found	Time Found	Zone Name	Action Taken	Address Number	Street	Cross Street	Latitude	Longitude	Voltage	Shunt Voltage	3rd Harmonic	Asset Type	Asset number	Asset Owner?	Ground Source	Work Order #	# of Customers Interrupted	Duration of Interruption	Prior EV Hit?	>= 4.5 Volts	Repair Crew	Repair Date	Type of Repair	Repair Due Date	Mitigated Repair Voltage	Repair Status	Shunt Voltage Category	Contacted 3rd Party (City, State, Owner)
55	03/26/2013	3:51	Providence-Zone 6-Olneyville	Below Threshold	631	Broadway St	Harris Ave	41.817	-71.44025	0.58	0.36	0	Streetlight	66	Company	Ground Rod	90000128967	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
56	03/27/2013	1:01	Providence-Zone 9-Washington Park	Below Threshold	1428	Broad St	Payton St	41.78816	-71.40365	1.6	0.42	0	Store Fronts	N/A	Customer	Ground Rod	90000128972	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
57	03/27/2013	2:34	Providence-Zone 10-West End	Disconnected	621	Broadway St	Barton St	41.81753	-71.43883	74	71.2	3.5	Streetlight	61	Company	Fence	90000128974	0	N/A	No	At or Above 4.5 Volts	Internal	04/15/2013	Replaced head, wire, & service.	Saturday, May 11, 2013	1.40	Repair Complete	>25 Volts	
58	03/27/2013	5:01	Providence-Zone 10-West End	Installed Barriers	870	Westminster St	Cranston St	41.81679	-71.42321	109	81.2	0	Streetlight	N/A	Customer	Fence	90000128974	0	N/A	No	At or Above 4.5 Volts	Customer	03/28/2013	Customer Owned		0.20		>25 Volts	Customer - Citizen Bank, notified by Pat Matulaitis, Bus. Service. And UG Supervisor Vincent Scirocco visited site and spoke to the manager. Customer to make repairs today 3/27/13 per UG supervisor. Aladdin Electric on Site 3/28/13 making repairs.
59	03/27/2013	5:01	Providence-Zone 10-West End	Installed Barriers	870	Westminster St	Cranston St	41.81658	-71.42328	114	78	0	Streetlight	N/A	Customer	Fence	90000128974	0	N/A	No	At or Above 4.5 Volts	Customer	03/28/2013	Customer Owned		0.20		>25 Volts	Customer - Citizen Bank, notified by Pat Matulaitis, Bus. Service. And UG Supervisor Vincent Scirocco visited site and spoke to the manager. Customer to make repairs today 3/27/13 per UG supervisor. Aladdin Electric on Site 3/28/13 making repairs.
60	03/27/2013	22:41	Providence-Zone 10-West End	Disconnected	325	Washington St	W Franklin St	41.81973	-71.41997	54	6.38	10.2	Streetlight	40/41	Company	Ground Rod	90000128974	0	N/A	No	At or Above 4.5 Volts	Internal	04/22/2013	Replaced Damaged neutral in HH off MH 2429. Wash.ST.	Saturday, May 11, 2013	0.00	Repair Complete	4.5 - 24.9 Volts	
61	03/27/2013	22:41	Providence-Zone 10-West End	Disconnected	325	Washington St	W Franklin St	41.8196	-71.42	55.9	7.45	10.2	Streetlight	23 1/2	Company	Ground Rod	90000128974	0	N/A	No	At or Above 4.5 Volts	Internal	04/22/2013	Replaced Damaged neutral in HH off MH 2429. Wash.ST.	Saturday, May 11, 2013	0.00	Repair Complete	4.5 - 24.9 Volts	
62	03/27/2013	22:41	Providence-Zone 10-West End	Below Threshold	325	Washington St	W Franklin St	41.8197	-71.41999	2.21	0.267	0	Traffic Control Box	N/A	Customer	Ground Rod	90000128974	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
63	03/27/2013	23:51	Pawtucket	Disconnected	67	Roosevelt Ave	Main St	41.87766	-71.38341	120	120	0	Streetlight	N/A	Customer	Fence	90000128960	0	N/A	No	At or Above 4.5 Volts			Customer Owned			Repair Pending	>25 Volts	NGrid Crews worked to disconnect and stayed at location. Randy from Pawtucket Public Works out on Roosevelt Ave. We energized the circuit so we could show him the elevated voltage on two poles. He assured me that these poles would be removed from the circuit so when the lights come on tonight there will be no elevated voltage present. Per Vinnie Scirocco
64	03/28/2013	1:56	Pawtucket	Disconnected	67	Roosevelt Ave	Main St	41.87713	-71.38357	54	25	0	Streetlight	N/A	Customer	Ground Rod	90000128960	0	N/A	No	At or Above 4.5 Volts			Customer Owned			Repair Pending	4.5 - 24.9 Volts	NGrid Crews worked to disconnect and stayed at location. Randy from Pawtucket Public Works out on Roosevelt Ave. We energized the circuit so we could show him the elevated voltage on two poles. He assured me that these poles would be removed from the circuit so when the lights come on tonight there will be no elevated voltage present. Per Vinnie Scirocco
65	03/28/2013	22:22	Newport	Below Threshold	199	Narragansett Ave	Ochre Point Ave	41.47579	-71.29762	1.08	0.229	0	Streetlight	1 30	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
66	03/28/2013	22:39	Newport	Installed Barriers	138	Narragansett Ave	Annandale Rd	41.47559	-71.03084	3.1	2.56	8.5	Streetlight	5 1	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts	Internal	04/18/2013	Remade All Connections	Sunday, May 12, 2013	1.00	Repair Complete	1- 4.4 Volts	
67	03/28/2013	22:46	Newport	Installed Barriers	102	Narragansett Ave	Annandale Rd	41.4754	-71.30506	3.66	2.89	8.5	Streetlight	6 1	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts	Internal	04/18/2013	Remade All Connections	Sunday, May 12, 2013	1.00	Repair Complete	1- 4.4 Volts	
68	03/28/2013	22:55	Newport	Installed Barriers	88	Narragansett Ave	Clay St	41.47541	-71.306	4.65	3.7	5.7	Streetlight	7 1	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts	Internal	04/18/2013	Replaced Head and Wire (sweep/drop)	Sunday, May 12, 2013	1.70	Repair Complete	1- 4.4 Volts	
69	03/28/2013	23:04	Newport	Installed Barriers	74	Narragansett Ave	Clay St	41.4753	-71.30727	4.89	4.27	7	Streetlight	8 1	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts	Internal	04/18/2013	Replaced Head and Wire (sweep/drop)	Sunday, May 12, 2013	1.60	Repair Complete	1- 4.4 Volts	
70	03/29/2013	2:17	Newport	Below Threshold	86	Marsh St	Gladys Carr Bolhouse Rd	41.49116	-71.32052	2.89	0.8	0	Streetlight	2	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
71	03/29/2013	3:30	Newport	Below Threshold	19	Truro St	Thames St	41.49025	-71.31451	1.2	0.538	0	Streetlight	N/A	Company	Ground Rod	90000128959	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
72	03/29/2013	22:07	Woonsocket	Below Threshold	29	Rathburn St	Social St	42.00998	-71.50386	0.429	0.362	0	Streetlight	32	Company	Ground Rod	90000128976	0	N/A	No	Below 4.5 Volts							1- 4.4 Volts	
73	03/29/2013	22:57	Woonsocket	Disconnected	N/A	Worrall St, behind post office	Federal St	42.00562	-71.51097	60	52.8	7.6	Streetlight	4 dash 310	Company	Ground Rod	90000128976	0	N/A	No	At or Above 4.5 Volts	Internal	05/07/2013	Replaced head, wire, & service.	Monday, May 13, 2013	0	Repair Complete	>25 Volts	
74	03/29/2013	23:10	Woonsocket	Disconnected	245	Clinton St	Veterans Pkwy	42.00647	-71.50732	53	13.6	5.4	Streetlight	26 dash 1	Company	Ground Rod	90000128976	0	N/A	No	At or Above 4.5 Volts	Internal	04/15/2013	Replaced head, wire, & service.	Monday, May 13, 2013	0.2	Repair Complete	4.5 - 24.9 Volts	
75	03/30/2013	0:08	Woonsocket	Disconnected	36	N Main St	Blackstone St	42.00642	-71.51291	62	20.1	3.2	Streetlight	2 dash 1	Company	Ground Rod	90000128976	0	N/A	No	At or Above 4.5 Volts	Internal	04/15/2013	Fed Overhead, repaired neutral connection	Tuesday, May 14, 2013	0	Repair Complete	4.5 - 24.9 Volts	