Rochester Gas and Electric

STRAY VOLTAGE TEST

And

FACILITY INSPECTION

Report on the results of stray voltage tests and facility inspections

for the period ending on December 31, 2011

February 15, 2012

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I. <u>Background</u>

The New York State Public Service Commission's ("PSC" or "Commission") Electric Safety Standards Order issued on January 5, 2005 (Case 04-M-0159), with subsequent revisions issued on July 21, 2005, December 15, 2008, and July 21, 2010 (Case 10-E-0271), (collectively referred to herein as the "Safety Standards" or "Order"), require electric utilities in New York State, including Rochester Gas and Electric ("RG&E" or the "Company") to test annually all of their publicly accessible transmission and distribution facilities for stray voltage and to inspect their electric facilities every five years.

This report describes Rochester Gas and Electric Stray Voltage Detection Program and Equipment Inspection Program conducted in 2011.

II. <u>Company Overview</u>

RG&E is located in upstate New York and serves approximately 355,324 electric customers. RG&E covers an area of about 2,700 square miles and serves a primarily rural area composed of 1 large city and 80 villages.

RG&E's electric delivery infrastructure consists of 170 substations, 43,214 underground facilities and 513 streetlight/traffic signal facilities. This system includes an estimated 211,298 distribution structures and 19,767 transmission structures.

III. Stray Voltage Testing Program

During the period ending December 31, 2011, RG&E conducted stray voltage testing of all its publicly accessible transmission and distribution facilities that are capable of conducting electricity, and all Company and non-Company owned metallic streetlights and traffic signals. The Company also tested all publicly accessible third party facilities in close proximity to RG&E's system components identified with elevated voltage.

In addition, and in compliance with the Order, RG&E:

a. Immediately safeguarded and/or mitigated all voltage findings ≥ 1.0 volt. In instances where the stray voltage finding was determined to be caused by customer-owned equipment, the area was immediately made safe and the customer or responsible party associated with the premises was notified of the unsafe condition and the need for the customer to arrange for a permanent repair. Voltage findings determined to be caused by a utility-owned facility were immediately safeguarded and/or mitigated. All permanent repairs were made within 45 days.

- b. Tested all publicly accessible structures and sidewalks within a 30 foot radius of the electric facility or streetlight where there was a stray voltage finding ≥ 1.0 volt.
- c. Responded, investigated, and mitigated positive findings of shock incidents reported by the public.

Of the 299,489 facilities visited, 84,691 did not require stray voltage testing because these are wood poles that have no attached appurtenances capable of conducting electricity; their electrically conductive appurtenances are not accessible to the public (pre-wired wood); the facilities are enclosed in fiberglass (non-conductive materials); and/or de-energized facilities.

Structures Inaccessible to the Public

There are several types of Inaccessible structures as described below. Of the 299,489 facilities visited, 629 were deemed Inaccessible to the public. If the contractor could not reach the structure to perform a test, it was identified as "Inaccessible" and all other pertinent data was collected in the field. Contractors made every attempt to locate and test all structures. Inaccessible structures include:

- a. <u>Private Property</u> The structure was not tested if it was located on private property and was inaccessible due to walls, fences or barriers such as a locked gate, if excavation or bush/tree removal was required, or if there was unauthorized construction around the structure.
- b. <u>RG&E Property</u> Structure located on Company property, such as substations, are accessible only to Company personnel and authorized contractors.
- c. <u>Buried / Paved Over</u> The structure was not tested if it had been covered over with dirt, pavement, or other foreign objects that would prohibit public access and prevent testing the structure. Contractors noted the structure ID on the issued maps and turned them in to Maintenance Engineering for verification with the Maps and Records Department. If Maps and Records confirmed that the structure does exist, company and contractor crews followed up and attempted to locate, uncover, and test the structure. If the structure could not be found, it was then considered removed from the field, and revisions to mapping were generated.
- d. <u>Inside Building</u> If a tester identified a structure as being inside a building, RG&E personnel verified that the structure was actually inside the building. If the RG&E personnel verified that the structure was accessible to the public, a test was performed. Typically, customer owned equipment that is inside a building is in a locked equipment room that is accessible to authorized personnel only.
- e. <u>Limited Access Highways</u> Structures located on highways, exit and entrance highway ramps. The performance of stray voltage testing would constitute an unacceptable risk to the employee.
- f. <u>Dangerous Terrain</u> Poles located on cliffs and other dangerous terrain are generally inaccessible to Company personnel and are approached only under urgent circumstances. The performance of stray voltage testing would constitute an unacceptable risk to the employee.

IV. Facility Inspection Program

The Safety Standards require RG&E to visually inspect approximately 20% of its facilities annually, resulting in 100% inspection of its electric facilities every five years.

The objective of all inspections is to conduct a careful and critical examination of an electric facility by a qualified individual to determine the condition of the facility and the potential to cause, or lead to safety hazards, or adverse effects on reliability.

Inspections conducted during routine maintenance and other work not directly related to the inspection program count as an inspection visit, provided that the inspection is performed using the same safety and reliability criteria and to the same extent as would otherwise be required under the Electric Safety Standards.

In accordance with the Safety Standards, RG&E uses the following severity levels to establish priority for repairs and scheduling:

<u>Level I</u> – Repair as soon as possible but not longer than one week. A Level I deficiency is an actual or imminent safety hazard to the public or poses a serious and immediate threat to the delivery of power. Critical safety hazards present at the time of the inspection shall be guarded until the hazard is mitigated.

<u>Level II</u> – Repair within one year. A Level II deficiency is likely to fail prior to the next inspection cycle and represent a threat to safety and / or reliability should a failure occur prior to repair.

<u>Level III</u> – Repair within three years. A Level III deficiency does not present immediate safety or operational concerns and would likely have minimum impact on the safe and reliable delivery of power if it does fail prior to repair.

<u>Level IV</u> – Condition found but repairs not needed at this time. Level IV is used to track atypical conditions that do not require repair within a five year timeframe. This level shall be used for future monitoring purposes and planning proactive maintenance activities.

In accordance with the PSC requirements, when a temporary repair is located during inspection or performed by the company, best efforts are put forth to make a permanent repair of the facility within 90 days. Temporary repairs that remain on the system for more than 90 days are due to extraordinary circumstances, i.e. storms, and require extensive repair activity. The Company puts forth best efforts to conduct permanent repairs in the field, and only construct a temporary repair if/when absolutely necessary. For cycle year 2011, RG&E has no temporary repair exceptions to report.

V. <u>Company Facilities</u>

Structure Categories

RG&E has approximately 214,169 individual facilities that require testing for the presence of stray voltage. These facilities are broken down into four main categories including:

<u>Distribution Overhead</u> – There are approximately 128,325 distribution pole structures that require testing for the presence of stray voltage in RG&E's territory. The testing criteria include all utility-owned or joint use wooden poles with utility electrical facilities located on both public thoroughfares and customer property, including backyards or alleys. Stray voltage tests are performed on all wooden poles with metallic attachments such as ground wires, ground rods, anchor guy wires, riser pipes, or any electrical equipment within reach of the general public. Distribution overhead facilities are included in both the stray voltage and inspection programs.

<u>Underground Facilities</u> – There are 44,452 underground facilities that require testing for the presence of stray voltage that comprise RG&E's system. The testing criteria are comprised of subsurface structures, including above ground pad-mounted structures. Included in the underground facilities are padmount switchgear cases, padmount transformer cases, electric utility manhole covers, submersible transformer covers, electric utility handhole covers, network vaults and grates. These facilities are included in both the stray voltage and facility inspection programs.

<u>Street lights and Traffic Signals</u> – There are approximately 13,083 metallic street lights and approximately 11,287 traffic signals within RG&E's service territory that require stray voltage testing. This total includes all conductive street lights owned by RG&E with the balance of the equipment owned by various municipalities. The testing criterion includes all metallic streetlights, traffic signals, and pedestrian crosswalk signals located on publicly accessible thoroughfares. All stray voltage testing of street lights is performed at night while the fixtures are energized. Area and street lighting that is privately owned is not included in the stray voltage testing program, as per the Order's requirements. All Company-owned streetlights are included in the facility inspection program.

<u>Transmission Structures</u> – There are 16,852 individual poles/towers that require testing for the presence of stray voltage that comprise RG&E's transmission system. The testing criteria are comprised of all structures, guys, and down leads attached to the structures. Transmission structures support circuit voltages of 34.5 kilovolts and greater. Transmission poles as described above, with distribution under-build, are included in this transmission category. All transmission structures are included in both the stray voltage and facility inspection programs.

<u>Substations</u> – There are a total of 170 substation fences in RG&E's territory that require annual testing for the presence of stray voltage.

VI. <u>Annual Performance Targets</u>

RG&E performed the required stray voltage testing and facilities inspections in accordance with the requirements set forth in the Order.

In compliance with the Safety Standards, RG&E has met the annual performance target for stray voltage testing of 100% of electric facilities and streetlights for the period ending December 31, 2011.

In addition, in compliance with the Safety Standards, RG&E has met the second year annual performance target for inspection of 20% of its electric facilities and the cumulative inspection target of 40% of its facilities for the period ending December 31, 2011.

The results are summarized in the table below.

Category	RG&E Inspection Target	Actual Cumulative Inspected as of 2011
Overhead Distribution	40%	41%
Overhead Transmission	40%	47%
Underground	40%	44%
Streetlight	40%	100%

Facility Inspection Program Results

5-Year Inspection Performance Summary

Overhead Distribution Facilities

Inspection	Number of Overhead Distribution	% of Overall System
Year	Structures Inspected	Inspected (Cumulative in
	-	Five Year Cycle 2010-2014)
2010	39,325	19%
2011	46,760	41%
2012		
2013		
2014		

Overhead Transmission Facilities

Inspection	Number of Overhead Transmission	% of Overall System
Year	Facilities Inspected	Inspected (Cumulative in
	_	Five Year Cycle 2010-2014)
2010	6,570	33%
2011	2,804	47%
2012		
2013		
2014		

Underground Facilities

Inspection	Number of Underground Facilities	% of Overall System
Year	Inspected	Inspected (Cumulative in
	_	Five Year Cycle 2010-2014)
2010	4,227	18%
2011	6,175	44%
2012		
2013		
2014		

Pad-mount Facilities

Inspection	Number of Underground Facilities	% of Overall System
Year	Inspected	Inspected (Cumulative in
	_	Five Year Cycle 2010-2014)
2010	3,760	19%
2011	4,658	43%
2012		
2013		
2014		

<u>Streetlights</u>

Inspection	Number of Streetlights Inspected	% of Overall System
Year		Inspected (Cumulative in
		Five Year Cycle 2010-2014)
2010	1,347	21%
2011	0*	100%
2012		
2013		
2014		

* In 2010 RG&E sold all its city streetlights to the City of Rochester and retains ownership of 513 streetlights outside city boundaries

VII. <u>Certifications</u>

Pursuant to Section 7 of Appendix A of the Safety Standards, the president or officer of each utility with direct responsibility for overseeing stray voltage testing and facility inspections shall provide an annual certification to the Commission that the utility has, to the best of his or her knowledge, exercised due diligence in carrying out a plan, including quality assurance, that is designed to meet the stray voltage testing and inspection requirements, and that the utility has:

- Tested all of its publicly accessible electric facilities and street lights, as referred to in the body of the February 15 Report, and
- Inspected the requisite number of electric facilities.

The certifications are attached as Exhibit 1 of this report.

VIII. Analysis of Causes of Findings and Stray Voltage

All New York State utilities perform an inventory on all findings and report on the number of these findings each year. Section 1(f) of the December 15, 2008 Order defines a finding as "any confirmed voltage reading on an electric facility or streetlight greater than or equal to 1 volt measured using a volt meter and 500 ohm shunt resistor." Section 1(c) defines Stray Voltage as "voltage conditions on electric facilities that should not ordinarily exist. These conditions may be due to one or more factors, including, but not limited to, damaged cables, deteriorated, frayed, or missing insulation, improper maintenance, or improper installation." A Summary of Energized Objects for the manual program can be found in Appendix 2 of this report.

Generally, there are two types of reported findings; a confirmed voltage reading greater than or equal to 1 volt measured using a volt meter and 500 ohm shunt resistor which is the result of an abnormal power system condition, and a confirmed voltage reading greater than or equal to 1 volt measured using a volt meter and 500 ohm shunt resistor which results from the normal delivery and/or use of electricity. Utilities are required to report on all findings, regardless of whether or not the voltage is abnormal or normal to operating conditions. Inclusion of these normal occurring voltages in the total findings can result in the perception that there are more potentially hazardous voltage findings than actually exist. Our analysis of confirmed findings deemed normal to the operating system has shown a detection rate of .048% to our total system.

Causes of these findings include, but are not limited to, naturally occurring neutral to earth voltages (as part of a multi-grounded WYE power system); poor soil grounding conditions; load balance between phases; long low voltage single phase circuit spurs with high current loads; and/or proximity to transmission lines. Attempts to mitigate these conditions include a high cost, and there is no guarantee of resolution.

True hazardous voltages have been identified and mitigated through the stray voltage testing program. These voltages resulted from a variety of conditions including: deterioration of conductors; age of equipment; exposure to the elements; and various customer related issues. Through the efforts of the stray voltage testing program, RG&E has been able to repair these issues and mitigate the danger associated with the elevated voltage.

Some distinction needs to be made between these two classes of findings: findings due to potentially hazardous Stray Voltage, and findings normal to the operating system. The following table contains a breakdown of the causes of Stray Voltage findings identified through the 2011 manual testing effort:

Streetlights	Defective Neutral Connection – Handhole	2
Streetlights	County Owned Equipment	1
Streetlights	Defective Neutral – Underground Cable	1
Transmission	Grounds and Ground Rods	1
Distribution	Transformers/Capacitors	1
Distribution	Guy Wire	2
Distribution	Defective Down Ground Connection	4
Distribution	Customer Owned Equipment	9
Distribution	Other Utility Equipment	3
Distribution	Inadequate Ground Path	1
Distribution	Defective Cutout/ Lightening Arrestor	1
		26

In accordance with the PSC requirements; when a finding is discovered on an electric facility or streetlight during stray voltage testing, the Company is obligated to perform stray voltage testing on all publicly accessible structures and sidewalks within a minimum 30 foot radius of the electric facility or streetlight. In this year's testing cycle 26 findings due to potentially hazardous stray voltages were found. A total of 11 additional objects were tested as a result of testing within a 30 foot radius. Of the 11 objects tested, none were energized associated with the initial tested structure.

IX. Analysis of Inspection Results

Overhead Distribution Structures

Table	of Locations	with Deficiencies	
			_

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies
46,760	471	1.01%

Breakdown of Locations with Deficiencies

Priority Rating	Number of Deficiencies	% Deficiencies Found
1	36	7.64%
2	192	40.76%
3	87	18.47%
4	156	33.12%
Total:	471	100%

Overhead Transmission Facilities

Table of Locations with Deficiencies

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies
2,804	127	4.53%

Breakdown of Locations with Deficiencies

	v	v
Priority Rating	Number of Deficiencies	% Deficiencies Found
1	0	0%
2	32	25.12%
3	45	35.43%
4	50	39.37%
Total:	127	100%

Underground Facilities

Table of	f Locations	with D	eficier	ıcies
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Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies
6,175	102	1.65%

Breakdown of Locations with Deficiencies

Priority Rating	Number of Deficiencies	% Deficiencies Found			
1	9	8.82%			
2	41	40.20%			
3	48	47.06%			
4	4	3.92%			
Total:	102	100%			

Pad-mounts

Table of Locations with Deficiencies

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies
4,658	244	5.24%

Breakdown of Locations with Deficiencies

		J
Priority Rating	Number of Deficiencies	% Deficiencies Found
1	4	1.64%
2	123	50.41%
3	49	20.08%
4	68	27.87%
Total:	244	100%

<u>Streetlights</u>

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies		
0	0	0%		

Dreakaown of Locations with Deficiencies					
Priority Rating	Number of Deficiencies	% Deficiencies Found			
1	0	0%			
2	0	0%			
3	0	0%			
4	0	0%			
Total:	0	0%			

Breakdown of Locations with Deficiencies

In 2011, a total of 944 deficiencies were identified through scheduled inspections which represent a deficiency rate of about 1.5% of the total unique inspections performed.

Each and every year since the commencement of the Safety Standards Order in 2005, NYSEG has continually made improvements toward the administration of the Facility Inspection program. The results of these improvements have provided some additional benefits to the company.

The collection and management of data was centralized into a single program group to provide an effective way to communicate inspection progress and issues to and from field operations and inspectors. The asset data received has enhanced the quality of information we had in place identifying in more detail specific structure attributes giving us the ability to document accurate GPS locations in the field. Common training efforts were conducted among all field personnel through the centralized program group resulting in uniform standardized reporting of field conditions.

Other groups within the company have also capitalized on this information to assist them in their particular needs. Asset Management groups have used inspection information to assist them in trending analysis and preparation of targeted maintenance efforts such as pole treatment and replacement projects, and other equipment issues. Vegetation Management groups routinely use inspection information to look for potential trouble spots where out of cycle trimming may be necessary.

X. <u>Stray Voltage Testing and Inspection QA/QC Programs</u>

Stray Voltage Testing QA/QC Program

Throughout the stray voltage testing effort, the testing contractor submits their testing data to NYSEG in the form of batch files. These batch files are submitted for multiple QA/QC reviews. The first review that takes place is for data accuracy. Batch files are scanned to ensure formatting and proper data is populated in each of the required fields. If approved, the file is loaded into the production database and a copy forwarded to the Global Positioning System (GPS) QA/QC Team for the second review to check the data for positional accuracy and content. If the data is not acceptable, the contractor is notified of such and the reasons for failure. The testing contractor remedies the problems and resubmits the file with corrections.

Following vendor batch file approval through the program administrator, the GPS QA/QC team loads the batch file into NYSEG's GIS database, SDE. The QA/QC team uses the GIS application Arc Map to evaluate and certify the testing results. The data, GPS location, test results and time stamp are recorded at each structure on Trimble GeoXt handheld devices with sub-meter GPS capability during the field testing effort. This collection method has been extensively used and successfully tested by NYSEG as an effective means of monitoring progress and ensuring the stray voltage testing contractor is acquiring all test points and delivering complete and accurate results. Additionally, the GPS QA/QC team employs the use of high level satellite ortho photography to verify positional accuracy.

The methodologies deployed to conduct the QA/QC evaluation are as follows:

- Upon data load into SDE, the level of digitized data points is checked and recorded to insure that the number of points does not exceed the expected level based on satellite position, interference (i.e. buildings, vegetation) and equipment capabilities. This level is generally < 1%. Also, at this time a gross high level check is made looking for gross geographical errors that would indicate a batch file processing error by the vendor. If either of these conditions is not acceptable the "batch" is rejected.
- Following the initial checks above, the batch data is overlaid on top of the previous years' data in Arc Map. All data is 100% evaluated against the prior testing effort plus some additional safeguards to be covered later. These methods have proven to be very effective in ensuring that all structures have been tested. The overall management of the process is through a grid system on which the field testing maps

are based. As data accumulates throughout the year the grids are attributed to reflect their completeness based on structure type, i.e. Streetlights OK = Yes and so on.

- The next aspect of QA/QC effort is final certification by division. When we are notified by the vendor that a division is complete and all data has been submitted we initiate a final audit of the division. This is a final review of any missed structures and any new structures not tested. Any structures deemed "missed" are extracted into a shape-file (GIS database) and fed back to the vendor for follow up testing, thus completing a continuous feedback loop year to year to cover missed structures. At this time the QA/QC team does a high level grid check to make sure no map sheets were omitted.
- The additional safeguards mentioned above are as follows:
 - Duplicate testing of structures: The analysts are prompted to be aware of and flag any evidence of massive duplicate testing.
 - GPS time stamp anomalies: Analysts are aware to look for suspicious time intervals between structures, particularly on heavily digitized areas (i.e. 3 seconds between poles 300' apart).

The QC team does a periodic review of the Stray Voltage data vs. The Corporate electrical distribution asset system called Smart-map. This evaluation allows us to identify any new or previously missed structures which are extracted and sent back to the vendor for testing.

Random Quality Assurance

On an ongoing basis, NYSEG performs many quality assurance measures to ensure testing data accuracy. These include, but are not limited to; investigations into inaccessible structures to determine the nature of inaccessibility, performance of individual testers, miscellaneous anomalies found in testing data, and checking circuit maps to ensure all structures have been visited. Problem testers are identified to the testing contractor and, if need be, removed from the testing effort. If needed, problem areas are retested in order to ensure testing accuracy. Any discrepancies found as a result of random data sampling checks like wrong town or street name and incorrect spellings are then corrected.

In addition to these measures, Field Coordinators conduct random field visits to ascertain that field contractors are performing tests on all required structures. During these visits, the Field Coordinator will observe testers performing their work to ensure they're doing it correctly and answer any questions about map reading, structure IDs, and location of structures. The Field Coordinator also performs follow up on randomly chosen completed maps to check that all structures are tested and recorded properly.

Inspection QA/QC Program

NYSEG's inspection program is administered through the Inspection Tracking System (ITS) Group. The ITS Group monitors all company assets in a central database to ensure all planned inspections for the current year are performed.

The ITS Group randomly selects a sample set of reported repaired deficiencies throughout each division. This sample set contains all information regarding the deficiency including the cause and the reported repair effort and is given to the QA/QC Coordinators to be field evaluated. NYSEG performs field verifications in each of its thirteen divisions to assess the reported results from inspectors. QA/QC Coordinators visit the specific asset and validate whether the reported repair work has been made. Independent results of the verification effort are compared to the original reporting to assess effectiveness.

In addition, the ITS Group develops a random sample of assets from each of the circuits inspected in the current year. Administered by a third party of QA/QC Coordinators who are qualified to perform utility inspections, they are deployed to perform independent field inspections on these random assets. Results of their findings are compared with results submitted by the field inspectors to assess effectiveness.

XI. <u>Other Pertinent Information</u>

RG&E Mobile Detection Program

Pursuant to the Public Service Commission's *Order Requiring Additional Mobile Stray Voltage Testing* ("Order"), Case 10-E-0271- In the Matter of Examining the Mobile Testing Requirements of the Electric Safety Standards, issued and effective July 21, 2010; Rochester Gas and Electric ("RG&E") performed 1 Mobile system scan in the City of Rochester between January 1, 2011 and December 31, 2011. RG&E contracted with Power Survey Company, 25 Campus Drive Kearny, NJ to perform mobile stray voltage testing in the City of Rochester for 2011.

Mobile Testing Procedure

Power Survey performed mobile testing utilizing their company test procedures with various ground reference points, which included fire hydrants, manhole covers, and street signs. These ground reference points can be at various distances up to 100 feet from the energized object.

In addition to the mobile detection services provided by Power Survey, RG&E provided a full time support team to assist Power Survey which included a Field Coordinator, and two electricians. The Field Coordinator followed along independently collecting GPS coordinates of the nightly routes traveled and on all hot structures found. The Coordinator documented the ground reference points used at each structure, as well as all false hits.

The GPS data was acquired to provide positional attributes to structures with detected voltages and to ensure all structures and streets reported by Power Survey were complete. The Field Coordinator ensured all documented voltage reads were accurate, and all

energized objects found to be energized at 4.5 volts or greater were immediately made safe and turned over to the appropriate owner for repair.

Under the direction of the Field Coordinator, the two electricians were utilized to ensure that unnecessarily lengthy wait times were not incurred due to the anticipated high incidence of findings on the mobile detection program, and to isolate all energized objects.

Mobile Testing Results

The mobile scan of the City of Rochester included approximately 27,102 testable structures. In total, Power Survey scanned 782 miles on 495 street miles and the results for this effort are as follows:

Mobile Testing Summary of Events				
Total Number of Events	~ ~	365		
Below 4.5 Volts	316	86.6%		
Greater or Equal to 4.5 And Less Than 25 Volts	39	10.7%		
Greater or Equal to 25 And Less Than 100 Volts	7	1.9%		
Greater or Equal to 100 Volts	3	0.8%		

Of all 316 findings below 4.5 volts, a large percentage of detections were below 2 volts. The table below categorizes all the low voltage findings into smaller voltage classes to illustrate the specific findings.

Breakdown Of Voltages Below 4.5 Volts				
Total Number of Events < 4.5 volts		316		
1- 1.9 volts	203	64.2%		
2- 2.9 volts	82	25.9%		
3- 4.4 volts	31	9.8%		

Analysis

Final results of the mobile scan confirmed 365 energized objects. All stray voltage findings greater or equal to 4.5 volts were immediately made safe to the public and turned over to the appropriate owner to execute permanent repair. As a result of immediately safeguarding any findings equal to or greater than 4.5 volts, 2 energized objects were cleared immediately.

All energized objects below 4.5 volts were immediately safeguarded and have been turned over to the City of Rochester for further investigation and to conduct permanent repairs.

A summary of energized object for the mobile detection program can be found in Appendix 2(a).

RG&E	Total System Units	Units Completed	Percent Completed	Units with Voltage Found (>= 1.0v)	Percent of Units Tested with Voltage (>= 1.0v)	Units Classified as Inaccessible
Distribution Facilities	211,256	211,256	100%	26	0.012%	297
Underground Facilities	44,560	44,560	100%	0	0%	107
Street Lights / Traffic Signals	24,372	24,372	100%	4	0.016%	2
Substation Fences	170	170	100%	0	0%	0
Overhead Transmission	19,131	19,131	100%	99	0.517%	223
TOTAL	299,489	299,489	100%	129	0.043%	629

Appendix 2 Ourninary		cigizcu c	Jujee		liiuai	Tiogra	<u>111)</u>
		Initial Deer	lingo		1	Readings a	
RG&F	4 4 4)/		angs	Tatala	. 417		
Distribution Excilition	1-4.4V	4.0-24.90	>250	101als	< 1 V	1-4.4 V	>4.50
Distribution Facilities	22	5		20	23	3	0
Fole	1	2	1	7	6	1	
Giv	4	2	0	18	16	2	
Bisor	1	0	0	10	10	2	
Other	I	0	0	0	1		
Underground Facilities	0	0	0	0	0	0	0
Manhole/ Pull box	•	, , , , , , , , , , , , , , , , , , ,	Ŭ	0			
Manhole				0			
Padmount Switchgear				0			
Padmount Transformer				0			
Vault-Cover/Door				0			
Pedestal				0			
Other				0			
Street Lights/Traffic Signals	2	0	2	4	4	0	0
Metal Street Light Pole	2	0	2	4	4	0	0
Traffic Signal Pole				0			
Pedestrian Crossing Pole				0			
Traffic Control Box				0			
Other				0			
Substation Fences	0	0	0	0	0	0	0
Fence				0			
Other				0			
Transmission (Total)	84	13	2	99	2	5	2
Lattice Tower				0			
Pole	2	0	0	2	0	2	0
Ground	68	9	2	79	2	1	2
Guy	13	4	0	17	0	2	0
Other	1	0	0	1	0	0	0
Miscellaneous Facilities	0	0	0	0	0	0	0
Sidewalk				0			
Gate/Fence/Awning				0			
Control Box				0			
Scaffolding				0			
Bus Shelter				0			
Fire Hydrant				0			
Phone Booth				0			
Water Pipe				0			
Riser				0			
Other				0			

Appendix 2 Summary of Energized Objects (Manual Program)

		nci gizcu				, i i ogi	amy
RG&E		Initial Readi	ngs			Readings a Mitigatior	fter 1
	1- 4.4V	4.5- 24.9V	>25V	Totals	< 1V	1- 4.4V	>4.5V
Distribution Facilities	0	0	0	0	0	0	0
Pole				0			
Ground				0			
Guy				0			
Riser				0			
Other				0			
Underground Facilities	1	3	0	4	4	0	0
Service Box				0			
Manhole	1	1	0	2	4		
Padmount Switchgear				0			
Padmount Transformer				0			
Vault-Cover/Door				0			
Pedestal				0			
Other		2	0	2			
Street Lights/Traffic Signals	304	25	9	338	33	0	0
Metal Street Light Pole	256	17	9	282	26		
Traffic Signal Pole	37	6	0	43	6		
Pedestrian Crossing Pole	0	0	0	0			
Traffic Control Box	0	1	0	1			
Other	11	1	0	12	1		
Substation Fences	0	0	0	0	0	0	0
Fence				0			
Other				0			
Transmission (Total)	0	0	0	0	0	0	0
Lattice Tower				0			
Pole				0			
Ground				0			
Guy				0			
Other				0			
Miscellaneous Facilities	17	11	1	29	16	0	0
Sidewalk				0			
Gate/Fence/Awning	1	1	0	2			
Control Box	0	0	1	1	1		
Scaffolding				0			
Bus Shelter				0			
Fire Hydrant				0			
Phone Booth				0			
Water Pipe (Cap)	1	0	0	1			
Riser				0			
Other*	15	10	0	25	15		
Totals	322	39	10	371	53	0	0

Appendix 2(a) Summary of Energized Objects (Mobile Program)

*Including but not limited to rain gutter drain, tree guard, street sign, parking meters, municipal meter, metal door, bridge joint, patches of dirt, metal pole, and guard rail

	RGE Data as of December 31, 2011	Quarterly Update	Yearly Total
I.	Total Shock Calls Received:	2	7
	Unsubstantiated	2	4
	Normally Energized Equipment		2
	Stray Voltage:		
	Person		1
	Animal		
П.	Injuries Sustained/Medical Attention Received:	0	1
	Person		1
	Animal		
111.	Voltage Source:	0	3
	Utility Responsibility		
	Issue with primary, joint, or transformer		
	Secondary joint (Crab)		
	SL service Line		
	Abandoned SL service line		
	Defective service line		
	Abandoned service line		
	OH Secondary		
	OH Service		
	OH Service neutral		
	Pole		
	Riser		
	Other		
	Customer Responsibility		
	Contractor damage		
	Customer equipment/wiring		3
	Other Utility/Gov't Agency Responsibility		
	SL Base Connection		
	SL Internal wiring or light fixture		
	Overhead equipment		
IV.	Voltage Range:	0	1
	1.0V to 4.4V		
	4.5V to 24.9V		
	25V and above		
	No Reading		1

Appendix 3 Summary of Shock Reports from the Public

Appendix 4 RGE Visual Inspection Program Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Distribution

Overhead Facilities		2009			2010			2011			2012			2013	
Priority Level	I	II		I	II		I			I			I	11	
Repair Expected	Within 1 week	Within 1 year	Within 3 years	Within 1 week	With in 1 year	With in 3 year s									
								Poles							
Pole Condition Number of															
Deficiencies Repaired in	-	16	44	-	5	9	0	8	11						
Time Frame Repaired - Overdue		15 1	32		5	8		3	7						
Not Repaired - Not Due Not Repaired -		·	12			1		5	4						
Overdue															
Grounding System Number of															
Deficiencies Repaired in	-	9	37	-	5	4	0	2	4						
Time Frame Repaired -		9	37		4	3		2	3						
Not Repaired - Not Due					1	1			1						
Not Repaired - Overdue						·									
Anchors/Guy Wire															
Deficiencies	-	6	15	-	4	13	0	16	7						
Repaired in Time Frame		6	12		3	12		14	7						
Repaired - Overdue					1										
Not Repaired -			~			4		~							
Not Due Not Repaired - Overdue			3			1		2							

Riser	
Number of	
Deficiencies 1 0 1 0	
Repaired in	
Time Frame	
Repaired -	
Overdue	
Not Repaired -	
Not Due 1 1	
Not Repaired -	
Överdue	
Cross	
Arm/Bracing	
Number of	
Deficiencies - 8 38 - 13 12 3 16 8	
Repaired in	
Time Frame 8 36 9 12 2 11 6	
Repaired -	
Not Poppired	
Not Repaired -	
Not Date 2 5 2	
Not Repaired -	
Overdue	
Conductors	
Primary Wise (Broken	
lies Newton of	
Deficiencies 11 228 143 1 77 68 6 96 32	
lime Frame 10 219 138 1 /3 66 6 /5 29	
Repaired -	
Overdue 1 9 3	
Not Repaired -	
Not Due 5 2 21 3	
Not Repaired -	
Overdue 1	
Overdue 1 Neutral 1	
Overdue 1 Neutral 1 Number of 1	
Overdue 1 Image: Constraint of the state of the stat	
Overdue1Neutral Number of Deficiencies52348212310	
Overdue 1 Image: Constraint of the state of the stat	
Overdue1Neutral Number of Deficiencies52348212310Repaired in Time Frame50348212310	
Overdue1Neutral Number of Deficiencies52348212310Repaired in Time Frame50348212310Repaired - Overdue2448212310	
Overdue1Image: Constraint of the second secon	
Overdue1Image: Constraint of the second secon	
Overdue11Neutral Number of Deficiencies52348212310Repaired in Time Frame50348212310Repaired - Overdue2482123111Not Repaired - Not Due244444444Not Repaired - Not Repaired - Not Repaired - Not Repaired -44444444Not Repaired - Not Repaired - Not Repaired -444	

Insulators										
Number of		2			40	2	2	25	•	
Deficiencies	1	3	4	-	12	2	2	25	9	
	-	2	2		10	2	2	22	0	
Depoired	I	3	3		IZ	2	2	23	9	
Repaired -										
Not Popoirod										
Not Repaired -			1					2		
Not Repaired -			'					2		
Overdue										
T ([[Pole Ec	luipmer	nt	
Transformers										
Number of		_	•				•			
Deficiencies	-	5	2	-	1	-	0	1	1	
Repaired in		-	2		4			4		
Depaired		5	2		I			1	1	
Repaired -										
Overaue Not Depaired										
Not Repaired -										
Not Penaired										
Cutouto										
Cutouts										
Number of	1	10	e	2	15	2	0	2	2	
Denciencies Bopairod in	1	19	0	2	15	3	0	2	2	
Timo Fromo	1	10	6	2	15	2		2	1	
Poppirod	1	19	0	Z	15	3		Z	I	
Overdue										
Not Repaired -										
Not Due									1	
Not Repaired -										
Overdue										
Lightning										
Arrestors										
Number of										
Deficiencies	-	5	24	-	7	3	0	10	7	
Repaired in										
Time Frame		5	23		7	3		7	5	
Repaired -										
Overdue										
Not Repaired -										
Not Due			1					3	2	
Not Repaired -										
Overdue										
Skypin/Skypin										
Bolt										
Number of	_	10	_		_	~			-	
Deficiencies	1	10	5	-	7	3	0	1	2	
Repaired in		10	_		7	~		4	~	
⊓me ⊢rame	1	10	5		/	3		1	2	
Repaired -										

Overdue Not Repaired - Not Due Not Repaired - Overdue										
	_						Miscel	laneous	5	
Trimming Related										
Deficiencies	1	22	52	4	24	3	0	0	0	
Time Frame Repaired -	1	22	52	3	23	3				
Overdue Not Repaired -				1	1					
Not Due Not Repaired -										
Overdue										
Number of										
Deficiencies Repaired in	1	33	64	6	51	30	2	13	4	
Time Frame Repaired -	1	33	63	6	48	27	1	7	4	
Överdue Not Repaired -					3		1			
Not Due			1			3		6		
- Not Repaired Overdue										
						Ove	rhead F	acilities	Total	
Total										
Number of										
Deficiencies	68	367	438	21	223	152	36	192	87	
Time Frame	65	357	413	20	209	143	34	147	74	
Repaired -							•			
Overdue	3	10	-	1	13	-	2	-	-	
Not Repaired -	-	-	25	-	-	q	-	45	13	
Not Repaired -			20			5		ΤU	10	
Overdue	-	-	-	-	1	-	-	-	-	

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Transmission RGE

Transmission Facilities		2009			2010			2011			2012			2013	
Priority Level	1			1			1			1			1	Ш	111
	•			•			•			•			•	Wit	With
Repair Expected	Within 1 week	Within 1 year	Within 3 years	Within 1 week	hin 1 yea r	in 3 year s									
							Tow	ers/Pol	es						
Steel Towers Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired -	-	-	-	-	-	-	-	-	1						
Not Repaired Not Repaired - Overdue									1						
Poles															
Number of Deficiencies Repaired in	-	20	38	-	-	7	-	7	5						
Time Frame Repaired -		18	26			4		2							
Not Repaired - Not Due Not Repaired - Overdue		2	12			3		5	5						
Anchors/Guy Wire															
Number of Deficiencies Repaired in Time Frame Repaired -	-	7 7	6	-	-	1	-	2 1	7 7						
Överdue Not Repaired - Not Due Not Repaired - Overdue						1		1							

Crossarm/Brace														
Number of														
Deficiencies	-		10		17	-		1	14	-	-	10		
Repaired in Time								•				10		
Frame		10		14			1		11			4		
Renaired -		10		14			•		• •			Т		
Overdue														
Not Repaired -					l									
Not Duo				2					2			6		
Not Penaired -				5					J			0		
Overdue														
Grounding														
System														
Number of			~		•						4.0			
Deficiencies	-		2		9	-		-	15	-	16	4		
Repaired in Time		-		-							. –	-		
Frame		2		6					12		15	2		
Repaired -														
Overdue														
Not Repaired -														
Not Due				3				3	3		1	2		
Not Repaired -														
Overdue														
										Cond	ductors			
Cable										Cond	ductors			
Cable Number of										Cond	luctors			
Cable Number of Deficiencies	_		-		1	_		_	_	Conc	ductors	8		
Cable Number of Deficiencies Repaired in Time	-		-		1	-		-	-	Conc	ductors	8		
Cable Number of Deficiencies Repaired in Time Frame	-		-		1	-		-	-	Conc	<mark>ductors</mark> 3 1	8 6		
Cable Number of Deficiencies Repaired in Time Frame Repaired -	-		-		1	-		-	-	Conc	<mark>ductors</mark> 3 1	8 6		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue	-		-		1	-		-	-	Conc	<mark>ductors</mark> 3 1	8 6		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired -	-		-		1	-		-	_	Conc	<mark>ductors</mark> 3 1	8 6		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due	-		-	1	1	-		-	-	-	3 3 1	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired -	-		-	1	1	-		-	-	-	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue	-		-	1	1	-		-	-	-	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral	-		-	1	1	-		-	-	-	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of	-		-	1	1	-		-	-	-	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies	-		-	1	1	-		-	-	- -	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time	-		-	1	1	-		-	-	- -	3 1 2	8 6 2 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame	-		-	1	1	-		-	-	- -	3 1 2	8 6 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame Repaired -	-		-	1	1	-		-	-	- -	3 1 2	8 6 2 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame Repaired - Overdue	-		-	1	1	-		-	-	- -	3 1 2	8 6 2 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame Repaired - Overdue	-		-	1	1	-		-	-	- -	3 1 2	8 6 2 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due	-		-	1	-	-		-	-	<u>-</u>	3 1 2 1	8 6 2 2		
Cable Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Static/Neutral Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired -	-		-	1	-	-		-	-	- -	Juctors 3 1 2 1 1	8 6 2 2 2		

Insulators										
Number of										
Deficiencies	-	34	49	-	1	9	-	-	6	
Repaired in Time										
Frame		33	46		1	2				
Repaired -										
Overdue		1								
Not Repaired -										
Not Due			3			7			6	
Not Repaired -										
Overdue										
							Mis	scellaneou	IS	
Right of Way										
Condition										
Number of										
Deficiencies	-	64	-	-	-	-	-	-	-	
Repaired in Time										
Frame		64								
Repaired -										
Överdue										
Not Repaired -										
Not Due										
Not Repaired -										
Överdue										
Other										
Number of										
Deficiencies	-	304	76	-	5	19	-	3	2	
Repaired in Time										
Frame		303	57		5	6				
Repaired -										
Överdue		1								
Not Repaired -										
Not Due			19			13		3	2	
Not Repaired -										
Överdue										
	_	-			-	Trans	miss	ion Facilit	ies Tota	
Total										
Number of										
Deficiencies	-	441	196	-	7	65	-	32	45	
Repaired in Time					2					
Frame	-	437	155	-	7	35	-	19	19	
Repaired -					-				="	
Overdue	-	4	-	-	-	-	-	-	-	
Not Repaired -										
Not Due	-	-	41	-	-	30	-	13	26	
Not Repaired -								-		
Överdue	-	-	-	-	-	-	-	-	-	

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Underground RGE

Underground Facilities		2009			2010			2011			2012			2013	
Priority Level			III	1	11	111		11		1	11		1	11	
Repair Expected	Within 1 week	Within 1 vear	Within 3 vears	Within 1 week	Within 1 vear	Within 3 vears	Within 1 week	Within 1 year	Within 3 vears	Within 1 week	Within 1 year	Within 3 vears	Withi n 1 week	Wit hin 1 yea r	Within 3 vears
						i I	Indergro	und Str	uctures						
Damaged Cover						L			uctures						
Deficiencies Repaired in	-	1	-	2	2	3	2	18	24						
Time Frame Repaired -		1		2	2	3	2	11	19						
Not Repaired - Not Due Not Repaired - Overdue								7	5						
Damaged Structure															
Deficiencies Repaired in	-	-	-	-	8	6	1	5	13						
Time Frame Repaired -					5	2	1	5	9						
Overdue Not Repaired - Not Due Not Repaired					3	4			4						
- Overdue															
Congested Structure Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired	-	-	-	-	-	-	-	-	-						
Not Repaired - Overdue															

Damaged											
Equipment											
Number of											
Deficiencies	-		-	-	-	5	4	2	3	2	
Repaired in											
Time Frame						2	2	1			
Bonoirod						2	2				
Repaireu -						~					
Overdue						2					
Not Repaired											
- Not Due							2		3	2	
Not Repaired											
- Overdue						1		1			
		-						Con	ductor	S	
Primary										-	
Cable											
Number of											
Deficiencies	_		_	_	1	8	3	1	1	1	
Denciencies Dencirod in	-		-	-	'	0	5		-	1	
					4	0	2	4			
Time Frame					1	8	Z	1			
Repaired -											
Overdue											
Not Repaired											
- Not Due							1		4	1	
Not Repaired											
- Overdue											
Secondary											
Cable											
Number of											
Deficiencies	_		_	1	2	5	2	2	2	_	
Denciencies Denciencies	-		-	'	2	5	2	2	2	-	
				4	2	-	4	0			
Time Frame				1	2	Э	1	2			
Repaired -											
Overdue											
Not Repaired											
- Not Due							1		2		
Not Repaired											
- Overdue											
Neutral											
Cable											
Number of											
Deficiencies	-		-	-	-	1	1	-	2	4	
Renaired in									_	-	
Time Frame						1	1		1	1	
Papairod						1	I		1		
Overaue											
Not Repaired									-	-	
- Not Due									1	3	
Not Repaired											
- Overdue											

Racking																	
Needed																	
Number of																	
Deficiencies		-		-		-		-	-	2	2		-	-	1		
Repaired in																	
Time Frame																	
Repaired -																	
Överdue																	
Not Repaired																	
- Not Due										2					1		
Not Repaired																	
- Overdue																	
		-										Μ	lisc	ellaneo	bus	· · · · ·	
Other																	
Number of																	
Deficiencies		-		-		-		-	1	7	7		1	7	3		
Repaired in																	
Time Frame									1	1				2	1		
Repaired -																	
Överdue													1				
Not Repaired																	
- Not Due										6				5	2		
Not Repaired										-				•			
- Overdue																	
		-						·		Un	nd	ergro	oun	d Faci	lities To	tal	
Total											Ĩ	-					
Number of																	
Deficiencies		-		1		1		5	30	28	3		9	41	48		
Repaired in				-		-		•			-		•				
Time Frame	-		1		1		5		24	12		7		19	30		
Repaired -			-		-		-					-					
Overdue	-		-		-		-		5	-		1		-	-		
Not Repaired									-			-					
- Not Due	-		-		-		-		-	16		-		22	18		
Not Repaired															10		
- Overdue	-		-		-		-		1	-		1		-	-		

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Pad Mount Transformers RGE

Pad Mount Transformers		2009			2010			2011			2012			2013	
Priority Level													I		
Repair Expected	Within 1 week	Within 1 year	Within 3 years	Within 1 week	Within 1 year	Within 3 years	Within 1 week	Within 1 year	Within 3 years	Within 1 week	Within 1 year	Within 3 years	Within 1 week	Withi n 1 year	Wit hin 3 yea rs
						Pa	d Moun	t Trans	formers	5	-				
Damaged Structure Number of Deficiencies Repaired in	2	262	112	1	44	24	1	49	25						
Time Frame Repaired - Overdue	2	200 62	72	1	31 10	1	1	2							
Not Repaired - Not Due Not Repaired - Overdue			40		3	23		47	25						
- Overdue Damaged Equipment Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue Cable	1	5 4 1	3 1 2	-	3 1 1	-	-	37 1 36	13 13						
Condition Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue	1 1	-	-	-	-	-	2 2	3 3	-						

Oil Leak										
Number of										
Deficiencies	2	24	16	-	12	2	-	11	-	
Repaired in Time										
Frame	1	10	4		7					
Repaired -										
Överdue	1	14			4					
Not Repaired -										
Not Due			12			2		11		
Not Repaired -										
Overdue					1					
Off Pad										
Number of										
Deficiencies	-	24	11	-	4	9	-	-	-	
Repaired in Time										
Frame		14	6		3	5				
Repaired -										
Overdue		10			1					
Not Repaired -										
Not Due			5			4				
Not Repaired -										
Overdue										
Lock/Latch/Penta										
Number of				-					_	
Deficiencies	-	32	226	4	52	23	1	19	5	
Repaired in Time		10			~~~	•				
Frame		19	93	1	30	8	1	1		
Repaired -		40		0	00					
Overaue		13		3	20					
Not Repaired -			100			45		10	~	
Not Due			133			15		18	5	
					2					
Overdue	<u> </u>		-		2		Misselle			 · · · ·
• /1	1						wiiscena	aneous	5	
Other										
Number of										
D . ('. ' '		~ ~ ~	000		~~~			~	-	
Deficiencies	2	64	393	-	68	54	-	6	7	
Deficiencies Repaired in Time	2	64	393	-	68	54	-	6	7	
Deficiencies Repaired in Time Frame	2 2	64 10	393 77	-	68 37	54 17	-	6 3	7	
Deficiencies Repaired in Time Frame Repaired -	2 2	64 10	393 77	-	68 37	54 17	-	6 3	7	
Deficiencies Repaired in Time Frame Repaired - Overdue	2 2	64 10 54	393 77	-	68 37 29	54 17	-	6 3	7	
Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired -	2 2	64 10 54	393 77	-	68 37 29	54 17	-	6 3	7	
Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired -	2 2	64 10 54	393 77 316	-	68 37 29	54 17 37	-	6 3 3	7 7	

		Pad Mount Total													
Total															
Number of															
Deficiencies		8	411	761		5	181	112		4	125	50			
Repaired in Time															
Frame	5		257	253	1		109	31	1		7	-			
Repaired -															
Overdue	3		154	-	4		64	-	3		-	-			
Not Repaired -															
Not Due	-		-	508	-		-	81	-		118	50			
Not Repaired -															
Överdue	-		-	-	-		8	-	-		-	-			

Comments of Deficiencies and Densit Activity Deputting from the Inspection Decases. Other that to															
Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Streetlights RGE															
	Overhead														
Overhead Facilities		2009			2010			2011			2012			2013	
Priority Level			III		11				III			111		Ш	
Repair Expected	Within 1	Within	Within 3	Within 1	Within	Within 3	Within 1	Within	Within 3	Within 1	Within	Within 3	Wit hin 1 wee	Wit hin 1	With in 3 year
	week	i year	years	week	i year	years	Stro	otlight	years	week	i year	years	<u> </u>	year	5
				1			Stre	etiight					<u> </u>		
Base/Standard/Lig ht															
Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired -	0	0	0	0	0	0	-	-	-						
Handhole/Service															
Box															
Number of															
Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue	0	0	0	0	0	0	-	-	-						
Service/Internal															
Wiring Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not	0	0	0	0	0	0	-	-	-						
Due															
Not Repaired - Overdue															

Access Cover Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue		0	C)	0	0	0	·	0	-	-	-				
										Misc	cellaneo	ous				
Other Number of Deficiencies Repaired in Time Frame Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue		0	C)	0	0	0	1	1	-	-	-				
	•	·		-				-	S	Stree	tlight T	otal			· · · ·	Ť
Total Number of Deficiencies Repaired in Time Frame	-		-	-		-	-	1		-	-	-				
Repaired - Overdue Not Repaired - Not Due Not Repaired - Overdue	-			- -		-	-	- 1 -		-	-	-				

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Level IV Conditions RGE

Overhead Facilities	2009		20	10	20	011	201	2	20	13
	Number of	Number of	Number of	Number of	Number of	Number of	Number of	Number of Conditio ns	Number of Conditio	Number of Conditio
	Conditions Found	Conditions Repaired	Conditions Found	Conditions Repaired	Conditions Found	Conditions Repaired	Conditions Found	Repaire d	ns Found	ns Repaired
			•	C	verhead Fa	cilities	-	-	•	
Pole Condition										
Pole Condition			2		5					
Grounding										
System			24	5	2					
Anchors/Guy										
Wire			8		13					
Riser			2							
Cross										
Arm/Bracing					2					
Conductors				1						
Primary										
Wire/Broken Ties			2		3					
Neutral										
Insulators					1					
Pole Equipment				-						
Transformers										
Cutouts										
Lightning				-						
Arrestors										
Other Equipment										
Miscellaneous										
Trimming Related			34	1	125					
Other			3	1	5					
Overhead										
Facilities Total	0	0	75	7	156	-		-		
			1	Tra	nsmission	Facilities	1		1	
Towers/Poles										
Steel Towers										
Poles	222	2								
Anchors/Guy										
Wire	94	1								
Crossarm/Brace	108		2	2	1					
Grounding										
System	4									
Conductors										
Cable	3									
Static/Neutral			2	1	26					
Insulators	252		2	2	8					
Miscellaneous										
Right of Way										
Condition	78									

Other	426		3	1	15		
Transmission							
Facilities Total	1,187	3	9	6	50		
				Une	derground Facilities		
Underground							
Structures							
Damaged Cover			9		4		
Damaged							
Structure			31				
Congested							
Structure							
Damaged			40				
Equipment			10				
Conductors							
Primary Cable	1		12				
Secondary Cable			1				
Neutral Cable							
Racking Needed			8				
Miscellaneous							
Other			6				
Underground							
Facilities Total	1	0	77	0	4		
				Pad	Mount Transformers	S	
Pad Mount							
Structures							
Damaged							
Structure			168		2		
Damaged							
Equipment					1		
Damaged Cable							
Oil Leak							
Off Pad			1				
Look/Lotoh/Dout-	044		070				
Lock/Latch/Penta	241	1	270				
wiscellaneous			<i>, .</i> –				
Other	4		145	1	62		
Pad Mount	0.45		50.4		05		
Transformer Total	245	1	584	1	65		

					Streetlight	ts					
Streetlight											
Base/Standard/Light											
Handhole/Service Box Service/Internal Wiring Access Cover Miscellaneous Other			٥								
Streetlight Total	0	0	8	0	0						
Ŭ	Total Level IV Conditions										
Overall Total	1,433	4	753	14	275	0					

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process

Year		Priority Level / Repair Expected	Deficiencies Found (Total)	Repaired In Time Frame	Repaired - Overdue	Not Repaired - Not Due	Not Repaired - Overdue
2009							
	I	Within 1 week	76	70	6	0	0
	Ш	Within 1 year	1,220	1052	168	0	0
	Ш	Within 3 years	1,396	822	0	574	0
	IV	N/A	1,433	4	n/a	1,429	n/a
2010							
	I	Within 1 week	31	26	5	0	0
	Ш	Within 1 year	441	349	82	0	10
	Ш	Within 3 years	358	221	0	137	0
	IV	N/A	753	14	n/a	739	n/a
2011							
	Ι	Within 1 week	49	42	6	0	1
	Ш	Within 1 year	390	192	0	198	0
	Ш	Within 3 years	230	123	0	107	0
	IV	N/A	275	0	n/a	275	n/a
2012							
	I	Within 1 week					
	Ш	Within 1 year					
	Ш	Within 3 years					
	IV	N/A					
2013							
	I	Within 1 week					
	Ш	Within 1 year					
	Ш	Within 3 years					
	IV	N/A					

Appendix 5 Temporary Repair Exceptions

For 2011, RG&E has no temporary repair exception to report.

		Repaired Number of Days Overdue				 N	Not Ro lumbe Ove	epaire r of Da erdue	d lys	
Year	Facilities	1- 30	31- 90	91- 180	>180	1- 30	31- 90	91- 180	>180	Comments
2009	Distribution	0	-	1	_				_	
	Transmission	3	-	2		_	-	-		
	Underground	-		3	-	-	-	-	-	
	Pad-mounts	-	-	-	-	-	-	-	-	
	Streetlights	41	21	00	20	-	-	-	-	
2010	Distribution	-	- 7	-	-	_	1	_		Pole is inaccessible and requires an
	Transmission	-	-	-	_	_	_	_	_	
	Underground	4	1	_	_	_	_	1	_	Referred to engineering
	Pad-mounts	31	27	6	_	4	4	-	_	Require outages
	Streetlights	-	-	-	-	-	-	-	-	
2011	Distribution	-	-	-	-	-	-	-	-	
	Transmission	-	-	-	-	-	-	-	-	
	Underground	-	-	-	-	-	-	-	-	
	Pad-mounts	-	-	-	-	-	-	-	-	
	Streetlights	-	-	-	-	-	-	-	-	
2012	Distribution									
	Transmission									
	Underground									
	Pad-mounts									
	Streetlights									
2013	Distribution									
	Transmission									
	Underground									
	Pad-mounts									
	Streetlights									

Appendix 6 Summary of Overdue Repairs for Level II Repairs

Exhibit 1

CERTIFICATION [STRAY VOLTAGE TESTING]

STATE OF NEW YORK

COUNTY OF Monroe

)) ss.:

Mary Smith on this <u>14</u> day of February 2012 certifies as follows:

)

- I am the Vice President, Asset Management and Planning for Rochester Gas and Electric (the "Company"), and in that capacity I make this Certification for the annual period ending December 31st, 2011 based on my knowledge of the testing program adopted by the Company in accordance the Public Service Commission's Orders issued and effective January 5, July 21, 2005, and December 15, 2008 in Case 04-M-0159 and July 21, 2010 in Case 10-E-0271 (collectively the "Orders"), including the Quality Assurance Program filed by the Company with the Commission.
- 2. In accordance with the requirements of the Orders, the Company developed a program designed to test (i) all of the publicly accessible electric facilities owned by the Company ("Facilities") and (ii) all streetlights located in public thoroughfares in the Company's service territory ("Streetlights"), as identified through a good faith effort by

the Company, for stray voltage (the "Stray Voltage Testing Program").

- 3. I am responsible for overseeing the Company's Stray Voltage Testing Program and in that capacity I have monitored the Company's Stray Voltage Testing Program during the twelve months ended December 31st, 2011 (the "Twelve-Month Period").
- 4. I hereby certify that, to the best of my knowledge, information and belief, the Company has implemented and completed its Stray Voltage Testing program for the Twelve Month Period. Except for untested structures that are identified as temporarily inaccessible in the Company's Annual Report, submitted herewith, the Company is unaware of any Facilities or Streetlights that were not tested during the Twelve-Month Period.
- 5. I make this certification subject to the condition and acknowledgment that it is reasonably possible that, notwithstanding the Company's good faith implementation and completion of the Stray Voltage Testing Program, there may be Facilities and Streetlights that, inadvertently, may not have been tested or were not discovered or known after reasonable review of Company records and reasonable visual inspection of the areas of the service territory where Facilities

and Streetlights were known to exist or reasonably expected

to be found.

Mary R. Suntit

Sworn to before me this $\frac{14}{14}$ day of February, 2012

Notary Public:

anny m. Salvers

ANNA M. SABERS Notary Public, State of New York No. 01SA6072590 Qualified in Monroe County Commisson Expires April 08, 20

Exhibit 1 <u>CERTIFICATION</u> [FACILITY INSPECTIONS]

STATE OF NEW YORK)) ss.: COUNTY OF Monroe)

Gene M. Jensen, on this 15th day of February 2012, certifies as follows:

- I am the Vice President, Electric Operations for Rochester Gas and Electric (the "Company"), and in that capacity I make this Certification for the annual period ending December 31st, 2011 based on my knowledge of the inspection program adopted by the Company in accordance the Public Service Commission's Orders issued and effective January 5, July 21, 2005, and December 15, 2008 in Case 04-M-0159 and July 21, 2010 in Case 10-E-0271 (collectively the "Orders"), including the Quality Assurance Program filed by the Company with the Commission.
- 2. The Company has an inspection program that is designed to inspect all of its electric facilities on a five-year inspection cycle, as identified through a good faith effort by the Company ("Facilities"), in accordance with the requirements of the Orders (the "Facility Inspection Program").
- 3. I am responsible for overseeing the Company's Facility Inspection Program and in that capacity I have monitored the

program during the twelve months ended December 31st, 2011 (the "Twelve-Month Period").

4. I hereby certify that, to the best of my knowledge, information and belief, the Company has implemented and completed its Facility Inspection Program to inspect approximately 20 % of its Facilities during calendar year 2011, in order to comply with the five-year inspection cycle required under the Orders.

Love M. Jenson

Sworn to before me this 15 day of February, 2012 Notary Public: Roberta B. Holahaw

> ROBERTA B. HOLAHAN Notary Public, State of New York No. 01HO6040322 Qualified in Monroe Council L Commission Expires April 17, 20