CENTRAL HUDSON GAS & ELECTRIC CORPORATION

CONTACT VOLTAGE TESTING

And

FACILITY INSPECTIONS

Report

On the results of the

2012 Contact Voltage Testing and Facility Inspections

February 15, 2013

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I. Background

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, and December 15, 2008 (collectively referred to herein as the "Safety Standards" or "Order"), requires electric utilities in New York State to test annually all of their publicly accessible transmission facilities and distribution facilities, as well as municipally owned traffic signals and streetlights for contact voltage and to inspect utility owned electric facilities every five years.

This report describes Central Hudson's contact voltage detection program and equipment inspection program conducted in 2012.

II. Company Overview

Central Hudson Gas & Electric Corporation is a regulated transmission and distribution utility that provides electric service to approximately 300,000 customers in a service area of approximately 2,600 square miles in eight counties of New York State's Mid Hudson River Valley. Central Hudson's service territory extends north from the suburbs of metropolitan New York City to the Capital District of Albany.

Central Hudson owns substations having an aggregate transformer capacity of 5,300 MVA. Central Hudson's electric transmission system consists of 629 pole miles of line. The electric distribution system consists of 7,293 pole miles of overhead lines and 1,371 trench miles of underground primary lines.

III. Contact Voltage Testing Program

During the twelve-month period ending December 31, 2012, contact voltage testing was completed on all of Central Hudson's publicly accessible transmission and distribution facilities that are capable of conducting electricity along with all Company and non-Company owned metallic streetlights and traffic signals. Central Hudson also tested all publicly accessible facilities within thirty feet of a component found to have an elevated voltage in accordance with the Order.

In addition, as required by the Order, Central Hudson:

a. Immediately safeguarded and/or mitigated all contact voltages $\geq 1.0\ V_{ac}$. In instances where the contact voltage finding was determined to be caused by equipment not owned by Central Hudson, the area was immediately made safe and the municipalities, customers, or responsible parties associated with the premises were notified of the unsafe condition and the need for them to arrange for a permanent repair. Voltage findings that were caused by a Central Hudson owned facility were immediately safeguarded and/or mitigated. All permanent repairs were completed within 45 days, except in extreme circumstances.

b. Tested all publicly accessible structures and sidewalks within a 30 foot radius of the electric facility or streetlight where there was a voltage finding ≥ 1.0 V_{ac}.

c. Responded to and investigated all shock incidents reported by the public and mitigated positive findings.

All of the facilities that are included in Central Hudson's Contact Voltage Testing Program were visited. Of the 238,960 facilities visited, 1,632 locations did not have a contact voltage test performed because their electrically conductive appurtenances were deemed inaccessible. Inaccessible locations were defined in the Order as locations that have locked gates/fences, are located in dangerous terrain, or are located on limited access highways.

Contact Voltage Mitigation Efforts

Central Hudson identified 341 locations with voltage readings greater than or equal to 1 V_{ac}. Forty-two (42) were found to have contact voltage (as defined in the Order) and were mitigated. It is important to note that the forty-two findings that were classified as contact voltage were from 12 sources. The following is summary of these sources and how the resulting voltages were mitigated.

Fifteen (15) distribution pole locations were identified with voltage findings between 1.1 V_{ac} and 3.9 V_{ac} fed by or in close proximity to 1-mile of low voltage (2.4 kV) primary. The voltages found are suspected to be the result of high neutral current through a 2.4 kV low voltage primary wye spur. The 2.4 kV primary was converted to 7.6 kV and following the conversion, all voltages were below 1 V_{ac} and the THD characteristics changed significantly to show a THD level higher than 10%.

Seventeen (17) distribution pole locations were identified with voltage findings between 1.1 V_{ac} and 3.4 V_{ac} were along one road and two adjacent side streets. These 17 voltage findings were mitigated by changing two transformers in the spur. After this work was completed, all voltages were reduced below the threshold.

The remaining voltage findings that were classified as contact voltage were from individual sources and were mitigated in compliance with the Order.

Central Hudson was not required by the Order to perform mobile detection of its system between January 1, 2012 and December 31, 2012. Therefore, Central Hudson did not perform any mobile system scans during this period.

IV. Facility Inspection Program

The Order requires Central Hudson to visually inspect 100% of its electric facilities every five years. This equates to inspecting approximately 20% of these facilities annually.

Central Hudson visually inspects its transmission system on a five year-cycle in accordance with the Order.

Prior to 2011, the distribution system visual inspections were conducted on a three-year cycle, which exceeded the requirements of the Order. Beginning in 2011, the distribution inspection cycle was transitioned to a five-year cycle. This transition will be complete at the end of the 2014 inspection program.

In accordance with the Order, Central Hudson uses the following severity levels to report deficiencies to the PSC and establish priority for repairs and scheduling:

Level I – 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.

Level II – 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.

Level III – 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.

Level IV – Condition found but repairs are 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 should 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, such as storms, require extensive repair activity, or have special requirements. Central Hudson began tracking temporary repairs during the 2009 calendar year. Results from this tracking have been compiled and described in Appendix 5 of this report.

V. Company Facilities

Based on the requirements of the Order, Central Hudson has identified approximately 238,960 individual electric facilities that require testing for the presence of contact voltage. The Order also requires Central Hudson to inspect 20% of its facilities annually. These facilities are broken down into four main categories as follows:

Distribution Overhead – The testing criteria for distribution overhead with an operating voltage of 34.5 kV or less, includes all utility owned or joint use wooden poles with utility electrical facilities that are located on public thoroughfares or customer property, including backyards and alleys. There are approximately 208,209 distribution pole structures in Central Hudson's service territory. Contact 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 contact voltage testing and inspection programs.

Underground Facilities – The testing criteria for underground facilities is comprised of subsurface structures, including above ground, pad-mounted structures. There are approximately 15,363 underground facilities that comprise Central Hudson's system. Within this total are approximately 1,223 manholes and pullboxes and approximately 14,140 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 contact voltage and facility inspection programs.

Streetlights and Traffic Signals – The testing criteria for street lights and traffic signals includes all metal pole streetlights, traffic signals, and pedestrian crosswalk signals located on publicly accessible thoroughfares. There are approximately 5,940 metal pole streetlights and approximately 812 traffic signals within Central Hudson's service territory. This total includes 187 metal pole streetlights owned by Central Hudson with the balance of the equipment owned by various municipalities. All contact voltage testing of streetlights is performed at night while the fixtures are energized. Pursuant to the Order, area and street lighting that is privately owned is not included in the contact voltage testing program. All Company-owned streetlights are included in the facility inspection program.

Transmission Structures – The testing criteria for transmission structures include all structures, guys, and down grounds attached to the structures. There are approximately 8,532 individual structures that comprise Central Hudson's transmission system. Transmission structures support circuit voltages of 69 kV and above. Transmission structures as described above, with distribution underbuild, are included in this transmission category. Transmission structures are included in both the contact voltage and facility inspection programs.

Substation Fences – The testing criteria for substation fences consists of testing the fencing on the outside of the substation. There are approximately 104 substation fences in Central Hudson's territory. All substation fences are included in the contact voltage testing program.

VI. Annual Performance Targets

Central Hudson performed the required contact voltage testing and facilities inspections in accordance with the requirements set forth in the Order.

In compliance with the Order, Central Hudson has met the annual performance target for contact voltage by testing 100% of the publicly accessible electric facilities and streetlights/traffic signals for the twelve month period ending December 31, 2012.

In addition, Central Hudson has met the performance target for facility inspections by inspecting more than 21% of its electric facilities during the one-year period ending December 31, 2012 as defined in the Order. The results are summarized in the tables below:

Central Hudson Gas & Electric Corporation	Total System Units Requiring Testing	Units Completed	Percent Completed
Distribution Facilities	208,209	208,209	100.00%
Underground Facilities	15,363	15,363	100.00%
Non-URD	1,223	1,223	100.00%
Street Lights / Traffic Signals	6,752	6,752	100.00%
Substation Fences	104	104	100.00%
Transmission (69kV and Above)	8,532	8,532	100.00%
TOTAL	238,960	238,960	100.00%

Facility Inspection Program Results

Category	Inspection Target Through 2012	Cumulative Total of Units Inspected 2010 - 2012 (Actual)
Overhead Distribution	N/A	77.57%
Overhead Transmission	N/A	69.42%
Underground (Non-URD)	N/A	55.54%
Pad-mounted Transformers	N/A	92.94%
Streetlight	100%	100%
System Total	**60%**	**78.18%**

5-Year Inspection Performance Summary

Overhead Distribution Facilities

In 2012, Central Hudson continued its transition plan from a 3 year to 5 year inspection cycle on overhead distribution facilities. This transition will be completed at the close of the 2014 inspection year.

Inspection Year	Overhead Distribution Structures Inspected	% of Overall System Inspected (Yearly)	% of Overall System Inspected (Cumulative)
2010	74,023	35.48%	35.48%
2011	41,810	20.04%	55.52%
2012	45,911	22.05%	77.57%
2013			
2014			

Overhead Transmission Facilities

Central Hudson performed inspections on overhead transmission facilities on a five-year cycle in 2012 with the exception of the 345 kV transmission lines, which are on a yearly cycle.

Inspection Year	Overhead Transmission Facilities Inspected	% of Overall System Inspected (Yearly)	% of Overall System Inspected (Cumulative)
2010	2,823	32.78%	32.78%
2011	1,664	19.32%	52.10%
2012	1,436	16.83%	69.42%
2013			
2014			

Manholes and Pullboxes

Central Hudson performed inspections on manholes and pullboxes on a five-year cycle in 2012.

Inspection Year	Manholes and Pullboxes Facilities Inspected	% of Overall System Inspected (Yearly)	% of Overall System Inspected (Cumulative)
2010	352	26.55%	26.55%
2011	251	18.93%	45.48%
2012	123	10.06%	55.54%
2013			
2014			

Padmount Transformers

In 2012, Central Hudson continued its transition plan from a 3 year to 5 year inspection cycle on padmount transformers. This transition will be completed at the close of the 2014 inspection year.

Inspection Year	Padmount Transformers Inspected	% of Overall System Inspected (Yearly)	% of Overall System Inspected (Cumulative)
2010	7,122	49.04%	49.04%
2011	3,226	24.44%	73.48%
2012	2,752	19.46%	92.94%
2013			
2014			

Streetlights

Central Hudson performs inspections on Company-owned streetlights yearly in conjunction with contact voltage testing. As technicians perform contact voltage testing, they also perform a visual inspection of the streetlights.

Inspection Year	Streetlights Inspected	% of Overall System Inspected (Yearly	% of Overall System Inspected (Cumulative)
2010	187	100%	100%
2011	187	100%	100%
2012	187	100%	100%
2013			
2014			

VII. Certifications

Pursuant to Section 7 of Appendix A of the Order, the President or Officer of each utility with direct responsibility for overseeing contact 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 contact (stray) voltage testing and inspection requirements, and that the utility has:

- Tested all of its publicly accessible electric facilities and street lights/traffic signals, 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 Contact Voltage

All New York State utilities compile an inventory of 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 ≥ 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."

To distinguish between dangerous contact voltage and naturally occurring voltage, field forces use a handheld oscilloscope meter to classify these different types of voltages. By looking at the total harmonic distortion of a voltage waveform and the breakdown of the harmonics, in addition to the condition of the location, the proper actions can be taken.

If contact voltage is present, then the waveform will appear as a perfect 60 Hz sinusoidal wave with 10% or less total harmonic distortion. These voltages result from a variety of conditions including: deterioration of conductors; age of equipment; exposure to the elements; and various customer related issues. These voltages should not exist on normally operating electric facilities and are considered to be contact voltages per the Order definition in Section 1(c).

Section 3(h) of the Order requires "Mitigation shall be completed on any stray voltage findings." Through the efforts of the Contact Voltage testing program, Central Hudson has been able to repair these issues and mitigate the danger associated with these elevated voltages.

When examining a naturally occurring voltage on a handheld oscilloscope, high harmonic content from different frequencies (generally 180 HZ and 300 Hz) will cause distortion in the voltage waveform. Causes of these voltages 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; capacitive coupling; and/or proximity to transmission lines. Since all of these voltage sources are considered part of a normally operating electrical distribution system, they do not require mitigation per the Order.

Although not all findings are due to contact voltage, utilities are required to report on all findings, regardless of whether or not the voltage is normal to the operating system. It has been established that 88% of the findings identified in this year's testing effort are normal to the operating system, and not due to contact voltage. Inclusion of these naturally occurring voltages in the findings gives the perception that there are more potentially hazardous voltage findings than actually exist. The remaining 12% (42 findings) that were identified as contact voltage were the result of twelve (12) sources. True hazardous voltages have been identified and mitigated through the contact voltage testing program.

In accordance with the PSC requirements, when a finding was discovered on an electric facility during contact voltage testing, the Company performed contact voltage testing on

all publicly accessible structures and sidewalks within a minimum 30 foot radius of the electric facility or streetlight. No publicly accessible structures with contact voltage were identified as a result of the 30-foot radius testing.

IX. Harmonics Analysis

Central Hudson has continued to apply the use of harmonics analysis to determine if voltages discovered in the field are dangerous contact voltage or naturally occurring/neutral to Earth voltage (NEV) common in a normally functioning electric system. After analysis, the voltages can be classified into one of the three following categories (Please note that Central Hudson mitigates all voltages in accordance with the Safety Order). The following table depicts a breakdown of findings by asset class:

Table 1 - Category Classification Criteria

Category One Voltage	Category Two Voltage	Category Three Voltage
• Voltage is $\geq 1V_{ac}$ • Sinusoidal waveform • 60 Hz dominant • Total Harmonic Distortion is <10% THD	• Voltage is $1V_{ac} - 10V_{ac}$ • Non-sinusoidal waveform • Is 180 Hz dominant • Total Harmonic Distortion is >10% THD	• Voltage is $\geq 10V_{ac}$ • Non-sinusoidal waveform • Is 180 Hz dominant • Total Harmonic Distortion is >10% THD
These voltages are considered contact voltage, which is hazardous and should not be present in a normally functioning electric system.	These voltages are considered non-hazardous Neutral to Earth Voltages and are considered part of a normally functioning electric system.	These voltages require additional field-testing and review to determine if the source is due to a system abnormality or if it is a result of a normally functioning electric system. Central Hudson attempts to mitigate these voltages at the time of discovery.

Analysis of Findings

Since 2009, the documented accounts of dangerous contact voltage has been consistently less than 0.02% of the total of Central Hudson's entire electric system. The aggregate of the findings over the past four years, shows that contact voltage comprise of 12.1% (189) of the 1,554 findings during this time period (0.08% of Central Hudson's total electric system).

Contact voltage on Overhead Distribution accounts for 10.75% of the total findings. Street and Traffic Lights contact voltage account for 1.35% of the total findings and URD (Pads) contact voltage account for 0.06% (1) of the total findings over the past 4 years. There have been no findings of contact voltage in the Underground (Non-URD), Transmission, and Substation Fence groups (see Table 2).

Although there are fluctuations in the total number of category two voltage conditions, these conditions account for 85% to 95% of the voltages findings each of the past four years. Category two voltages are expected to fluctuate due to weather and load

conditions. These voltages can be considered part of a properly functioning multi-grounded wye electric system, and pose no threat to the public.

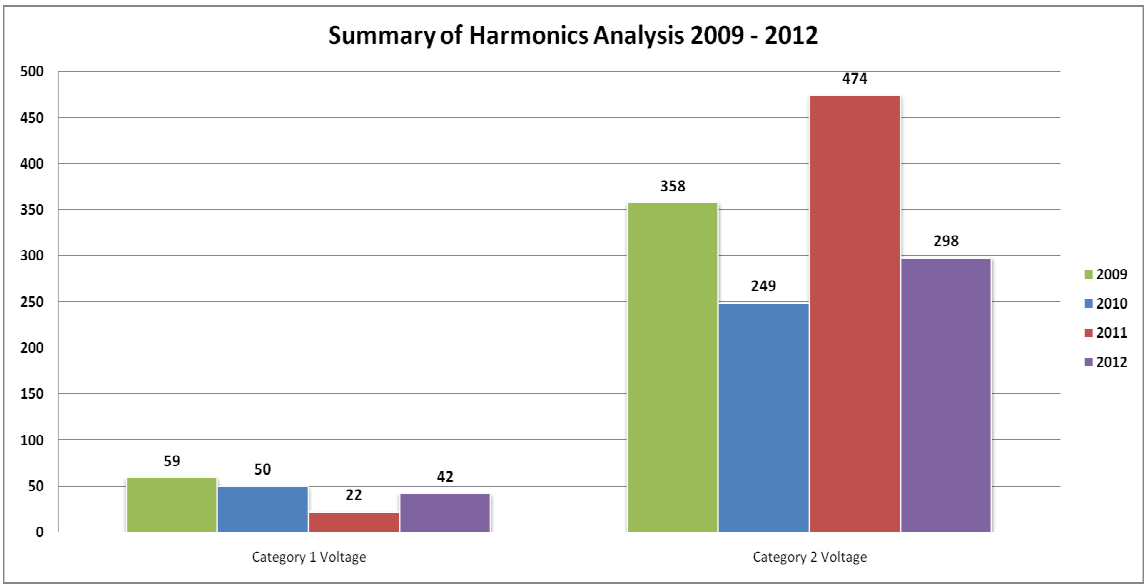
There have been no findings of naturally occurring voltage in the Underground (Non-URD), and Substation Fence groups (see Table 2). By differentiating between dangerous contact voltage and naturally occurring voltages, field crews can be effectively dispatched to mitigate dangerous voltage conditions ensuring the safety of the public while maintaining reliability of the system in a financially responsible manner.

Table 2 - Summary of Findings by Asset Class

	2009			2010			2011			2012		
Asset Class	Cat. 1	Cat. 2	Cat. 3	Cat. 1	Cat. 2	Cat. 3	Cat. 1	Cat. 2	Cat. 3	Cat. 1	Cat. 2	Cat. 3
Overhead Distribution	47	334	0	43	240	0	19	463	1	58	280	1
Underground (Non-URD)	0	0	0	0	0	0	0	0	0	0	0	0
URD (Pads)	0	7	0	1	4	0	0	8	0	0	2	0
Street and Traffic Lights	12	0	0	6	0	0	3	3	0	0	0	0
Transmission Overhead	0	17	0	0	5	0	0	0	0	0	0	0
Substation Fences	0	0	0	0	0	0	0	0	0	0	0	0
Total	59	358	0	50	249	0	22	474	1	58	282	1

Table 3 - Summary of All Findings by Asset Class

	Total Findings (2009 - 2012)		
Asset Class	Cat. 1	Cat. 2	Cat. 3
Overhead Distribution	167	1317	2
Underground (Non-URD)	0	0	0
URD (Pads)	1	21	0
Street and Traffic Lights	21	3	0
Transmission Overhead	0	22	0
Substation Fences	0	0	0
Total	189	1363	2



X. Analysis of Inspection Results

Discussion of Inspection Findings/Repairs

During the inspection process, two or more deficiencies can be reported at a single location during an inspection. Since there is no direct correlation between the numbers of deficiencies reported to the number of locations with deficiencies, this data has been tabulated separately.

The most common level of deficiencies found in Central Hudson's service territory were Level IV conditions, representing 7,559 out of the 9,141 total deficiencies found (82.69%). The three most common deficiencies all involve overhead distribution poles. These deficiencies are Missing Guy Guards, (4,259; 56.34% of priority level IV deficiencies), Broken Ground Moldings (2,060; 27.25% of priority level IV deficiencies), and Tags Missing (333, 4.41% of priority level IV deficiencies).

Currently, Central Hudson is utilizing tree trimming crews and other contract employees to help reduce the number of Level IV deficiencies. As a tree trimming crew is working in an area, the crew is installing missing guy guards to guy wires on the circuit they are working on. Targeted guy guard replacements are also being issued to contract employees. To reduce the backlog of broken ground moldings and missing pole tags, Central Hudson is utilizing contractor technicians to replace the broken ground molding while performing the contact voltage testing. Central Hudson also utilizes contractor technicians to install pole tags during inspection and testing activities. This work was only performed on poles that were in the backlog of missing tags. Central Hudson confirmed the correct pole number for these poles and a pop up prompted the technician to install a pole tag during the survey.

In 2009, the Transmission group decided to gather an inventory of spar arms to be identified for removal from the transmission system. During that testing and inspection year, spar arms were noted and recorded into the inspections system as a Level 3 condition. This classification was made in order to get an accurate count of how many spar arms were in the system to help guide the work plan for future removal of spar arms.

This condition does not pose any threat to the general public or reliability of the electric system within a three year time period and it has been reduced to a level IV condition.

Central Hudson maintains a good response time to Level I deficiencies. There were no Level I deficiencies repaired outside of the allotted time frame in 2012.

Overhead Distribution Structures

Table of Locations with Deficiencies for 2012

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies	% Locations w/ Deficiencies Requiring Repair in 1 year
45,911	7,793	16.97%	1.56%

Breakdown of Deficiencies for 2012

Priority Rating	Number of Deficiencies	% Deficiencies Found
I	17	0.21%
II	105	1.21%
III	1,446	16.68%
IV	7,099	81.90%
Total:	8,667	100%

Overhead Transmission Facilities

Table of Locations with Deficiencies for 2012

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies	% Locations w/ Deficiencies Requiring Repair in 1 year
1,436	99	6.89%	10.10%

Breakdown of Deficiencies for 2012

Priority Rating	Number of Deficiencies	% Deficiencies Found
I	0	0.00%
II	10	5.43%
III	82	44.57%
IV	92	50.00%
Total:	184	100%

Manholes and Pullboxes

Table of Locations with Deficiencies for 2012

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies	% Locations w/ Deficiencies Requiring Repair in 1 year
123	29	23.58%	10.34%

Breakdown of Deficiencies for 2012

Priority Rating	Number of Deficiencies	% Deficiencies Found
I	1	2.08%
II	2	4.16%
III	25	52.08%
IV	20	41.68%
Total:	48	100%

Padmount Transformers

Table of Locations with Deficiencies for 2012

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies	% Locations w/ Deficiencies Requiring Repair in 1 year
2,752	391	14.21%	4.09%

Breakdown of Deficiencies for 2012

Priority Rating	Number of Deficiencies	% Deficiencies Found
I	14	3.30%
II	2	0.48%
III	64	15.09%
IV	344	81.13%
Total:	424	100%

Streetlights

Table of Locations with Deficiencies for 2012

Locations Inspected	Locations w/ Deficiencies	% Locations w/ Deficiencies	% Locations w/ Deficiencies Requiring Repair in 1 year
187	0	0.00%	N/A

Breakdown of Deficiencies for 2012

Priority Rating	Number of Deficiencies	% Deficiencies Found
I	0	N/A
II	0	N/A
III	0	N/A
IV	0	N/A
Total:	0	N/A

XI. Inspection Driven Reliability and Efficiency Improvement Programs

Central Hudson has recognized the opportunity to use the inspection program as a means to help improve system reliability. Operations and Engineering have deployed "micro-surveys" to be completed by contracted technicians in line with contact voltage testing and inspection surveys. These micro-surveys were added to the existing inspection survey as a line item, and completed during the regular round of testing and inspections, eliminating the need for a second mobilization. The data that is collected during the survey is then aggregated and used to make a more efficient response plan based on what the goal is for each individual micro-survey. These surveys have included inventories for cutouts, animal guards, and streetlights.

Cutouts

Porcelain cutouts can fail when exposed to the elements for long periods. Porcelain cutouts can develop cracks in the insulator which will hold water. When this crack is filled with water and exposed to freezing, the crack can expand. Over time, the constant freezing and thawing can open the crack further. When water flows through the crack, it can create a path for the electricity track, bypassing the fuse.

Prior to the 2010 inspection year, Central Hudson replaced porcelain cutouts with polymer cutouts located in the first zone of protection and/or protecting circuit segments of 500 customers or more. In 2010, a micro-survey was added to the contact voltage testing and inspection survey to confirm the cutouts were replaced and capture any that may have been missed. The data collected was aggregated and used to formulate a replacement plan in line with current operational plans and scheduled maintenance in order to avoid a second mobilization to the facility to replace the cutout(s).

Streetlights

In 2011, a micro-survey was added to inventory streetlights mounted on wooden poles (cobra heads) in the electric distribution system. These streetlights are visually inspected from the ground when contractor technicians perform a voltage test. After the survey was completed, 30,000 pole mounted streetlights were inventoried.

The micro-survey documented the head type, body type, bulb type (when applicable), bulb wattage (when applicable), width (set back style only), and decorative arm (tear drop type only). This information was stored and will be used to update the GIS system available to line crews when repairs are scheduled to ensure that the correct bulb/wattage was on the truck, thus saving a second mobilization.

Animal Guards

Central Hudson has noticed a high rate of outages caused by wildlife. In 2012, a survey of animal guards was conducted on our system to inventory what style animal guard is currently installed on transformers. This data was imported into our GIS system to show locations that needed an upgrade to a modern, more effective animal guard. A plan will

be developed to replace and/or add animal protection where it will positively impact customer reliability.

Poles

During the inspection survey, each pole is "sound tested" by contractor technicians when they perform an inspection. Using a hammer, technicians strike the pole from grade to at least four feet above grade, at least 4 times. While striking the pole with a hammer, technicians listen for audible indications of rot in the poles interior where it cannot be seen. Technicians will record the pole as "unsatisfactory" in the PDA if rot is suspected. A Central Hudson Field Supervisor will perform a site visit to confirm the preliminary assessment before recommending replacement. Central Hudson maintains a spending plan in the capital budget to replace any pole that is found to be rotten during the inspection process.

XII. Quality Assurance

Central Hudson continues to utilize an external auditor to perform its QA/QC program to review the effectiveness and accuracy of the contact voltage testing and facility inspection programs and their associated activities. The external auditor report directly to Central Hudson's Internal Auditing Department and submits audit reports simultaneously to the Internal Auditing Department and the Program Manager for review. If there are any findings, an action plan is assembled to address the concerns identified by the external auditor. These audits have resulted in specific improvements to the various processes, which have contributed toward increasing program efficiency and accuracy as well as reducing potential for future errors. The QA/QC program calls for several types of audits and for constant feedback with respect to the data collection and processing. The various audits cover personnel training, field testing and inspection procedures and practices, testing and inspection records, and field trailing audits.

For 2012, to date two audits of field-testing and inspection activities, one audit of the initial training, and one audit of test data records were completed. In addition, a comprehensive year-end audit for the 2012 records is currently being processed. The completed audits indicate that all significant activities associated with the contact voltage testing and facilities inspection programs were conducted in accordance with established protocols. The external auditor's findings resulted in one minor issue that required formal remedial action plan. The finding was corrected immediately by having the Inspection Contractor update their field procedures to ensure the issue would not occur again.

XIII. Other Pertinent Information

Central Hudson continues to participate in the NYS Residential Stray Voltage Committee Activities, and through EPRI membership, continues to ensure that the best operational, construction and maintenance practices are being utilized. Central Hudson also

participates with the New York State Utilities and the PSC in discussing issues and opportunities regarding both Contact (Stray) Voltage Testing and Facility Inspections.

In addition, Central Hudson participates in the IEEE P1695 Working Group on Voltages at Publicly and Privately Accessible Locations. This working group is working towards creating a trial use guide that addresses the normal and abnormal voltages that exist at publicly and privately accessible locations as a result of the delivery and use of electrical energy (often referred to as stray voltage). The guide will focus primarily on the presence of power frequency related voltages, and will discuss definitions, causes, impacts, testing techniques, mitigation strategies, and hazard levels.

As a result of Central Hudson's involvement in the IEEE P1695 Working Group, Central Hudson has been asked to lead a panel session discussion in July 2013 at the IEEE PES General Meeting on the use of use of harmonic analysis to identify the source of elevated voltages, and will contribute to a the second panel discussion serving as an analysis of the manual testing program results in New York State. Both panel discussions are based upon transaction papers submitted to IEEE in 2012 and approved in January 2013. . The first paper discusses use of harmonic analysis to identify the source of elevated voltages, and the second paper is an analysis of the manual testing program results in New York State. Both papers were attached to the 2011 annual report as Appendix 6.

During 2012, Central Hudson continued working closely with EPRI in the utilization of a handheld oscilloscope meter to analyze the harmonic content of voltages found during contact (stray) voltage testing. Through this collaborative effort, EPRI has been able to prepare documentation identifying the sources of voltage found in the field. By identifying the source of the voltage, technicians are able to determine if a voltage is naturally occurring relative to the operation of an electrical distribution system or due to contact (stray) voltage.

To advance harmonic analysis and data acquisition, Central Hudson is an active participant in an EPRI research project utilizing iOS devices (iPods and iPads) for voltage detection and waveform capturing. By utilizing the processing power of the iOS devices; the multimeter, oscilloscope, and handheld voltage detector can be combined into one package. Central Hudson is sending collected field data to EPRI for evaluation and implementation into hardware and software revisions.

In recognition of the efforts of Central Hudson and Consolidate Edison of New York to advance harmonic analysis and data acquisition, members of both companies have been awarded with the 2012 EPRI Technology Transfer Award for forward thinking and being drivers for the "first of its kind" application of smart phone technology for field measurement and data acquisition.

Central Hudson was approached to co-author an article about harmonic analysis for the January 2012 issue of T&D World Magazine. Con Edison and EPRI contributed to the article which shares some field experiences using portable oscilloscopes to identify the source of voltages found and highlights cost savings realized. The article was published and can be found on T&D World Magazine's website.

Appendix 1: Contact (stray) Voltage Testing Summary – 2012

Central Hudson Gas & Electric Corporation	Total System Units Requiring Testing[1]	Units Completed	Percent Completed	Units with Voltage Found (>= 1.0v)	Percent of Units Tested with Voltage (>= 1.0v)	Units Classified as Inaccessible
Distribution Facilities	208,209	208,209	100.00%	339	0.16%	955
Underground Facilities	15,363	15,363	100.00%	2	0.01%	166
Non-URD	1,223	1,223	100.00%	0	0.00%	24
Street Lights / Traffic Signals	6,752	6,752	100.00%	0	0.00%	33
Substation Fences	104	104	100.00%	0	0.00%	0
Transmission (69kV and Above)	8,532	8,532	100.00%	0	0.00%	478
TOTAL	238,960	238,960	100.00%	341	0.21%	1,632

Findings will include naturally occurring and stray voltages. Of the 341 locations that tested positive for voltage, 42 locations were mitigated due to contact voltage and are included in this number.

[1] Central Hudson performs two to three field verifications per year when a structure is not found. If structures are not found for two years, they are removed from the data as invalid structures. Central Hudson removed 4,775 not founds from the data.

Appendix 2A: Summary of Contact (Stray) Voltage Findings – 2012

The table below shows Central Hudson's Contact (Stray) Voltage Mitigation efforts. Of the 341 locations with findings of 1 Volt or greater, 42 locations required mitigation to less than 1 Volt and were found to have contact (stray) voltage caused by the deterioration of conductors, contact voltage, or broken equipment. The remaining 299 voltage findings were deemed to have been caused by a natural source and therefore did not require mitigation. For a complete breakout of energized objects see Appendix 2B.

Central Hudson Gas & Electric Corporation	Initial Readings				Readings after Mitigation		
	1V to 4.4V	4.5V to 24.9V	25V and Over	**Totals**	< 1 V	1V to 4.4V	4.5V and Over
Distribution Facilities	**333**	**6**	**-**	**339**	**101**	**195**	**4-**
Pole	-	-	-	-	-	-	-
Ground	130	2	-	132	35	81	1
Guy	186	4	-	190	63	102	3
Riser	9	-	-	9	2	6	-
Other	8	-	-	8	1	6	-
Underground Facilities	**2**		**-**	**2**	**1**	**1**	**-**
Handhole / Pull box	-	-	-	-	-	-	-
Manhole	-	-	-	-	-	-	-
Padmount Switchgear	-	-	-	-	-	-	-
Padmount Transformer	-	-	-	-	-	-	-
Vault – Cover/Door	-	-	-	-	-	-	-
Pedestal	-	-	-	-	-	-	-
Other	2	-	-	-	1	1	-
Street Lights / Traffic Signals							**-**
Metal Street Light Pole							-
Traffic Signal Pole	-	-	-	-	-	-	-
Control Box	-	-	-	-	-	-	-
Pedestrian Crossing Pole	-	-	-	-	-	-	-
Other - NOT LISTED	-	-	-	-	-	-	-
Substation Fences	-	-	-	-	-	-	-
Fence	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Transmission (69kV and Above)	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Lattice Tower	-	-	-	-	-	-	-
Pole	-	-	-	-	-	-	-
Ground	-	-	-	-	-	-	-
Guy	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Miscellaneous Facilities	-	-	-	-	-	-	-
Sidewalk	-	-	-	-	-	-	-
Gate/Fence/Awning	-	-	-	-	-	-	-
Control Box	-	-	-	-	-	-	-
Scaffolding	-	-	-	-	-	-	-
Bus Shelter	-	-	-	-	-	-	-
Fire Hydrant	-	-	-	-	-	-	-
Phone Booth	-	-	-	-	-	-	-
Water Pipe	-	-	-	-	-	-	-
Riser	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-

Appendix 2B: Summary of Energized Objects – 2012

The table below shows the summary of energized objects. Of the 341 locations with findings of 1 Volt or greater, 42 of the locations required mitigation to 1 Volt or less and were found to have contact voltage caused by the deterioration of conductors, broken equipment, and/or aging equipment.

The table below has a complete breakout of findings along with distinctions between naturally occurring voltage and stray voltage discovered through the Contact Voltage Testing Program.

Central Hudson Gas & Electric Corporation	Initial Readings				Voltage Type		
	1V to 4.4V	4.5V to 24.9V	25V and Over	**Totals**	Naturally Occurring	Contact (Stray) Voltage	Mitigated Locations (<1 Volt)
Distribution Facilities	**333**	**6**	**-**	**339**	**297**	**42**	**42**
Pole	-	-	-	-	-	-	-
Ground	130	2	-	132	116	16	16
Guy	186	4	-	190	166	24	24
Riser	9	-	-	9	8	1	1
Other	8	-	-	8	7	1	1
Underground Facilities	**2**	**-**	**-**	**2**	**2**	**-**	**-**
Handhole/Pull Box	-	-	-	-	-	-	-
Other	2	-	-	2	2	-	-
Street Lights / Traffic Signals	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Metal Street Light Pole	-	-	-	-	-	-	-
Traffic Signal Pole	-	-	-	-	-	-	-
Transmission (69kV and Above)	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Lattice Tower	-	-	-	-	-	-	-
Ground	-	-	-	-	-	-	-
Grand Total	***335***	***6***	***-***	***341***	***299***	***42***	***42***

Appendix 3: Summary of Shock Reports from the Public – 2012

	Central Hudson Gas & Electric Corporation	Yearly Total
I.	**Total Shock Calls Received:**	**24**
	Unsubstantiated	2
	Normally Energized Equipment	6
	Stray Voltage:	
	Person	16
	Animal	0
II.	**Injuries Sustained/Medical Attention Received**	**1**
	Person	1
	Animal	0
III.	**Voltage Source:**	**22**
	Utility Responsibility	
	Issue with primary, joint, or transformer	0
	Secondary Joint (Crab)	0
	SL Service Line	0
	Abandoned SL Service Line	0
	Defective service line	0
	Abandoned service line	0
	OH Secondary	0
	OH Service	0
	OH Service neutral	4
	Pole	0
	Riser	0
	Other	0
	Customer Responsibility	
	Contractor damage	0
	Customer Equipment / Wiring	16
	Other Utility / Gov't Agency Responsibility	
	SL Base Connection	1
	SL Internal Wiring or Light Fixture	1
	Overhead Equipment	0
	Other	
IV.	**Voltage Range:**	**22**
	Unrecorded/Below 1V	13
	1.0V to 4.4V	6
	4.5V to 24.9V	1
	25V and above	2

Appendix 4: Summary of Deficiencies and Repair Activity Resulting from the Inspection Process – 2012

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

Overhead Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Poles															
Pole Condition															
Number of Deficiencies	**4**	**48**	**369**	4	54	440	7	50	366	1	44	212	-	-	-
Repaired in Time Frame	4	23	321	4	36	395	7	35	254	1	17	43	-	-	-
Repaired - Overdue	-	25	40	-	18	-	-	15	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	45	-	-	112	-	27	169	-	-	-
Not Repaired - Overdue	-		8	-	-	-	-	-	-	-	-	-	-	-	-
Grounding System															
Number of Deficiencies	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anchors/Guy Wire															
Number of Deficiencies	-	-	**634**	-	-	524	-	-	187	-	-	254	-	-	-
Repaired in Time Frame	-	-	536	-	-	502	-	-	119	-	-	54	-	-	-
Repaired - Overdue	-	-	98	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	22	-	-	68	-	-	200	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cross Arm/Bracing															
Number of Deficiencies	**2**	**7**	**23**	1	8	31	2	17	33	-	3	3	-	-	-
Repaired in Time Frame	2	6	16	1	8	31	2	14	16	-	1	1	-	-	-
Repaired - Overdue	-	1	7	-	-	-	-	3	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	17	-	2	2	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Riser															
Number of Deficiencies	**1**	-	-	-	-	-	4	4	13	-	2	1	-	-	-
Repaired in Time Frame	1	-	-	-	-	-	4	4	7	-	1	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	6	-	1	1	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductors															
Primary Wire/Broken Ties															
Number of Deficiencies	**27**	**8**	**80**	21	19	69	9	26	195	11	8	54	-	-	-
Repaired in Time Frame	27	4	69	21	19	68	9	21	127	11	2	3	-	-	-
Repaired - Overdue	-	4	10	-	-	-	-	5	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	68	-	6	51	-	-	-
Not Repaired - Overdue	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Secondary Wire															
Number of Deficiencies	**2**	-	**22**	1	-	20	-	-	23	-	-	7	-	-	-
Repaired in Time Frame	2	-	18	1	-	19	-	-	23	-	-	4	-	-	-
Repaired - Overdue	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-
Not Repaired - Overdue	-	-		-	-	-	-	-	-	-	-	-	-	-	-

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

Overhead Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Neutral															
Number of Deficiencies	-	-	**22**	-	-	15	-	-	14	-	-	3	-	-	-
Repaired in Time Frame	-	-	21	-	-	14	-	-	12	-	-	-	-	-	-
Repaired - Overdue	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	2	-	-	3	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insulators															
Number of Deficiencies	**1**	-	**20**	1	11	12	-	6	46	-	-	4	-	-	-
Repaired in Time Frame	1	-	19	1	9	12	-	4	28	-	-	1	-	-	-
Repaired - Overdue	-	-	1	-	2	-	-	2	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	18	-	-	3	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pole Equipment															
Transformers															
Number of Deficiencies	-	-	**21**	-	1	17	1	4	19	-	-	9	-	-	-
Repaired in Time Frame	-	-	20	-	1	17	1	4	13	-	-	2	-	-	-
Repaired - Overdue	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	6	-	-	7	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cutouts															
Number of Deficiencies	-	**34**	-	-	19	-	-	5	-	-	34	-	-	-	-
Repaired in Time Frame	-	34	-	-	18	-	-	4	-	-	12	-	-	-	-
Repaired - Overdue	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	1	-	-	22	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lightning Arrestors															
Number of Deficiencies	-	-	**4**	-	-	7	-	-	14	-	-	4	-	-	-
Repaired in Time Frame	-	-	2	-	-	3	-	-	7	-	-	1	-	-	-
Repaired - Overdue	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	4	-	-	7	-	-	3	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Equipment															
Number of Deficiencies	-	-	-	-	-	-	1	4	13	-	2	1	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	1	4	7	-	1	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	6	-	1	1	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous															
Trimming Related															
Number of Deficiencies	**4**	**25**	**1,583**	9	37	2,360	5	23	988	4	10	888	-	-	-
Repaired in Time Frame	4	15	1,583	9	30	2,321	5	23	986	4	10	866	-	-	-
Repaired - Overdue	-	10	-	-	7	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	39	-	-	2	-	-	22	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Overhead Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Other															
Number of Deficiencies	-	**5**	**28**	2	3	14	-	5	60	1	2	6	-	-	-
Repaired in Time Frame	-	4	28	2	3	14	-	5	30	1	1	-	-	-	-
Repaired - Overdue	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	30	-	1	6	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overhead Facilities Total															
Total															
Number of Deficiencies	**41**	**127**	**2,806**	39	152	3,509	31	144	1,971	17	105	1,446	-	-	-
Repaired in Time Frame	41	86	2,633	39	124	3,396	31	118	1,629	17	45	975	-	-	-
Repaired - Overdue	-	41	164	-	28	-	-	26	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	113	-	-	342	-	60	471	-	-	-
Not Repaired - Overdue	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-

* In the 2012 3rd Quarter Report, 2 conditions were initially reported as a Level I deficiency. Upon Foreman review (after 9/30/2012) these conditions were deemed safe and removed from the final count.

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

Transmission Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Towers/Poles															
Steel Towers															
Number of Deficiencies	-	-	-	-	-	15	-	-	-	-	2	1	-	-	-
Repaired in Time Frame	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	13	-	-	-	-	2	1	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poles															
Number of Deficiencies	-	3	21	-	2	50	-	-	16	-	2	42	-	-	-
Repaired in Time Frame	-	2	21	-	2	8	-	-	-	-	2	9	-	-	-
Repaired - Overdue	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	42	-	-	16	-	-	33	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anchors/Guy Wire															
Number of Deficiencies	-	-	20	-	-	108	-	-	-	-	-	6	-	-	-
Repaired in Time Frame	-	-	20	-	-	6	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	102	-	-	-	-	-	6	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crossarm/Brace															
Number of Deficiencies	-	-	-	-	-	6	-	-	3	-	-	5	-	-	-
Repaired in Time Frame	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	3	-	-	5	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grounding System															
Number of Deficiencies	-	-	-	-	-	1	-	-	48	-	2	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductors															
Cable															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	1	13	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	1	13	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Static/Neutral															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Transmission Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Insulators															
Number of Deficiencies	-	1	3	-	-	1	-	-	-	-	-	5	-	-	-
Repaired in Time Frame	-	1	3	-	-	1	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous															
Right of Way Condition															
Number of Deficiencies	-	-	1	-	2	10	-	-	-	-	-	1	-	-	-
Repaired in Time Frame	-	-	1	-	2	10	-	-	-	-	-	1	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other															
Number of Deficiencies	-	-	11	-	-	-	-	-	3	-	1	6	-	-	-
Repaired in Time Frame	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	3	-	1	6	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transmission Facilities Total															
Total															
Number of Deficiencies	-	4	56	-	4	191	-	-	70	-	10	82	-	-	-
Repaired in Time Frame	-	3	56	-	4	34	-	-	-	-	4	10	-	-	-
Repaired - Overdue	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	137	-	-	70	-	6	72	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* For 2009, 163 level III conditions were reclassified as level IV conditions (see Section X: Analysis of Inspection Results)

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Manholes and Pullboxes

Underground Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Underground Structures															
Damaged Cover															
Number of Deficiencies	-	4	1	-	-	2	-	-	2	-	-	4	-	-	-
Repaired in Time Frame	-	3	1	-	-	1	-	-	1	-	-	3	-	-	-
Repaired - Overdue	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	1	-	-	1	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Damaged Structure															
Number of Deficiencies	-	2	10	1	1	4	-	-	1	-	-	3	-	-	-
Repaired in Time Frame	-	-	2	1	-	3	-	-	1	-	-	1	-	-	-
Repaired - Overdue	-	2	8	-	1	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Congested Structure															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Damaged Equipment															
Number of Deficiencies	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-
Repaired in Time Frame	-	-	-	-	-	1	-	-	-	1	-	1	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductors															
Primary Cable															
Number of Deficiencies	-	-	2	-	-	3	-	-	1	-	-	1	-	-	-
Repaired in Time Frame	-	-	2	-	-	2	-	-	-	-	-	1	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secondary Cable															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Neutral Cable															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-			
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-			
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-			
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-			
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-			

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Manholes and Pullboxes

Underground Facilities	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Racking Needed															
Number of Deficiencies	-	**3**	**1**	-	-	6	-	-	6	-	-	-	-	-	-
Repaired in Time Frame	-	3	1	-	-	6	-	-	6	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous															
Other															
Number of Deficiencies	-	-	5	-	-	2	-	1	2	-	2	16	-	-	-
Repaired in Time Frame	-	-	2	-	-	2	-	1	1	-	1	6	-	-	-
Repaired - Overdue	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	1	-	1	10	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Underground Facilities Total															
Total															
Number of Deficiencies	-	9	19	1	1	18	-	1	12	1	2	25	-	-	-
Repaired in Time Frame	-	6	8	1	-	15	-	1	9	1	1	12	-	-	-
Repaired - Overdue	-	3	11	-	1	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	3	-	-	3	-	1	13	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Padmount Transformers

Pad Mount Transformers	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Pad Mount Transformers															
Damaged Structure															
Number of Deficiencies	**19**	-	**1**	13	1	3	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	19	-	1	13	1	3	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Damaged Equipment															
Number of Deficiencies	-	-	**9**	-	-	45	2	-	18	-	-	19	-	-	-
Repaired in Time Frame	-	-	7	-	-	35	2	-	8	-	-	1	-	-	-
Repaired - Overdue	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	10	-	-	10	-	-	18	-	-	-
Not Repaired - Overdue	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Cable Condition															
Number of Deficiencies	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	9	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Leak															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Off Pad															
Number of Deficiencies	**21**	**3**	-	36	19	-	12	-	-	10	-	-	-	-	-
Repaired in Time Frame	21	3	-	36	18	-	12	-	-	10	-	-	-	-	-
Repaired - Overdue	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lock/Latch/Penta															
Number of Deficiencies	**1**	-	-	2	-	-	8	-	-	4	1	-	-	-	-
Repaired in Time Frame	1	-	-	2	-	-	8	-	-	4	1	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous															
Other															
Number of Deficiencies	-	-	**110**	1	8	160	10	-	12	-	1	45	-	-	-
Repaired in Time Frame	-	-	104	1	8	141	9	-	5	-	1	3	-	-	-
Repaired - Overdue	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	19	-	-	7	-	-	42	-	-	-
Not Repaired - Overdue	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process - Padmount Transformers

Pad Mount Transformers	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Pad Mount Total															
Total															
Number of Deficiencies	41	3	120	52	38	208	32	-	30	14	2	64	-	-	-
Repaired in Time Frame	41	3	112	52	36	179	31	-	13	14	2	4	-	-	-
Repaired - Overdue	-	-	2	-	2	-	1	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	29	-	-	17	-	-	60	-	-	-
Not Repaired - Overdue	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-

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

Streetlights	2009			2010			2011			2012			2013		
Priority Level	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
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	Within 1 year	Within 3 years
Streetlight															
Base/Standard/Light															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Handhole/Service Box															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Service/Internal Wiring															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Access Cover															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous															
Other															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Streetlight Total															
Total															
Number of Deficiencies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired in Time Frame	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Not Due	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Repaired - Overdue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Level IV Conditions	2009		2010		2011		2012		2013	
	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired
Overhead Facilities										
Pole Condition										
Pole Condition	7	5	28	17	9	-	17	-	-	-
Grounding System	6,375	4,937	8,496	7,726	6,450	5,740	2,347	2,179	-	-
Anchors/Guy Wire	13,066	13,044	6,236	6,233	6,984	6,952	4,382	4,184	-	-
Cross Arm/Bracing	-	-	-	-	-	-	-	-	-	-
Riser	-	-	-	-	-	-	-	-	-	-
Conductors										
Primary Wire/Broken Ties	-	-	-	-	-	-	-	-	-	-
Secondary Wire	-	-	-	-	-	-	-	-	-	-
Neutral	-	-	-	-	-	-	-	-	-	-
Insulators	-	-	-	-	-	-	-	-	-	-
Pole Equipment										
Transformers	-	-	43	25	41	2	20	-	-	-
Cutouts	-	-	-	-	-	-	-	-	-	-
Lightning Arrestors	-	-	-	-	-	-	-	-	-	-
Other Equipment	-	-	-	-	-	-	-	-	-	-
Miscellaneous										
Trimming Related	-	-	-	-	-	-	-	-	-	-
Other	2,791	2,781	1,892	299	2,141	32	333	6	-	-
Overhead Facilities Total	22,239	20,767	16,695	14,300	15,625	12,726	7,099	6,369	-	-
Transmission Facilities										
Towers/Poles										
Steel Towers	-	-	-	-	-	-	1	-	-	-
Poles	86	22	5	4	10	2	42	-	-	-
Anchors/Guy Wire	191	20	12	4	-	-	6	-	-	-
Crossarm/Brace	10	4	7	-	1	-	5	-	-	-
Grounding System	-	-	2	-	-	-	7	-	-	-
Conductors										
Cable	6	1	-	-	-	-	14	-	-	-
Static/Neutral	-	-	-	-	-	-	3	-	-	-
Insulators	4	3	2	2	-	-	7	-	-	-
Miscellaneous										
Right of Way Condition	1	-	7	2	1	-	1	-	-	-
Other	231	17	6	-	1	-	6	-	-	-
Transmission Facilities Total	529	67	41	12	13	2	92	-	-	-

* For 2009, 163 level III conditions were reclassified as level IV conditions (see Section X: Analysis of Inspection Results)

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

Level IV Conditions	2009		2010		2011		2012		2013	
	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired	Number of Conditions Found	Number of Conditions Repaired
Underground Facilities										
Underground Structures										
Damaged Cover	3	2	5	3	1	-	2	-	-	-
Damaged Structure	4	3	-	-	-	-	-	-	-	-
Congested Structure	-	-	-	-	-	-	-	-	-	-
Damaged Equipment	-	-	2	2	-	-	3	-	-	-
Conductors										
Primary Cable	35	-	-	-	3	-	2	-	-	-
Secondary Cable	-	-	-	-	-	-	-	-	-	-
Neutral Cable	-	-	-	-	-	-	-	-	-	-
Racking Needed	7	2	-	-	-	-	-	-	-	-
Miscellaneous										
Other	10	6	43	11	52	-	13	4	-	-
Underground Facilities Total	59	13	50	16	56	-	20	4	-	-
Padmount Transformers										
Underground Structures										
Damaged Structure	-	-	2	1	-	-	-	-	-	-
Damaged Equipment	-	-	-	-	-	-	-	-	-	-
Damaged Cable	-	-	-	-	-	-	-	-	-	-
Oil Leak	-	-	-	-	-	-	-	-	-	-
Off Pad	-	-	-	-	-	-	-	-	-	-
Lock/Latch/Penta	-	-	-	-	-	-	-	-	-	-
Miscellaneous										
Other	198	180	407	26	94	-	344	1	-	-
Pad Mount Transformer Total	198	180	409	27	94	-	344	1	-	-
Streetlights										
Streetlight										
Base/Standard/Light	-	-	-	-	-	-	-	-	-	-
Handhole/Service Box	-	-	-	-	-	-	-	-	-	-
Service/Internal Wiring	-	-	-	-	-	-	-	-	-	-
Access Cover	-	-	-	-	-	-	-	-	-	-
Miscellaneous										
Other	-	-	-	-	-	-	-	-	-	-
Streetlight Total	-	-	-	-	-	-	-	-	-	-
Total Level IV Conditions										
Overall Total	23,025	21,027	17,195	14,355	15,788	12,728	7,555	6,374	-	-

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	82	82	0	0	0
	II	Within 1 year	143	98	45	0	0
	III	Within 3 years	3,001	2,809	177	0	15
	IV	N/A	23,025	21,027	N/A	1,988	N/A
2010	I	Within 1 week	92	92	0	0	0
	II	Within 1 year	195	164	31	0	0
	III	Within 3 years	3,926	3,624	0	302	0
	IV	N/A	17,195	14,355	N/A	2,840	N/A
2011	I	Within 1 week	63	62	1	0	0
	II	Within 1 year	145	119	26	0	0
	III	Within 3 years	2,083	1,651	0	432	0
	IV	N/A	15,788	12,728	N/A	3,060	N/A
2012	I	Within 1 week	32	32	0	0	0
	II	Within 1 year	119	52	0	67	0
	III	Within 3 years	1,617	1001	0	616	0
	IV	N/A	7,559	6,374	N/A	1,185	N/A
2013	I	Within 1 week					
	II	Within 1 year					
	III	Within 3 years					
	IV	N/A					

Appendix 5: Temporary Repairs

The process of tracking temporary repairs throughout all divisions in Central Hudson is a complex one requiring interfacing of multiple systems and coordination of several organizations. Currently, Central Hudson has developed an automated system to track Temp Repairs and produce reports for line crews and supervisors to better manage the process. The system has automated most of the work associated with tracking Temporary Repairs, but manual intervention is still required. Central Hudson continues to utilize contact voltage technicians to update the inventory annually.

Overall, Central Hudson has completed permanent repairs on 93 out of 110 locations (85%). Of the repairs completed, 80 were completed within the 90 day time frame stated in the Order (73%). The remaining open orders (17) are being assessed or scheduled for work. Currently, 1 of the open temp repairs is over the 90 day time frame.

Many factors contributed to temporary repairs being completed outside of the 90 day window. In addition, the process of getting a work order created, estimate generated, and obtaining highway permits can cause the permanent repair to be completed outside of the 90 day time frame. Similar to deficiencies identified during inspections, qualified personnel are prioritizing temporary repairs based on circuit reliability and public safety

Once a temporary condition is identified, the Company re-evaluates the location and determines if additional safeguards are required to protect the interest of the public, and does so immediately. Other conditions outside of Central Hudson's control have also caused delays such as; weather, field conditions, equipment rentals, and available load capacity due to switching requirements.

Exhibit 1: Certifications

CERTIFICATION
[STRAY VOLTAGE TESTING]

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

Paul E. Haering, on this 15th day of February 2013, certifies as follows:

1. I am the Vice President, Engineering & System Operations of Central Hudson Gas and Electric (the "Company"), and in that capacity I make this Certification for the annual period ending December 31st, 2012 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 (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, 2012 (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.

Paul E Haemmerle

Sworn to before me this 13th day of February, 2013

Notary Public:

JILL SAMMON
Notary Public, State of New York
No. 01SA6038324
Qualified In Dutchess County
Term Expires March 6, 2017

CERTIFICATION
[FACILITY INSPECTIONS]

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

Paul E. Haering, on this 15th day of February 2013, certifies as follows:

1. I am the Vice President, Engineering & System Operations of Central Hudson Gas and Electric (the "Company"), and in that capacity I make this Certification for the annual period ending December 31st, 2012 based on my knowledge of the inspection program adopted by the Company in accordance with the Public Service Commission's Orders issued and effective January 5, July 21, 2005, and December 15, 2008 in Case 04-M-0159 (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, 2012 (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 19 % of its Facilities during calendar year 2012, in order to comply with the five-year inspection cycle required under the Orders.

Paul E Doerry

Sworn to before me this 13th day of February, 2013

Notary Public:

JILL SAMMON
Notary Public, State of New York
No. 01SA6038324
Qualified in Dutchess County
Term Expires March 6, 2017