

Niagara Mohawk

A National Grid Company



report

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**VIA HAND DELIVERY**

February 22, 2005

Honorable Jaclyn Brilling  
Secretary  
State of New York  
Public Service Commission  
Three Empire State Plaza  
Albany, NY 12223

ORIG-FILES  
C 04-M-0159  
COPIES:  
MR. K. LANG  
MR. M. WARDEN  
MR. C. PUGLIESE

**RE: Case 04-M-0159 – Proceeding on Motion of the Commission to Examine the Safety of Electric Transmission and Distribution Systems.**

Dear Secretary Brilling:

Enclosed please find for filing an original and three (3) copies of Niagara Mohawk Power Corporation's ("Niagara Mohawk's") "2005 Stray Voltage Testing and Inspection Plan" in the above-referenced matter (the "Plan").<sup>1</sup> Pursuant to the "Order Instituting Safety Standards," issued by the New York State Public Service Commission (the "Commission") on January 5, 2005 in the above-referenced proceeding (the "Order"), every utility that owns transmission or distribution facilities and is subject to the Commission's jurisdiction was required to make such a filing within 45 days of the date of the Order.

Kindly acknowledge receipt of this filing by date-stamping as received the enclosed duplicate copy of this letter and returning it in the enclosed, self-addressed envelope.

Respectfully submitted,

Jeremy J. Euto

Enclosures

c: Robert Visalli (NYPSC Staff)

<sup>1</sup> Concurrent with this filing, Niagara Mohawk is also filing a separate request for waiver with the Commission; to the extent any such waiver of the Order's requirements may be required in connection with the Company's implementation of the Plan.



# **Niagara Mohawk Power Corporation**

## **2005 Stray Voltage Testing and Inspection Plan**

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## **Niagara Mohawk Power Corporation**

### **2005 Stray Voltage Testing and Inspection Plan**

#### **I. GENERAL**

Niagara Mohawk Power Corporation ("Niagara Mohawk" or the "Company"), a National Grid Company, along with its National Grid affiliates (together "National Grid") files this implementation plan (the "Plan") in compliance with the New York State Public Service Commission's (the "Commission's") "Order Instituting Safety Standards" in Case 04-M-0159, dated January 5, 2005 (the "Order"). In the Order, the Commission adopted "Electric Safety Standards" and required utilities to file, within 45 days, a report or plan for implementation and compliance with the safety standards adopted by the Order. At the technical conference session administered by Commission Staff ("Staff") on January 20, 2005, Staff stated their understanding that Staff would review the utilities' filings, and while they did not expect the Commission to formally approve the utilities' plans, the Staff would notify the utility of any deficiencies with compliance with the Order.<sup>1</sup>

Section 9(a) of the "Electric Safety Standards"<sup>2</sup> required each utility to file a report, providing the following:

- (i) the details of its voltage testing program;
- (ii) the details of the its inspection program;
- (iii) the safety criteria it will apply as part of each program;

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<sup>1</sup> The Order does not specifically state whether the Commission will approve, or take other action with regard to such plans. However, given the timeframes provided in the Order for testing and inspections, and the need for Niagara Mohawk to continue to take steps to implement its plan on an expedited basis, we respectfully request that the Commission and or Commission Staff provide any response or comments regarding Niagara Mohawk's plan as soon as possible.

<sup>2</sup> Order, Appendix A at 5.



- (iv) an inspection schedule that demonstrates how the utility will comply with the requirements to inspect all of its electric facilities at least once every five years;
- (v) the details of its quality assurance program;
- (vi) its plans to train its employees and contractors to perform the testing and inspections; and
- (vii) a description of any research and development activities the utility is conducting or plans to conduct related to stray voltage and safety issues.

This Plan is intended to address each of these requirements.

## **II. OVERVIEW**

The Company's Plan provides a comprehensive approach and schedule to address the Commission's objectives to test every publicly accessible electric facility that is capable of conducting electricity as soon as reasonably possible and have all electric facilities visually inspected at least once every five years. In accordance with the compressed schedule for performing testing and inspections in 2005, the Company will continue its ongoing overhead inspection program and is currently staffing with internal and contractor workforce with a likely commencement of May 1.

With respect to the Commission's inspection requirements, the Company's Plan is designed to fully meet the schedule that every facility be visually inspected at least once over a period of five years.

With respect to the stray voltage testing requirements, the Company's Plan is designed to assure that every applicable electric facility that is located in those areas where the public is most likely to travel on foot is tested for stray voltage by November 30, 2005. These are the facilities



that have a higher probability of contact with pedestrians, compared to facilities located in the more remote areas of the service territory where members of the public rarely traverse on foot. The testing schedule is staggered to concentrate on the areas of higher risk first, followed by testing over a longer period of the areas where access is more difficult and the risks are much lower.

Given the time required for start-up, mobilization, resource requirements, and the nature of the Company's service territory, it is not practicable for the Company to complete testing of all facilities by November 30, 2005, without regard to their location. Because of the wide expanse of geographical territory comprising the Company's service area, the Plan proposes that facilities located where pedestrian traffic is rare or non-existent be tested as soon as practicable, but in no event later than August 31, 2006. The Company recognizes that a waiver may be needed for this deviation in schedule. For that reason, the Company has filed a petition with the Commission for a waiver concurrently with the filing of this Plan.<sup>3</sup>

The schedule for testing and the Company's prioritization of facilities are discussed in greater detail in Section III A (9) below. Other than the request for a waiver for additional time to complete the stray voltage testing for more remotely located facilities, we believe that the Company's Plan satisfies the requirements of the Electric Safety Standards.

### **III. PLAN REQUIREMENTS**

The Electric Safety Standards require: (1) annual stray voltage testing of utility electric facilities capable of conducting electricity that are accessible to the public, using qualified

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<sup>3</sup> On February 4, 2005, in connection with Case No. 04-M-0159, Niagara Mohawk joined in a Request for Rehearing with other upstate utilities, requesting certain relief, including relief regarding the timeline for testing. To the extent relief is granted on this issue, a waiver may not be needed. In the absence of such relief, the Company respectfully requests a waiver, as detailed in its petition for waiver filed concurrently herewith.



voltage detection devices; (2) inspections of utility electric facilities on a minimum of a five-year cycle; (3) recordkeeping, certification, and reporting requirements; and (4) adoption of the National Electric Safety Code (NESC) as the minimum standard governing utility construction, maintenance, and operations.<sup>4</sup> The standards require that where a utility finds stray voltage, it must immediately make the facility safe and repair it within a short time period thereafter.<sup>5</sup> With the exception of the schedule for testing, the Company's Plan is designed to fully comply with these requirements.

To communicate the requirements of the Electric Safety Standards and implement the details of the Plan, the Company has drafted a series of electric operating procedures ("EOP's"). These EOPs are attached as Attachments 1-6 to this Plan. In addition to the detailed EOPs, a general description of the Plan follows.

A. **Stray Voltage Testing of all Publicly Accessible Electric Facilities Capable of Conducting Electricity**

The details of the Company's stray voltage testing procedures and protocols are included in EOP-211D, entitled "Stray Voltage Testing Procedure," provided in Attachment 1. Below is an overview of the programs and associated procedures and protocols.

*(1) Facilities to Be Tested*

In accordance with the Electric Safety Standards, stray voltage testing must be conducted on all electric facilities that are capable of conducting electricity and are publicly accessible.<sup>6</sup> For purposes of the Company's program, all facilities falling into the covered categories listed

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<sup>4</sup> Order, Appendix A at 2-5.

<sup>5</sup> Order, Appendix A at 2.

<sup>6</sup> Order, Appendix A, Section 3(a) at 2.



below that are within reach of a person will be tested (i.e., reach from the ground of an inspector standing normally). The Company has identified common equipment that is covered by this directive and developed a list of such equipment and facilities, as set forth below:

- (a) Metallic street lighting standards on public thoroughfares, no matter who the owner may be.<sup>7</sup> Metallic street lighting standards owned by the Company or under maintenance contract with the Company. Street lighting standards will be tested at night, when the light (if operating properly) would normally be energized. Stray voltage testers also will be equipped with "angel guards" (street light standard base covers) for installation if covers are missing or wires are found to be exposed to the public at the time of testing. Private area lighting, lights owned by park associations, in parking lots, non-conductive (e.g., fiberglass) street light standards, and standards located in places that are not publicly accessible (e.g., without stopping traffic or creating hazardous situations for workers or members of the public) will not be tested;
- (b) Metallic fences surrounding substations containing Niagara Mohawk-owned equipment. If Niagara Mohawk has equipment or facilities within a customer-owned substation, the fencing will be tested, even if the fencing is owned by the customer;
- (c) Metallic components of overhead distribution and transmission facilities that are within reach of persons, including such items as metallic towers and metallic poles (but excluding wood), metallic riser guards or conduit, uncovered or non-insulated down ground, down guys, and any other metallic piece of equipment on

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<sup>7</sup> Regarding those street lighting standards that are not owned by the Company, please see Section III (A) (8) below, regarding other limitations.



the pole (i.e., other than a pole step, stencil or any other metallic piece not meant to be part of a current carrying or grounding path) within reach of the ground (but excluding meters and customer meter poles);

- (d) Municipal-owned traffic signal standards and accessible related devices; and
- (e) The following equipment associated with underground facilities: metallic manhole covers, vault covers and grates, junction box covers, handhole covers, conductive padmount transformers, and switchgear. Nonmetallic concrete, fiberglass pads, and fiberglass handholes and other non-conductive equipment will not be tested.

The Company records contain information about the equipment to be tested in multiple systems, in both electronic and paper form. Based on those records, we estimate that potentially conductive equipment that requires testing will encompass the following items, shown in Table 1 below:

**Table 1**

**Conductive T&D Equipment Items Referenced in Order for Voltage Testing**

<b>Element</b>	<b>Count</b>
Dist Poles	1,212,965
Transmission Poles	600,000
Transmission towers <sup>1</sup>	22,000
Dist Pole – Metal <sup>1</sup>	248
Riser Poles <sup>1</sup>	88,301
Anchored Guys Wires <sup>1</sup>	79,277



Guy Wires	10,903
Handholes – all	62,681
Conductive Handholes – (i.e., excluding concrete & fiberglass) <sup>1</sup>	16,736
Manholes <sup>1</sup>	16,342
Vaults <sup>1</sup>	1,852
Vaults w/ Transformer <sup>1</sup>	174
Pad Mount Transformer <sup>1</sup>	56,998
Switchgears <sup>1</sup>	2,700
23 kV – 345 kV - Circuit Miles	9,333 miles
Primary Voltage - Circuit Miles	42,095 miles
Secondary Voltage - Circuit Miles	18,249 miles
Downground (estimate ¼ poles)	450,000
Muni Traffic Signals <sup>1</sup>	4,500
Metallic Outdoor Lighting <sup>1</sup>	52,000
Muni Metallic Outdoor Lighting <sup>1</sup>	Unknown
Substations <sup>1</sup>	894

1. Conductive metallic equipment

**(2) *Limitations on Testing***

The Company expects to encounter situations where equipment is located in areas where access can only be achieved by jumping or climbing a fence, and access to the public is generally prevented. The Company will not scale the barrier to test such equipment, which will be considered not publicly accessible.

Similarly, there may be temporary construction or other work activity that obstructs access to a particular facility for an extended period of time. In such cases, the Company will make note of the obstruction, but will not attempt to test the equipment at such time.



**(3) *Daily Job Site Testing***

In addition to the formal testing program, the Company will implement daily job site testing. The daily job site testing will require that metallic equipment associated with a job at each job site where Company personnel or its contractors complete a work assignment shall be tested for stray voltage at the end of the work day or the completion of the assignment.

**(4) *Use of Test Equipment***

The Company will use hand held devices (proximity detection units) that are capable of detecting voltage from 8 volts to 600 volts. The devices will be certified to a minimum level of 8 volts and to a maximum level of 600 volts by an independent laboratory. At this time, the following units have been submitted for certification: (i) HD Electric model LV-S-5 (5-600 volts) and (ii) AMP probe K-1 (6-600 volts).

When testing, if the presence of voltage is indicated by the proximity detection unit, a portable AC digital voltmeter will be utilized to confirm the voltage. The test meter will have an input load impedance of 2000 ohms. The device used if voltage is indicated will be an AC digital meter with a Cat. IV rating or better (rated by an independent lab). At this time, the following units have been approved: (i) Fluke 175 (Cat. IV) and (ii) Fluke 177 (Cat. IV).

The details of the testing procedure that will be used are set forth in EOP-211D in Attachment 1.

**(5) *Corrective Action Requirements***

The Company has established a procedure to be followed when a stray voltage condition is found, in accordance with the testing procedure. The Commission's Electric Safety Standards indicate that the location is to be "guarded".<sup>8</sup> At the technical conference, the Staff indicated that simply marking a sign was not sufficient and the utilities should use good judgment to assure

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<sup>8</sup> Order, Appendix A at 2.



that the site is safe during the period between discovery of the stray voltage condition and repairs. In implementing this directive, the Company's Plan calls for the following:

Where stray voltage in excess of 8 volts is found on a facility that is located in an area where pedestrians can make unintentional contact with the facility, a person will be assigned to remain on site to "guard" the location until it is made safe. If the stray voltage measures less than 8 volts, the Company will, at a minimum, install a barrier and protective markings, but also will use its discretion to assign a person if the facility is in a well-traveled area.

Temporary repairs will be made to make the condition safe as soon as practicable after the condition is discovered. Permanent repairs will be made within 45 days of the occurrence. If permanent repairs cannot be made within 45 days of the occurrence due to extraordinary conditions, the Company will periodically visit the site to monitor the condition of the temporary repair until the permanent repair is made.

Where the tester detects a minimal voltage level that is attributable to the design of the facility (e.g., a nominal induced voltage) and not the result of an improper condition, no corrective action would be taken.

***(6) Actions Taken When Facility is Not Company Owned***

When a stray voltage condition is found on equipment that is not owned by the Company, the Company will take the same steps as described above to guard the site until the area can be made safe. The Company will notify the owner or advise the entity or person responsible for the facility that the cause of the condition must be immediately remedied.

The Company will attempt to work with the owner of the equipment in addressing the condition and inform the owner of the need for permanent repair. In any event, if a condition presents a potential danger of serious physical harm to the public, the Company may temporarily



remove the meter, de-energize the owner's facilities (if necessary), or take such other actions as are appropriate to protect the public until the condition is remedied.

**(7) Training**

The training program for the Stray Voltage testing and Inspections is outlined in the Training Section of the Quality Assurance Program (Attachment 12). All Company employees doing inspections are trained for overhead and/or specially trained for underground equipment. Manholes and vaults require additional training and safety requirements for entry. Through this training, employees are trained on the principles of electricity, electrical equipment, Company Standards, NESC Codes, safety requirements, personal protective equipment and first aid.

To utilize the Computa-pole database (i.e., to electronically gather data), workers (in-house and contractor) will be trained on the use of the hand-held device, its operation, various asset class screens on the device (e.g., OH, UG, Street Light Standards, Stray Voltage Testing, etc.), and other corresponding maintenance priority codes.

The Company anticipates that employees working on-the-site will be qualified with the aforementioned training and as such will be skilled in the ability to take the required stray voltage testing and voltage measurement requirement of the Order. Since the same workers will likely be the repair crew – they may also be used to make any necessary repairs on the site.

Contractors conducting inspections will be required to meet training qualification criteria comparable to that of in-house workers. The Company's Construction and Management Services (C&MS) group coordinates safety and proficiency training for contractors on a routine basis when using such contractors. The bid specification for these workers will require proof of such qualification. This includes contractor orientation for the different levels of testing and inspection activity, review of safety plans, and risk mitigation and contractor safety procedures



in general. Required technical skills are outlined in the EOP's and any additional training necessary for contractors to perform the required testing and inspection activities will be provided by the Company.

Contractors conducting the stray voltage tests shall be provided orientation training regarding the program, for a subset of their workforce, who will then serve as trainers to instruct and train the remainder of the contractor's workforce; using Company training materials. Testing equipment will be demonstrated, and materials and policies will be provided. Workers will be equipped with the applicable materials to perform their job and will be trained on the protocols to secure an area where a stray voltage condition is found. The training will include a review of the applicable EOPs.

**(8) *Practical Limits on Testing of Street Light Standards Not Owned by the Company***

The Company is in the process of sending letters to each municipality to request information about their street light locations. Obtaining reliable data from the municipalities will be very important in achieving the goal of testing all street light standards. However, based on past experience with some municipalities, we expect to find municipalities who may not have kept complete or precise records of all their street light and traffic signal locations. There will be practical limitations on the ability of the Company to assure that it has tested all such facilities on public thoroughfares that are not owned by the Company, if the Company does not obtain sufficient information from the municipalities. Under the Company's Plan, for those municipalities that provide records of street light and traffic signal locations, a schedule can be developed to test all the facilities identified on the lists. To the extent the records are not available, not provided to the Company, or are inaccurate, it will not be possible to ensure that all non-owned street light and traffic standards will be tested.



Absent a reliable list from the municipality, the Company will attempt to capture as many unrecorded street lights and traffic signals as is reasonable under the circumstances.

Specifically, the Company will test its own street light standards in the evening hours, following the feeder maps the Company has for its own equipment. As the Company testing personnel come across street lights or traffic signals that are not recorded as Company owned, they will be instructed to test such unrecorded facilities and record the street light as a non-Company owned facility. However, this process in no way guarantees that all such facilities will be tested. Thus, there is a practical limitation on the stray voltage testing program to the extent adequate records are not provided to the Company.

***(9) Testing Schedule for the First Year of Testing***

The Company's schedule for completion of the first increment of stray voltage testing has two tiers of priority. The first tier governs facilities that are located in areas where the public has more frequent opportunities for making inadvertent contact with the facilities. The second tier governs other facilities that are in more remote areas of the service territory. The primary goal of this two-tiered schedule is to assure that all facilities with which members of the public are most likely to make contact are tested by no later than November 30, 2005. The criteria applied to create this two-tiered schedule are provided below.

In determining the priority of facilities to be inspected, the Company used a population density criterion for a first pass through the data. Specifically, 27 Urban Areas and Urban Clusters were identified. Within these areas, approximately 2.6 million out of the 3.5 million people who live in the Niagara Mohawk service area reside. This is approximately 74% of the population Niagara Mohawk serves. The land area occupied by these urban areas and clusters is approximately 1170 square miles or 4.9% of the approximately 24,000 square mile Niagara



Mohawk service territory. Thus, the vast majority (i.e., 74% of the customers), reside or work in only 4.9% of the Company's service territory. In those areas where there are the most customer meters, there is a higher likelihood of pedestrian traffic, more general activity, and a greater likelihood of members of the public coming into inadvertent contact with our facilities. Thus, there is a correlation between the density of customer meters and risk.

In identifying a reasonable place to draw the separating line between generally accessible facilities and remote facilities, the Company used the criterion of 100 yards between customers.<sup>9</sup> Thus, with specific exceptions that will be noted below, if there is an average of 100 yards or more between two customer meter points along a given feeder, the Company will consider the electric facilities along that feeder to be "Remote". In contrast, if the customers meters are less than 100 yards apart along a feeder (including both sides of the street) or one of the other specific exceptions apply, the Company will classify the electric facilities along the feeder as "Generally Accessible".

The program is designed such that all those facilities that are classified as "Generally Accessible" are tested before November 30, 2005, approximately seven (7) months from the beginning of testing and eleven (11) months from the date of the Order. In contrast, testing of those facilities that are classified as "Remote" will be completed as soon as practicable, but in no event later than August 31, 2006. This takes into account the start-up delays and other considerations in getting the testing program up and running in a timely manner

When applying the criteria to distinguish feeders that are "Remote" from those that are "Generally Accessible", the Company determined that 383 out of 2,050 overhead distribution circuits would fall into the category of "Remote". However, the Company will not limit the

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<sup>9</sup> See e.g., *EPRI Solutions, Inc.*, "Preliminary Assessment - Public Safety As It Concerns Metallic Objects Associated with or Near Electric Power Distribution and Transmission Facilities," (February 17, 2005), which appears as Exhibit II to Niagara Mohawk's Verified Petition for Waiver, filed concurrently herewith.



category of "Generally Accessible" facilities at this cut-off point. Rather, the Company will also perform a review to identify areas where schools or closely populated villages are located along the feeders. In cases where the review of such feeders identifies schools or such villages, the feeder will be moved into the "Generally Accessible" category.

As a starting premise, all transmission lines located along privately owned rights-of-way would also be classified as Remote. The Company will also exercise its good judgment and discretion to move any other facilities with unusual circumstances into the "Generally Accessible" category, where personnel reviewing the locations determine that members of the public are likely to make contact with the facilities, even if the 100 yards criterion has not been met. Further, the Company intends to test approximately 20% of transmission overhead facilities for stray voltage as part of its inspections of such facilities.

Following this prioritization process, the Company will concentrate its efforts to achieve the goal of testing 100% of "Generally Accessible" facilities by November 30, 2005 and all "Remote" facilities as soon as practicable, but in no event later than August 30, 2006.

The selection of August 30 for the "Remote" facilities is founded upon practical concerns. During the winter period, the "Remote" areas, by definition, will be difficult to access and test properly. Thus, from the period of December 1, 2005 through March 30, 2006, it will be difficult to perform testing on these facilities. Thus, the extension of time given for these facilities (while nine (9) months overall in length) only provides, as a practical matter, approximately five (5) additional months of useful testing time.

Having set this schedule, however, does not mean that the Company will not seek to complete testing of all facilities earlier than August 30, 2006. The purpose of putting this date in



our Plan is to provide an honest, good faith target date that the Company is confident can be met based on information currently available to the Company.

**(10) *Other Information***

In addition to the explanation of the testing program stated above, other details of the program can be found in Attachments 1 and 10.

**B. Inspection Programs**

The Company's Plan is designed to fully comply with the Electric Safety Standards schedule to have all electric facilities, as defined in the Order, visually inspected at least once every five years.

The inspection program can be divided up into five separate inspection categories:

- (1) Transmission Overhead;
- (2) Distribution Overhead;
- (3) Street Lighting;
- (4) Underground Inspection; and
- (5) Substations.

Each inspection program is designed to identify safety, reliability, and standard maintenance issues.

Except for some of the highly specialized inspection programs, which have specialized procedures, most of the programs are designed, in general, to have inspectors report maintenance and safety issues through hand held computers that tie into the Company's larger "Computa-pole" database, which is described in greater detail later in Section IV below. For these general



programs, maintenance issues are identified by five priority categories defined in the EOPs as follows:

***“V” Priority*** – An identified facility/component that is found to have an associated voltage with it (touch/stray voltage). These found conditions are to be made safe immediately, corrected immediately and shall not be left unguarded prior to correction.

***“A” Priority*** - Any identified facility/component or tree condition that must be addressed as soon as practicable to address public safety and or system reliability. These identified conditions are imminent failure conditions or potentially hazardous conditions.

***“B” Priority*** – Any identified facility/component condition for which it is reasonable to repair or replace when the equipment or feeder with which it is associated is scheduled for maintenance. These identified conditions will be corrected as preventive maintenance and/or facility life extension.

***“C” Priority*** – Any identified facility/component condition that is being trended and reviewed annually that may require replacement through the course of routine engineering and preventative maintenance processes (requiring project/Capital expenditures). Non-capital conditions identified under this priority can be corrected at the discretion of field operations.

***“F” Priority*** – An identified forestry condition that would be scheduled as time permits, within the routine right-of-way maintenance and danger tree removal schedules.



***(I) Transmission Overhead Facilities***

The details of the overhead inspection procedures and protocols for transmission overhead facilities are included in the NG-USA EOP T007, entitled "Transmission Line Patrol – 23 kV – 345 kV," provided in Attachment 2.

In general, there are six separate inspection activities associated with transmission overhead, the first of which, standing alone, is considered to meet the requirements of the Electric Safety Standards. We also describe the other inspection programs, for completeness and to show how the Company's inspection programs are not limited to the minimum required by the Commission's Order:

- (a) Ground Based Patrol & Maintenance: Transmission patrols are conducted by a line-qualified worker that can identify hazards, deficiencies or non-standard construction conditions on the facilities. These patrols will be scheduled in such a manner that each transmission circuit is examined in the field once every five (5) years. Thus, this component of the Company's transmission overhead inspection program addresses the requirements of the Commission's visual inspection schedule.
- (b) Aerial Helicopter Patrol: An enhanced patrol by helicopter to further identify and assess equipment condition through a different visual than that obtained through a foot-patrol will also be performed by the Company. These patrols are currently done on a one (1) year cycle, providing for a visual examination of all transmission lines by a line-qualified worker who can record maintenance issues. The aerial helicopter patrol has its own inspection priority categories.



- (c) Tower Footing and Inspection and Repair: In addition to the visual inspections, the Company conducts inspections that involve excavation of tower footings, based on a twenty (20) year cycle of 115 kV and higher voltage facilities.
- (d) Wood Pole and Inspection and Repair: Similarly, the Company conducts on a ten (10) year cycle, 115 kV and higher voltage base pole inspection and repair, which also involves excavation at the base of the wooden pole.
- (e) Aerial Helicopter Infrared Patrols: Aerial helicopter infrared patrol maintenance activity also is currently scheduled for a three (3) year cycle, with bulk power circuits done annually.
- (f) "As Needed" Comprehensive Helicopter Patrols: Finally, the Company conducts comprehensive helicopter based maintenance activity, involving a methodical examination of all components of a targeted transmission facility on an as needed basis to identify specific suspected problems.

More details regarding these various overhead transmission inspection programs are provided in Attachment 2.

With respect to the ground based control program, overhead transmission (23 KV – 345 KV) electrical facilities requiring inspection include all those facilities on overhead structures. The GPS longitude and latitude coordinates of each pole or tower exists in Computa-pole along with transmission corridor maps which are provided to the inspector going to the site. The inspector will document inspection of each pole and enter into Computa-pole any equipment deficiencies and/or condition identified on a pole. Overhead transmission equipment is identified in Attachment 2. This equipment includes approximately 9,333 circuit miles, 600,000 transmission poles, and 22,000 transmission towers.



**(2) *Distribution Overhead Facilities***

The details for overhead inspection procedures and protocols for distribution overhead facilities, including wood pole street lighting & traffic signals, are provided in EOP-211A, entitled "Distribution Line Patrol," provided in Attachment 3.

The Distribution Line Patrol and Maintenance program generally consists of patrols conducted by qualified workers that can identify deficiencies or non-standard construction conditions on the facilities. The patrols will be scheduled in such a manner that each distribution feeder and associated equipment would be examined at least once every five years.

Overhead Distribution (15 KV and less) electrical facilities requiring inspection include all those facilities on overhead structures. The database of this equipment is included in GIS and is provided in paper print to the inspector going to the site. The GIS GPS latitude and longitude coordinates for each pole is downloaded into Computa-pole. The inspector will document inspection of each pole and the equipment on the pole, enter into Computa-pole any equipment deficiencies and/or condition pursuant to the EOP on that pole.<sup>10</sup> Overhead equipment is identified in the scope and exhibit of the EOP in Attachment 3. Equipment quantity includes approximately 35,737 primary circuit miles, 22,377 secondary miles (predominantly on the same poles as primary), and approximately 1.2 million distribution poles with associated equipment.

**(3) *Street Light Standards***

Details of the Street Light Standard inspection procedures and protocols are included in EOP-211C, entitled "Street Light Inspections," provided in Attachment 4. These inspection procedures govern Company owned streetlights. While the Company will test street light

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<sup>10</sup> Wood poles with a street light luminaire are included in this inspection whereas Street Light Standards (metal poles) are inspected using EOP 211B. In addition, URDs and UCDs will be patrolled with the distribution overhead pursuant to EOP 211C.



standards owned by others in accordance with the Commission's Electric Safety Standards, it does not inspect such facilities.

Street lighting inspections will be performed as patrols, conducted by qualified workers who can identify deficiencies. Like the Transmission and Distribution Overhead inspections, the inspector will enter maintenance issues into a hand held computer, coding maintenance issues by priority, and the hand held computers will be synched with the Company's Computa-pole database.

Street Light Standard inspection will include the opening of the standard to inspect for hazardous connections. Identification of the 63,853 Standards (metal and fiberglass) was completed by the Company one year ago with the initial stray voltage testing. Although GPS longitude and latitude coordinates were not fully captured, this data will be downloaded where available into Computa-pole, along with directional locations, for use in prospective inspections.

Annual stray voltage testing will be scheduled for all street lights. Because the testing will occur in the evening, inspections will not take place concurrently. However, it is worth noting that stray voltage testers will be equipped with "angel guards" (street light standard base covers) for installation if covers are missing or wires are found to be exposed to the public at the time of testing. Thus, even though visual inspections will be on a five (5) year cycle, missing base covers may be addressed at the time of stray voltage testing.

#### **(4) *Underground Inspection***

The underground inspection procedures and protocols are included in EOP-211B, entitled "Underground Inspection and Maintenance," provided in Attachment 5. Underground electrical facilities requiring inspection include all those facilities in the networks (Buffalo, Syracuse, Utica, Albany, Troy, Schenectady, Glens Falls, and Watertown) along with conventional non-



network underground manhole/handhole and duct, plus commercial developments (“UCD’s”) and underground residential developments (“URD’s”).<sup>11</sup> The database of the URD’s and UCD’s is included in GIS (i.e., GPS longitude and latitude can be downloaded into Computa-pole for the location of switchgear, pad-mount transformers and handholes; although fiberglass handholes will not be inspected under this plan) and is provided in paper print to the inspector going to the site. The database of the network equipment is included in paper drawings but will be converted to electronic with the documentation of this program. Akin to the overhead inspection, Computa-pole shall be used for the documentation of equipment maintenance items and priority. The underground systems to be inspected include manholes, vaults, handholes, splice boxes, junction boxes, pad mount transformers, pad mount switchgears, and submersible equipment. This equipment includes approximately 1,852 vaults (174 with a transformer), 16,342 manholes, 62,681 handholes (45,945 of which are non-conductive material URD fiberglass handholes that will not be inspected), 56,998 pad mount transformers, 3,136 switchgears, 3,906 vaults, 3,136 switchgear, 3,370 URD miles, and 2,875 underground primary miles.

#### **(5) *Substation Inspection***

Given the importance and electrical complexities of substations, substation inspection is currently the most rigorous inspection program. The details of the procedures and protocols are defined in EOP 400.06.1 and 400.06.2, entitled “Substations,” provided in Attachment 6. The inspection program for substations is referred to as a “Visual and Operational (V&O) Inspection”. V&O Inspections are designed to detect abnormal conditions before the apparatus or equipment being inspected in the substation is damaged or an outage occurs. In fact, V&O is one of the elements used by the Company to prioritize for complete and diagnostic inspections.

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<sup>11</sup> URD’s and UCD’s will be patrolled with the Overhead systems since they are fed from the Overhead system.



Every transmission and distribution substation will have a V&O Inspection at least bimonthly.

Major transmission substations and generation switchyards are inspected at least monthly.

Substation equipment facilities requiring inspection include all those facilities within the substation. The Company has a complete database of this equipment referred to as "AIMMS".

Substation inspections also include inspections for oil leakage problems. Given the

Commission's Order, the Company will now incorporate stray voltage testing of the substation fence at the end of each V&O Inspection.

**(6) Inspection Schedules**

With the exception noted for more frequent inspection of the substations, each visual inspection program will be placed on a five (5) year cycle, in accordance with the Commission's Order. In the first year, an inspection target of one-fifth of the total amount of facilities will be followed. The Company has scheduled to inspect 20% of the overhead facilities based upon a circuit mileage basis. These circuits are listed in Attachment 7.

For Street Light Standards, the Company has scheduled to meet the requirement to inspect one-fifth by location; with inspections of one-third of the street light standards in the Western Division. The areas and schedules for street light inspections are summarized in the table appearing below, and described in further detail in Attachment 8.

• 1. Western Div - Buffalo	17,931	28%
• 2. Western Div - North	9,932	16%
• 3. Western Div - South	10,372	16%
• 4. Central Div	13,076	21%
• 5. Eastern Div	11,751	19%
• Total =	63,062	

For underground, the Company has scheduled to inspect 20% of the underground facilities based upon field work-force assessment of segregating the system into this portion by



specific areas. The areas and schedules for conventional Underground facilities are listed in Attachment 9.

#### **IV. THE DATABASE SYSTEM – “COMPUTA-POLE”**

The Company has a database system called “Computa-pole” that it uses to document the maintenance codes (those defined in the EOP’s). The Computa-pole system consists of DOS-driven hand-held computers within which the maintenance codes are pre-programmed. The hand-held units’ software can be upgraded to windows in the future. However, due to implementation time constraints of the Order, this is not feasible at this time.

The maintenance codes are key punched into the hand-held computer. At days-end, the hand-held computer information is downloaded into the master electronic (ORACLE) system. To effectuate the Underground Inspections (networks, URD, UCD), and stray voltage testing, additional screens (one for Overhead, one for Underground, one for Street Lighting, and one for stray voltage testing) with the applicable maintenance codes will be programmed into the hand-held computers. The storage system of the hand-held has the ability, with upgraded storage to a 256 MB card, to store the complete Company system for all four testing screens and maintenance codes.

The hand-held computers have built-in GPS systems that allow for the inspector or tester to confirm a location or add additional facilities with the touch of a key to input the longitude and latitude of the facility. This allows for building upon the database in the field. The Company initially had 19 hand-held computers for the Overhead (“OH”) inspections. To extend this to the Underground (“UG”), and street lighting, the Company procured an additional 81 units, totaling 100. This does not provide for hand-held computers for the Stray Voltage testing.



Hand-held computers for the Stray Voltage testing will be provided by the entity with whom the Company expects to contract to perform the services. The Company will provide the necessary data requirements (as listed in the Stray Voltage EOP) and the contractor will be required to provide them to the Company in electronic ORACLE format.

The Stray Voltage data repository must be developed to meet the information requirements listed in EOP-211D included in Attachment 1.

To populate the Computa-pole system with the Company's facility locations, it receives a download from the Company's GIS system - master asset register; specifically, the equipment GPS longitude and latitude points. However, the Computa-pole system does not electronically back-feed to the GIS system. For the Company-owned Street Lighting facility locations, the Street Lighting Inventory database ("OLDS") is downloaded to Computa-pole with the GPS longitude and latitude points.

For Municipal Street lighting and traffic signals we have historically billed by metered kWh. Thus, we may lack certain facility records. We are in the process of contacting all municipalities to obtain facility location information. A copy of the general form of letter being sent is provided as Attachment 11. The Company will seek the GPS longitude and latitude of the facilities and definition of the facilities from each municipality. At this time, however, it is not clear whether such data will be available from the municipalities.

Substation inspections use a different electronic system (AIMMS), to record asset condition.



## **V. MATTERS OF INTERPRETATION AFFECTING IMPLEMENTATION**

In developing its Plan, the Company identified a number of questions where interpretation was required in the design of various program details. Many of these issues were raised and discussed at the Technical Conference in January. Below, each matter is identified and explained in further detail.

### **A. Fiberglass URD Handhole**

In the Order, the Commission states, “[w]e do not expect the utilities to perform destructive testing as a part of this inspection program.”<sup>12</sup> Consistent with the Order, the Company’s inspection program is designed to preclude new testing or inspection activities that are destructive in nature. Further, the Commission’s Order states that with regard to the inspection of equipment, the inspection “should be performed in a manner that allows the inspector to examine its components, except those that are ordinarily encased in sealed compartments.”<sup>13</sup> The Company has 3,770 miles of URD with approximately 46,000 sealed fiberglass boxes/handholes. The Order requires the utilities to inspect the interior of manholes, service boxes, vaults and other underground structures.<sup>14</sup>

Underground secondary fiberglass handholes are non-conductive, and since they typically feed one or two customers, they do not have a significant impact on reliability. These handholes have very few wires and connections inside that can become frayed or damaged, are not routinely subject to road salt or vibration, and are generally about ten feet from the road line. Likewise, the conductors and connections that reside in these handholes are covered with insulation and even if one of the bare conductors were to make contact with the cover, there

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<sup>12</sup> Order at 19.

<sup>13</sup> *Id.*

<sup>14</sup> Order, Appendix A, Section 4(a), at 3.



would be no contact exposure, due to the non-conductive nature of the fiberglass material. More importantly, since these handholes were not designed for routine access, the boxes and seals will likely suffer unnecessary damage by having their covers opened and closed. Damage to the seal of the covers (which may create future leakage), covers and bolt threads could require inserts or, if the box is damaged or destroyed by opening, excavation and replacement, resulting in increased costs without any resulting benefits. Additionally, many of these handholes have never been reopened since they were sealed at installation, have become part of the landscape, and are buried on private property and not accessible by the public. To locate and inspect these boxes risks increasing the number of customer complaints due to private property entry, lawn excavation and restoration issues. The process of having to raise buried units to surface level would also increase the exposure of the top of the boxes and lids to future damage and structural failure from mowers and other garden equipment. Avoiding this unnecessary damage is consistent with the Commission's conclusion that utilities need not perform destructive testing as part of this inspection program. Thus, the Company's Plan does not require opening sealed fiberglass URD handhole boxes for inspection.

**B. Inspections and Stray Voltage Tests Documented by GPS Point of Facility**

The Company's system for inspections and stray voltage itemizes to the facility at each GPS point and identifies by asset type; e.g., Pole, Street Light Standard, Manhole, Handhole, Vault, Pad mount transformer, or Pad mount switchgear. For example, a pole may have a guy and a downground, which requires two stray voltage tests. This will be recorded as a "pole tested". Similarly, regarding inspections, a pole may have a pole-top transformer, guy, downground, cutouts, connections, etc. If all associated equipment on the pole is in good



condition, it will be recorded as a "pole inspected", but every piece (and sub-piece) of equipment is not noted. The Company believes this method is consistent with the record-keeping requirements of the Commission.

**C. Overhead Inspections - Based Upon 20% of Overhead Circuit Mileage**

To identify the one-fifth of the Overhead System and URD and UCD's that need to be inspected each year, the circuit mileage is used to define the portions, rather than the number of pieces of equipment. We believe this is consistent with the Commission's Order. Moreover, this approach does not have any affect on achieving the objective of inspecting all facilities once within the five (5) year cycle.

**D. Street Lights on Wood Poles - Testing Down Ground During Daytime**

The Order states that Street Light Standards must be tested for stray voltage when the light is operating during the night. The Company's program is designed to meet that requirement. However, for wood poles with a guy or downground, a street light arm/head located on that wood pole would be tested during the daytime along with the rest of the overhead system.

**E. Inaccessible Street Lights on Highways (Central- Rt. 81, 90, 481, and 790; West - Rt. 33, 90, 190, and 290; and, East - Rt. 87,90, and 787)**

Certain Street light standards, especially those in the median between interstate highways or other major roads, are inaccessible to the public. Thus, we do not believe the Electric Safety Standards require voltage testing of such facilities. As a practical matter, testing these facilities would require traffic lane closings and could place our workers in harms way. As such, while these facilities can be visually inspected from a short distance, the standard close inspection and



stray voltage testing will not be performed.

**F. Inaccessible Equipment Due to Fence**

Certain equipment may be inaccessible to the public due to customer fences. (e.g., poles in back-yard lots). In such cases, stray voltage testing would not be conducted and visual inspections would be completed with field glasses (binoculars).

**VI. ORGANIZATION & EXECUTION**

A project manager (Electric Inspections and Testing Department) will have supervisory control and authority over the Company's Inspection and Testing Programs. This individual will report directly to the Vice President of Distribution Planning and Engineering.<sup>15</sup> The project manager will have seven regional supervisors who will conduct the Quality Assurance program, as well as supervise inspections and stray voltage testing by internal Company employees and contractors. In addition, the supervisors assure day-to-day management of the inspection schedules, data quality, analysis, and reports. The Electric Inspections and Testing Department will be supported by several other Company departments. A Construction & Maintenance Service (C&MS) Department maintains relations with qualified contractors, issues Requests for Proposals (RFP's) for services, hires workers, and administers contracts with vendors. System Electric Operations in the T&D Technical Services Department develops EOP's, maintains the computer system administration, selects qualified testing devices, certifies laboratories, provides technical support for data analysis, and schedules development. Information Technology (IT) offers computer software support. Field Operations will support the inspection of networks.

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<sup>15</sup> The Vice President of Distribution Planning and Engineering reports directly to the Sr. Vice President of Operations who, in turn, reports directly to the President of Niagara Mohawk Power Corporation.



To effectuate the resources to complete this work, the Company currently plans to perform the work with the following personnel and contractors:

**(1) Substation Inspections**

The Company currently uses existing in-house energy services employees to perform substation inspections. This is anticipated to continue.

**(2) Overhead Distribution Inspections**

The Company will predominantly use in-house qualified resources to inspect the targeted amount of distribution overhead facilities each year, supplemented by contractors where regionally required due to lack of resources. Stray voltage testing for the overhead will be completed independently of the overhead inspections. The overhead distribution and underground inspections will not be co-mingled with the testing because of the difference in the qualification requirements of the inspector versus the voltage testing. The voltage testing is expected to proceed more slowly since every pole must be physically walked and touched, whereas the inspection often allows for driving in rural areas and use of field glasses in hard to access areas. The Company believes it more economic to avoid using a line-qualified employee to perform stray voltage tests, which would slow their inspection time.

**(3) Overhead Transmission Inspections**

An RFP for contracting the annual inspections of the 23 kV – 345 kV facilities will be issued. Depending upon the cost effectiveness and the disposition of existing in-house qualified employees, this may be completed using in-house resources or by contractors. Stray Voltage testing of overhead transmission facilities will take place concurrently with inspections. Stray Voltage testing will be completed simultaneously



with the annual inspections, since the majority of this equipment is off-road, time consuming, and difficult to reach.

#### **(4) URD & UCD**

Provided the in-house qualified inspector can open pad-mounted transformers, switchgear, and any conductive handholes<sup>16</sup> as a one-person crew, this task will likely be completed by them. Stray Voltage testing for the URD & UCD's, however, will be completed independent of the Inspections.

#### **(5) UG Network Vaults and Manholes**

The Company will predominantly use in-house "subway"-qualified resources, supplemented by contractors where regionally required due to any lack of resources, to inspect the annual targeted amount of network vaults and manholes. Non-network manholes and all handholes will be addressed independently.

#### **(6) Street Lighting Standard Inspections**

An RFP for contracting the inspections of the Street Light Standards will be issued. It is expected that contracting will be the most cost-effective means of performing the tests. Since the Stray Voltage testing of Street Light Standards must be completed at night, the inspections will be completed separate from the Stray Voltage Testing.

#### **(7) Stray Voltage Testing**

An RFP for contracting the Stray Voltage testing inspections of the Street Light Standards will be issued for 100% of the system. Contractor wages for this service are expected to be lower than the Company's lowest pay group. Therefore, it is expected that contracting will be cost effective. Stray Voltage testing of Street Light Standards must be

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<sup>16</sup> Conductive handholes excludes fiberglass.



completed at night while the rest of the system will be completed in daylight. For transmission overhead, the stray voltage tests will be co-mingled with the annual inspections in the year. Company Substation fences, however, will be tested upon entry during the separate substation inspections.

## **VII. QUALITY ASSURANCE**

### **A. Overview**

To assure quality of the data developed during testing and inspection, Quality Assurance ("QA") programs have been developed. The details of the QA programs are outlined in Attachment 12. In essence, a statistical sampling approach to assure a 95% confidence level is established for both the stray voltage and inspection programs. Based on previous Company testing experience, stray voltage may be expected to occur on about 0.1% of the equipment. Where stray voltage is found, a rigorous repair is completed and analyzed.

Given this, the QA program for Stray Voltage testing focuses on random selection samples, the associated non-conformance target, and auditing of the testing and documentation completed. It does not focus on a physical re-test of the equipment. Every facility with a positive stray voltage will be audited for assurance that procedures were followed (i.e. guarded, made safe immediately, permanently repaired within 45 days, and documented properly).

For the inspections, the same statistical confidence level is planned. However, in this case the focus is on consistency of the evaluation of the assessment of the maintenance priorities. As such, random selection of circuits (mainline portion only) will be inspected in tandem by the QA Supervisor and the Inspector to obtain on-the-site consistency in maintenance priority assessment.



The selection, prioritization, and work completed from the inspections (except stray voltage conditions described above) will be addressed in the annual reports and the Company's annual workplan (identification of work to be completed).

The QA Program at 95% confidence level and the sample size may change in the event the as-found non-conformance exceeds the ceiling.

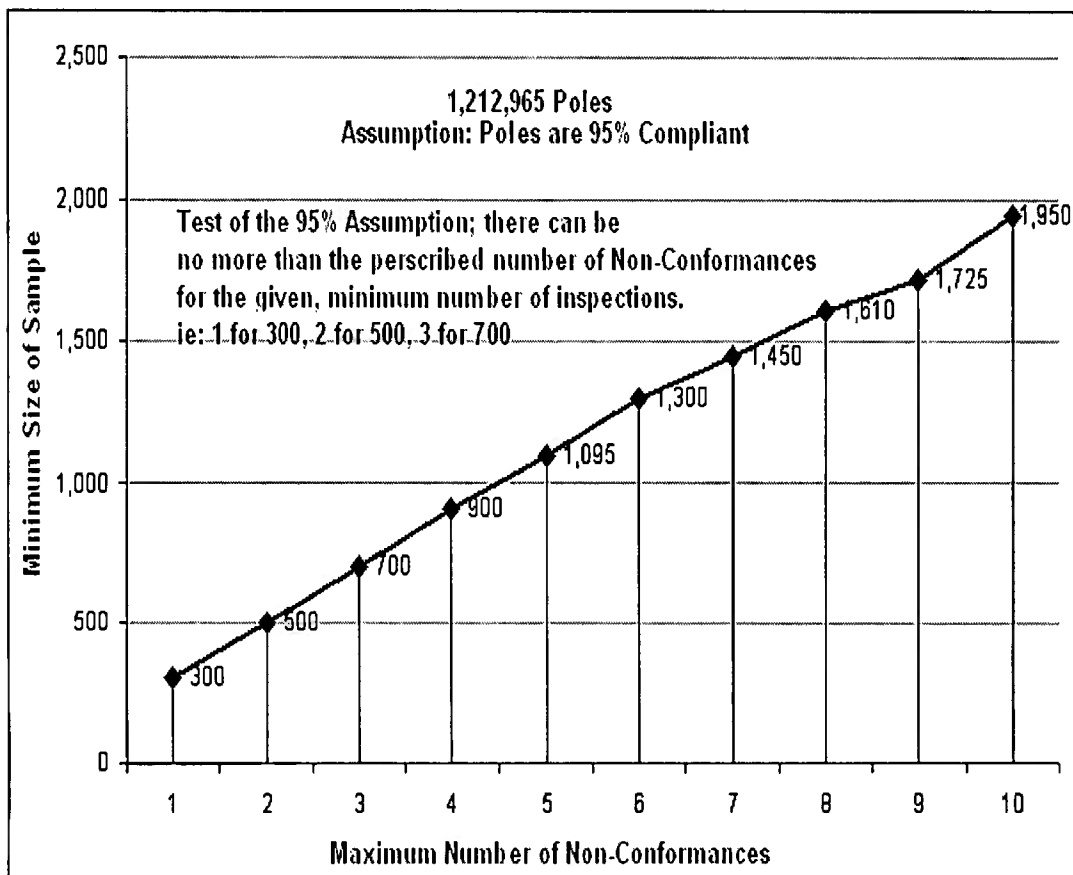
**B. QA Program Statistical Confidence Level of 95%**

The QA program is designed to achieve a minimum confidence level of 95% compliance. This is akin to the existing gas leak QA program. To achieve a 100% confidence level would be statistically impossible, as suggested by the Order. As discussed at the Technical Conference, the dynamic environment (e.g., weather, storms, DOT relocations, automobile accidents, customer sprawl, etc.) and immense number of equipment items, much of which are not recorded as plant property (e.g., downgrounds, guys), makes it likely that some equipment may be missed. Thus, 100% is unlikely to be realized even under the best designed program.

In general, a "text-book" QA program first establishes a desired confidence (or compliance level). To assess quality, a process of statistical sampling is implemented for the population for which the quality requirements are to be confirmed. Such sampling is viewed as being an accurate representation of a homogeneous population, so long as the samples are randomly chosen. Given this confidence level and the total population of the equipment, a sample size is established and a resultant ceiling "non-conformance" level is calculated. In the event the "as-found" non-conformances exceed the ceiling level, the sample size must be increased and the resultant "non-conformance" level re-calculated. Failure to meet the QA standards occurs when the "as-found" non-conformance level exceeds the ceiling at extremely



large sample sizes. A table illustrating minimum sample sizes and maximum number of non-conformances follows.



For example, consider the following. If a sample of 300 is taken and results in no more than 1 non-conformance, the task is complete (i.e., the population is 95% compliant). If more than 1 non-conformance is found, a sample of 200 more must be taken (for a total of 500). This second increment of sampling in such case cannot have any more than 1 additional non-conformance. If only 1 additional non-conformance is found, the task is complete at this stage. If, however, another 3 incidents of non-conformance are found (for a total of 4), another



sampling of 400 must be taken (for a total of 900). With the last sample, any additional non-conformances indicate a problem that must be addressed.

As the confidence level for the QA Program is increased to 100%, it becomes essentially impossible to achieve, since it would require double testing of literally everything, under carefully controlled test and sample conditions. For example, if, out of 1.2 million devices recorded on the Company's records, a review finds a different number of devices (e.g., a second review finds a new guy), the only way a 100% confidence level can be achieved would be to re-test the entire list of equipment once again, and so on.

The QA programs, including the sample sizes, non-conformance limits, and definition of what is being assessed are described in Attachment 12.

#### **VIII. CERTIFICATION**

Included with this Plan in Attachment 13 are sample certifications that will be provided to the Commission to comply with the certification requirements contained in the Electric Safety Standards. Prior to submitting such certifications to the Commission, however, the Company will employ a process of certification through the chain of command. In other words, each inspection and stray voltage test shall record electronically who conducted the test or inspection. Each of the aforementioned Supervisors of Electric Inspections and Testing Department will sign-off on the annual report in the Region for which they are responsible. Their Manager - Electric Inspections and Testing Department, and corresponding Vice President Distribution Planning and Engineering also will sign off. Essentially, a signatory form of assurance from the inspector, cascading organizationally up to the Senior Vice President Distribution Operations, will occur. The Sr. Vice President Operations will then provide to the Commission certifications in the aforementioned form.



## **IX. RESEARCH AND DEVELOPMENT**

The Company intends to evaluate the stray voltage testing results when the first round of testing is completed in 2006. At such time, the Company will be in a better position to determine whether there are any R&D projects that merit further consideration. In addition, it makes sense for any such R&D efforts to be coordinated with the other utilities, based on experience. Until the first round of testing and inspections are completed, however, the Company has no current plans for specific R&D projects aimed at stray voltage or safety issues related to inspections.




**Niagara Mohawk Power Corporation  
2005 Stray Voltage Testing and Inspection Plan**

**LIST OF ATTACHMENTS**

<b>Attachment</b>	<b>Description</b>
Attachment 1 -	EOP-211D Stray Voltage Testing Procedure
Attachment 2 -	NG-USA EOP T007 Transmission Line Patrol 23 kV - 345 kV
Attachment 3 -	EOP-211A Distribution Line Patrol
Attachment 4 -	EOP-211C Street Lighting Inspections
Attachment 5 -	EOP-211B Underground Inspection and Maintenance
Attachment 6 -	EOP 400.06.1 and 400.06.2 - Substations
Attachment 7 -	Transmission and Distribution Inspection Circuits for Calendar Year
Attachment 8 -	Street Lighting Inspection List
Attachment 9 -	Underground Inspection List
Attachment 10 -	Stray Voltage Testing Schedule & Those Excluded
Attachment 11 -	Form of Letter to non-electric-corporation Municipalities regarding their conductive Street Lights and Traffic Signals for Inclusion in the Stray Voltage Testing
Attachment 12 -	Quality Assurance Program
Attachment 13 -	Certification Form



<b>Niagara Mohawk</b> A National Grid Company  <b>ELECTRIC OPERATING PROCEDURES</b>	<b>Doc No.:</b> EOP 211D
	<b>Page:</b> Page 1 of 8
	<b>Date:</b> 02/01/05
<b>SUBJECT:</b> Stray Voltage Testing	<b>SECTION:</b> General

**REFERENCE:**

NYPSC Order 04-M-0159  
Applicable National Grid Safety Rules & Procedures  
Testing Equipment Operation Instructions

**GENERAL INFORMATION:**

The purpose of this procedure is to outline the requirements for the annual stray voltage testing requirements on various Niagara Mohawk Facilities as required by the New York Public Service Commission's "Electric Safety Standards" issued on January 5, 2005.

This procedure is designed to address regulatory requirements for annual stray voltage testing of all electric facilities with conductive surfaces that are accessible to the public.

**PROGRAM ADMINISTRATOR:**

Delivery Engineering Services

**SCOPE:**

- I. Facilities Where Stray Voltage Testing/Documentation is Required
  - A. Street Lights Company and Municipally Owned
  - B. Substation Fences
  - C. Overhead Distribution Facilities
  - D. Overhead Transmission Facilities
  - E. Underground Facilities
  - F. Daily Work Areas
  - G. Exemptions
- II. Test Equipment
- III. Test Procedure
- IV. Corrective Action Requirements
- V. Database Requirements
- VI. Annual Reporting and Certification Requirements
- VII. Applicability
- VIII. Responsibility
- IX. Definitions
- X. Training

Supersedes Document Dated: New Document	Authorized By: Director-Delivery Engrg. Services	Approved By: VP - Engineering Services
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**I. FACILITIES WHERE STRAY VOLTAGE TESTING/DOCUMENTATION IS REQUIRED**

**A. Street Lights Company and Municipally Owned**

1. Company owned metallic street lighting standards are required to be tested for stray voltage annually. This test is to be performed while the light is operating.
2. Municipally owned street light systems that Niagara Mohawk directly provides energy to must be tested for stray voltage annually. Niagara Mohawk will complete this testing unless assurances of the completion of required testing and transfer of such test data are made by the appropriate municipality. This test is to be performed while the light is operating.
3. Municipal owned metallic traffic signal standards and accessible devices are to be tested for stray voltage by Niagara Mohawk.
4. All street lights identified on public thoroughfares no matter who owns it.
5. All street lights under a maintenance contract.
6. Exceptions not requiring stray voltage testing: private lighting, park associations, parking lots, fiberglass (or other non-conductive) street light standards, and locations where street light standards are not publicly accessible, such as facilities located in the center of highways that cannot be accessed without stopping traffic or creating potentially hazardous situations for the worker and/or public.

**B. Niagara Mohawk Substation Fences**

1. Metallic fencing surrounding substations with Niagara Mohawk Facilities shall be tested for stray voltage annually. This fencing can be customer owned for customer stations, if a Niagara Mohawk facility is part of the station.

**C. Overhead Distribution Facilities**

1. Towers and/or metallic poles with distribution facilities shall be tested annually for stray voltage.
2. Wood distribution poles require annual stray voltage testing on the following equipment:
  - a. Metallic riser guard or conduit (company or non-company).
  - b. Uncovered or uninsulated down ground (company or non-company).
  - c. Down guy (company or non-company).
  - d. Any other publicly accessible conductive piece of equipment (company or non-company) on the pole within reach from the ground.
3. Exceptions: Customer meters and customer meter poles are excluded.

**D. Overhead Transmission Facilities**

1. Towers and/or metallic poles with transmission facilities.
2. Wood transmission poles or structures require annual stray voltage testing on the following equipment:
  - a. Metallic riser guard or conduit (company or non-company).
  - b. Uncovered or uninsulated down ground (company or non-company).
  - c. Down guy (company or non-company).
  - d. Any other publicly accessible conductive piece of equipment (company or non-company) on the pole or structure within reach from the ground.



E. Underground Facilities

1. Annual stray voltage testing is required on all of the following equipment where accessible to the public.
  - a. All metallic manhole covers, vault covers and grates, junction box covers, handhole covers, pad mount transformers, and switchgear.
2. Exceptions: Non-metallic concrete or fiberglass pads or handholes are not required to be tested.

F. Daily Job Site Test Requirements

1. Each job site where Niagara Mohawk personnel or its contractors complete a work assignment shall be tested for stray voltage at the end of the work day or the completion of the assignment. **This testing requirement is considered good utility practice and does not require specific documentation.**

G. Exemptions:

1. A completely fenced in area where access is achieved by jumping/climbing a fence where access is denied to the general public. Good judgment is required by the tester in these scenarios.
2. Temporary work that limits access to the facility for an extended period of time.

II. TEST EQUIPMENT

- A. A hand held device (proximity detection unit) that is capable of detecting voltage from 8 volts to 600 volts.
- B. The devices utilized must be certified to at a minimum level of 8 volts to a maximum level of 600 volts by an independent laboratory. The following units have been submitted for certification:
  1. HD Electric model LV-S-5 (5-600 volts).
  2. AMP probe K-1 (6-600 volts).
- C. If a presence of voltage is indicated by the certified detection unit listed above, a portable AC digital voltmeter shall be utilized to confirm voltage. The test meter must have an input load impedance of 2000 ohms.
- D. The devices utilized if voltage is indicated must be an AC digital meter with a Cat. IV rating or better by an independent laboratory. The following units have been approved:
  1. Fluke 175 (Cat. IV)
  2. Fluke 177 (Cat. IV)

III. TEST PROCEDURE

A. Job Briefing

1. At minimum, the following information must be communicated to all personnel, both National Grid and Contractors, at the beginning of each shift for Touch Potential Inspection Work:



- a. Structures are never to be touched with a bare hand while performing the tests, only the voltage detector or meter probe is to be used to make contact with the facilities.
- b. Appropriate PPE must be worn.
- c. Each individual needs to be aware of his/her surroundings at all times.
- d. Make sure to observe all traffic before entering a street, either at intersections or any other point.
- e. Traffic safety vest (DOT Compliant Class II) is to be worn at all times.
- f. Be aware that when bending down, the visibility benefits of the traffic safety vest are diminished.
- g. Obey all traffic control devices.
- h. When working in the street, face oncoming traffic whenever possible.

**B. Measurements for voltages will be performed in accordance with the following:**

- 1. Initial measurements for the presence of voltage shall be made using a certified proximity detection unit as noted in the testing equipment certified equipment list in Section II B.
  - a. To verify the proper operation of the proximity detector, follow operating instructions for the particular certified unit being utilized.
  - b. After verification that the detection unit is working properly touch the structure to be tested with the probe of the unit. Follow operating instructions of the particular unit being utilized. If a voltage is present, the appropriate notification will be made by the detector dependent upon which certified model is utilized.
- 2. If this test detects voltage, repeat the test with the portable AC voltmeter:
  - a. Measurements with a portable AC voltmeter shall be taken on clean bare metal surfaces.
  - b. When using a portable AC voltmeter, connection shall be made to suitable neutral or ground source with the common (black) AC voltmeter or lead.
    - i. In locations where the neutral or ground point is at a distance in excess of the voltmeter lead length, the connection to the neutral/ground shall be made with up to 25' of # 16 stranded copper lead wire, the other end of which shall be securely connected to the negative (black) probe of the meter or voltage continuity tester. When using such "extension leads" appropriate care shall be taken in the placement of such leads so as to not create a hazard to workers, pedestrian or vehicular traffic.
  - c. The "live" meter probe lead shall then be placed into contact with the structure under inspection.
    - i. The test point must be free from paint, rust or other contaminates that could affect the voltage reading.



**IV. CORRECTIVE ACTION REQUIREMENTS**

- A. If a stray voltage condition is found and verified by the Test Procedure in Section III, the site is to be guarded until made safe by Company personnel or if municipally owned, made safe by the owner or company. Guarded for the purposes of this EOP is defined as guarded by a person if the stray voltage found is greater than 8 volts. If the stray voltage measures less than 8 volts it can either be guarded in person or by a protective barrier that prevents public contact. It is expected that sound judgment shall be utilized in this application.
- B. The following notification process for personnel to respond shall be utilized.
  - 1. Notification by Division:
    - a. Eastern Division (Albany) 800/945-8303
    - b. Central Division (Syracuse) 315/460-2020
    - c. Western Division (Buffalo) 800/355-0713
  - 2. Inform the operator that this is a stray voltage call, giving the location and condition from the data supplied for the survey.
  - 3. National Grid personnel or designee will be assigned to respond.
- C. Once the stray voltage condition is made safe, temporary repairs may be made to energize the equipment.
- D. Except as noted in IV.E, permanent repairs to the equipment shall be made within 45 days of the occurrence.
- E. If permanent repairs can not be made within 45 days due to extraordinary circumstances, the company shall periodically perform site visits to monitor the condition of the temporary repair. All exceptions must be identified and justified in the annual reporting of the program to the commission.
- F. The Tester/Inspector may detect a minimal voltage level that is attributable to the design of the facility and not the result of an improper condition, no corrective action is required in this instance.
- G. The stray voltage testers conducting the stray voltage tests on street light standards shall be equipped with Angel guards (street light standard base covers) for installation if the cover is missing or wires are found to be exposed to the public at the time of testing.
- H. The stray voltage tester shall report any potentially hazardous conditions found on Niagara Mohawk facilities seen visually during the survey process.
- I. Customer Owned Equipment
  - 1. Where the Company finds stray voltage and identifies its source as customer-owned equipment, the Company shall immediately make the area safe and notify the customer or a responsible person, as appropriate, that a dangerous situation exists. The Company shall advise the customer or responsible person that the cause of the stray voltage must be immediately remedied.
  - 2. The Company is encouraged to work with the customer to determine and rectify the problem. If the Company chooses to do so, it may charge a reasonable cost for this effort.
  - 3. The Company may temporarily remove a customer's meter or take such other actions as are appropriate and necessary to protect the public.

**V. DATABASE REQUIREMENTS**

- A. The database in use shall be easily searchable for information and reporting.
- B. Information fields required to be completed for company facilities:
  - 1. Location
  - 2. Facility
  - 3. Facility #
  - 4. Circuit



5. Survey date
6. Name of person performing survey
7. Stray voltage test required Y/N
8. If yes, voltage found Y/N
9. If yes, voltage measurement result \_\_\_\_\_
10. Immediate action taken \_\_\_\_\_
11. Date permanent repair \_\_\_\_\_
12. Description of repair made \_\_\_\_\_
13. Equipment found in need of repair \_\_\_\_\_
14. Employee # of individual responsible for repair \_\_\_\_\_

**C. Information required for non-company facility:**

1. Location
2. Facility
3. Survey date
4. Name of person performing survey
5. Facility owner
6. Voltage measurement \_\_\_\_\_
7. Date owner notified
8. Person notified \_\_\_\_\_

**VI. ANNUAL REPORTING AND CERTIFICATION**

- A. Each Regional program supervisor shall provide certification to the program manager that the Region they supervise has complied with the stray voltage testing program as ordered by the PSC.
- B. The program manager shall provide certification to the Senior Vice President of Field Operations that the organization has complied with the stray voltage testing program as ordered by the PSC.
- C. Written certification of the completion and results of every stray voltage test shall be completed, as well as a certification that all unsafe conditions identified have been remediated by appropriate company personnel.
- D. The President or officer with direct responsibility for overseeing the stray voltage testing shall provide an annual certification to the Commission that the Company has tested all of its publicly accessible conductive surface electric facilities and all street lights.
- E. Analyses of stray voltage data to show trends or common causes.
- F. Discussion of performance mechanism, if required.
- G. Changes to program implementation due to lessons learned.
- H. The Company shall maintain its written certification and other documentary proof of its testing at its' Albany, Buffalo, and Syracuse office facilities. These documents shall be made available to the public for review upon request.

**VII. APPLICABILITY**

This procedure applies to all personnel involved with or responsible for the testing of facilities designated by this EOP for stray voltage.



**VIII. RESPONSIBILITY**

- A. Delivery Engineering Services
  - 1. Update program as necessary.
  - 2. Provide field support and training upon request.
  - 3. Act as liaison with database vendor when required.
- B. Field Operations
  - 1. Ensure the stray voltage program as outlined in this EOP is implemented properly and timely.
  - 2. Ensure that the program as outlined in the EOP is completed each year.
  - 3. Provide qualified personnel to complete stray voltage testing.
  - 4. Ensure all stray voltage testers have been trained.
- C. CM&S Management
  - 1. When requested by field operations obtain, schedule and manage contractors to perform stray voltage testing upon Field Operations requests.
  - 2. Ensure all stray voltage testers have been trained.
  - 3. Manage contractual terms and conditions including all change orders and resource requirements.
  - 4. Establish a process for the delivery of work, collection of data, invoice verification and payment, and reporting to local management and Asset Management.
  - 5. Manage any established support processes such as back office support or data entry clerks.
- D. Stray Voltage Inspector
  - 1. Demonstrate the ability and proficiency to perform stray voltage testing per this EOP.
  - 2. Demonstrate the ability to become proficient in the use of the appropriate database.
  - 3. Possess the ability to do walking patrols, collect information, edit data, and guard unsafe facilities.
  - 4. Attend stray voltage training program.
- E. Training Department
  - 1. Provide field training upon request.

**IX. DEFINITIONS:**

- A. Stray Voltage – The term “Stray Voltage” means voltage conditions on electric facilities that should not ordinarily exist.
- B. Proximity Detection Unit – A low voltage hand held detector used to test exposed metallic surfaces and conductors for the presence of low voltage from 8V to 600V. Measured voltages below 8V are required to be addressed per the PSC order.
- C. Stray Voltage Inspector – The individual performing the stray voltage inspection.
- D. Valid User – An individual that has been authorized to use the Transmission and Distribution program database by the program administrator.
- E. Handheld Computer - An electronic Data recording device that is used in the field to create a record of conditions found.
- F. Desk Top Computer - A personal computer that is connected to the NM network that is used to download the Hand Held device and retrieve the information in the form of reports.



**X. TRAINING:**

- A Delivery Engineering Services with assistance from the database vendor will provide training on the utilization of handheld computers and the selected database.
- B At a minimum, each worker conducting these tests should have knowledge and training in the following areas:
  - 1. Proper use of appropriate Personal Protective Equipment.
  - 2. Work Area Protection.
  - 3. Hazard Communication.
  - 4. First Aid CPR (This is required only on multi-person crews.)
  - 2. The proper use of certified voltage detection units and voltmeters.
  - 3. Hazardous condition identification.

The attendance of this training shall be documented.




**EOP 211D**

**“Stray Voltage Testing”**

**02/01/05**

This is a new procedure.



 <b>National Grid</b>  <b>ELECTRIC OPERATING PROCEDURES</b>	<b>Doc No.</b> NG-USA EOP T007
	<b>Page</b> 1 of 13
	<b>Date</b> 02/01/05
<b>SUBJECT:</b> Transmission Line Patrol – 23kV-345kV	<b>SECTION</b> Transmission & Distribution

**REFERENCE:**

NY PSC Order 04-M-0159  
Applicable National Grid Safety Rules and Procedures  
Stray Voltage Inspection NM EOP 211D

**GENERAL INFORMATION:**

The purpose of this procedure is to outline the requirements for the patrol and maintenance activities associated with National Grid USA Transmission circuits. The Transmission Maintenance Program is designed to address a variety of maintenance activities required to maintain a safe and reliable Transmission System. Due to the diverse service territories, system construction and voltages, National Grid will utilize the following definitions below to designate which maintenance activities in this EOP are completed in the sections discussed.

- Transmission NY 115kV and above
- Sub-transmission NY 23kV up to and including 69kV
- Transmission New England 69kV and above
- Sub-transmission New England 23kV up to and including 46kV.

These maintenance activities include a ground based patrol on a five year cycle, aerial Infrared on a three year cycle, Transmission Tower footing inspection and repair on a twenty year cycle, Transmission Wood Pole Inspection and Treatment on a ten year cycle, general aerial patrols on a one year cycle, Comprehensive Helicopter Inspections as needed, and Transmission Tower Painting on a twenty year basis.

**PROGRAM ADMINISTRATOR:**

Delivery Engineering Services

**SCOPE:**

Transmission Maintenance

- I. Ground Based Patrol and Maintenance
- II. Equipment to be Inspected and Maintenance Codes
- III. Aerial Helicopter Patrol
- IV. Tower Footing Inspection and Repair
- V. Wood Pole Inspection and Treatment
  
- VI. Aerial Helicopter Infrared Patrols

<b>Supersedes Document Dated:</b> 02/01/02 EOP 211	<b>Authorized By:</b> Director – Delivery Engineering Services	<b>Approved By:</b> VP – Network Asset Management
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- VII. Comprehensive Helicopter Patrol
- VIII. Tower Painting
- IX. Maintenance Database
- X. Maintenance
- XI. Time Reporting
- XII. Completion
- XIII. Applicability
- XIV. Definitions
- XV. Responsibilities
- XVI. Training

## **I. GROUND BASED PATROL INSPECTION AND MAINTENANCE**

### **Transmission NY & NE**

#### **Sub-transmission NY**

Transmission patrols are conducted by a line-qualified worker that can identify hazards, deficiencies or non-standard construction conditions on National Grid facilities. The patrols are scheduled in such a manner that each transmission circuit is examined in the field once every **five** years. Any new facilities added to the system will be incorporated through our GIS system and added to the appropriate inspection cycle.

The patrols are conducted by an Inspector identifying all required maintenance on a hand held computer. The maintenance items identified through this patrol are separated into five priority categories V, A, B, C and F priority. These priority categories are defined as follows:

*V Priority* – An identified facility/component that is found to have an associated voltage with it (touch/stray voltage). These found conditions are to be made safe immediately, corrected immediately and shall not be left unguarded prior to correction. Corrections made will be noted into the appropriate field of the database. If a V priority is found, please refer to Stray Voltage Inspection NM EOP 211D.

*A Priority* - An identified facility/component or tree condition that must be repaired/replaced as soon as practicable to address public safety and or system reliability. These identified conditions are imminent failure conditions or potentially hazardous conditions.

*B Priority* – An identified facility/component condition that shall be considered for repair/replacement as the circuit is scheduled for maintenance by Transmission Asset Management. These identified conditions will be corrected as preventive maintenance and or facility life extension.

*C Priority* – An identified facility/component condition that is being trended and reviewed by Transmission Asset Management annually that may require replacement through the engineering process (requires project/capital expenditures). Non-capital conditions identified under this priority will be corrected at the discretion of field operations in consultation with Transmission Asset Management.

*F Priority* – An identified forestry condition that should be scheduled as time permits, within the routine right-of-way maintenance and danger tree removal schedules.

***ALL "A PRIORITY" CONDITIONS IDENTIFIED PRIOR TO NOVEMBER 1<sup>ST</sup> MUST***



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*BE REPAIRED/CORRECTED BY NOVEMBER 30<sup>TH</sup>*

The Transmission patrol schedule/status is created and tracked by report RPT 3100 Circuit Patrol Status. The T&D Superintendent's or Transmission Line Services management are responsible to create this schedule for their respective Regions. The inspector uses a hand held computer to inspect scheduled circuits recording region, district, employee ID, circuit, pole number, GPS location, type, material make up, wood pole inspection year and treatment, specific pole information, maintenance problem codes and comments. The Inspector while patrolling shall also complete maintenance codes 532 – Tower numbers missing and 581 – stencil required, if found deficient upon inspection.

For these two codes, the Inspector will input the code into the handheld as required, as well as completing the work unit in the handheld upon field completion while at the site.

The maintenance hand held screens used to accomplish this are shown in Table I. The Maintenance Problem code listing is shown in Table II.

The hand held computer is to be used as the primary vehicle for recording maintenance problems in the field. There will be times where it is not practicable to use the hand held computer due to unfamiliarity or access to one (example: line crew finds maintenance problem and needs to document/record). The method to be used to document/record maintenance in these situations shall be the Transmission Field Survey worksheet, Exhibit I. This worksheet must be inputted into the Transmission Database through the desk top computer by inspector, clerk, or supervisor.

<b>NIAGARA MOHAWK TRANSMISSION PATROL</b>  Reg:54 CENTRAL Dis:12 CORTLAND Employee#:13430  <b>MAIN MENU</b> NMT 2.5b 02-07-2002 02:24p 1-Header 2-Inspect 3-Transmit 4-Options 5-Utility	<b>PATROLLED CIRCUIT</b> #:2 ALCAN -TAP (additional circuits)  Last Str#:101  STRUCTURE #:35-A--- LOCATION ALONG RAIL ROAD  Type:H-Frame Matl:Wood [2]	(2) Str#:35-A Wood [H-Frame]  S# HT CL YR MFG LY LT A 75 1 78 CAH 98 B B 85 1 78 CAH 98 B  ConfigTangent	(2) Str#:35-A POLE - Broken (115 KU) CODE Pri Circ Qty S# 1:510 A A POLE SCABED UP 2: 3: 4: -STRUCTURE COMMENTS- NEED TRACKED VEHICLE TO ACCESS.*****
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EXHIBIT 1

TRANSMISSION FIELD SURVEY WORKSHEET						
Patrolled Circuit/No.		Computapole ID		Pole/Tower No.	Voltage	District
Additional Circuit/No.		Computapole ID				
Region		Between _____ Rd. And _____ Rd.		Dated	Employee ID	
TYPE	<input type="checkbox"/> A) Single <input type="checkbox"/> B) H. Frame <input type="checkbox"/> C) 3 Pole <input type="checkbox"/> D) 4 Pole <input type="checkbox"/> E) 5 Pole <input type="checkbox"/> F) 6 Pole <input type="checkbox"/> G) Flex-Tower <input type="checkbox"/> H) Square-Tower <input type="checkbox"/> I) Hairpin <input type="checkbox"/> J) Other					
MATERIAL	<input type="checkbox"/> A) Wood <input type="checkbox"/> B) Steel <input type="checkbox"/> C) Lattice					
<input type="checkbox"/> No Action Required						
POLE		Priority / QTY	CONDUCTOR		Priority / QTY	MISCELLANEOUS
510 A <input type="checkbox"/> BROKEN		/	541 B <input type="checkbox"/> CONDUCTOR		/	584 B <input type="checkbox"/> INSTALL WRNG SIGN
511 B <input type="checkbox"/> VISUAL ROTTING		/	542 B <input type="checkbox"/> STATIC		/	585 B <input type="checkbox"/> REPLACE SIGNS
512 C <input type="checkbox"/> LEANING		/	543 A <input type="checkbox"/> GROUND WIRE		/	586 B <input type="checkbox"/> REMOVE STEPS
513 B <input type="checkbox"/> REPLACE SINGLE ARMS		/	544 B <input type="checkbox"/> SLEEVE/CONN		/	587 B <input type="checkbox"/> ADD DIRT & TAMP
514 B <input type="checkbox"/> REPL DOUBLE ARM		/	545 B <input type="checkbox"/> RESAG		/	OSMOSE
515 B <input type="checkbox"/> REPAIR BRACES		/	546 B <input type="checkbox"/> UNDER 25 FT.		/	901 A <input type="checkbox"/> OSMOSE-ident.PriorPole
516 B <input type="checkbox"/> REPLACE BRACES		/	LINE HARDWARE		/	902 B <input type="checkbox"/> OSMOSE-ident.RejctPole
517 B <input type="checkbox"/> REPLACE ANCHOR		/	551 B <input type="checkbox"/> INSULATORS/DAM		/	903 I <input type="checkbox"/> OSMOSE-inspExcess check (not rej)
518 B <input type="checkbox"/> INSTALL ANCHOR		/	552 B <input type="checkbox"/> INSULATOR PLUMB		/	904 I <input type="checkbox"/> OSMOSE-Climbg Insp Req. (not rej)
519 B <input type="checkbox"/> REPAIR/REPLACE GUY WIRE		/	553 B <input type="checkbox"/> HARDWARE DAM		/	STRAY VOLTAGE
521 B <input type="checkbox"/> TIGHTEN GUY WIRE		/	555 I <input type="checkbox"/> LIGHTING ARRESTOR		/	929 V <input type="checkbox"/> EQUIP-OTHER STRAY VLTG
522 B <input type="checkbox"/> REPLACE/INSTALL GUY SHIELD		/	FOUNDATION		/	930 V <input type="checkbox"/> POLE-STRAY VLTG
524 B <input type="checkbox"/> GUY NOT BONDED		/	561 B <input type="checkbox"/> STEEL BAD		/	931 V <input type="checkbox"/> TOWER-STRAY VLTG
525 B <input type="checkbox"/> LIGHTNING DAMAGE		/	562 B <input type="checkbox"/> BAD CONCRETE		/	932 V <input type="checkbox"/> GUY-STRAY VLTG
526 B <input type="checkbox"/> WOODPECKER DMG		/	563 B <input type="checkbox"/> EROSION		/	933 V <input type="checkbox"/> GROUND-STRAY VLTG
527 B <input type="checkbox"/> INSECTS		/	RIGHT OF WAY		/	934 V <input type="checkbox"/> RISER-STRAY VLTG
TOWER		/	571 F <input type="checkbox"/> EROSION		/	935 V <input type="checkbox"/> SWITCH-STRAY VLTG
531 A TOWER LEGS BROKEN		/	572 F <input type="checkbox"/> ENCROACHMENTS		/	949 V <input type="checkbox"/> EQUIP-OTHER STRAY VLTG
532 A NUMBERS MISSING		/	573 F <input type="checkbox"/> DEBRIS		/	969 V <input type="checkbox"/> EQUIP-OTHER STRAY VLTG
533 C RUSTED STEEL		/	574 F <input type="checkbox"/> DANGER TREE		/	
534 B LOOSE BOLTS/HARD		/	575 F <input type="checkbox"/> GATE BROKE		/	
535 B REPAIR ANTI-CLIMB		/	576 A <input type="checkbox"/> OIL/GAS LEAK		/	
536 F VEGETATION ON TOWER		/	MISCELLANEOUS		/	
537 B STRUCTURE DAMAGE		/	581 A <input type="checkbox"/> STENCIL STRUCT.			
538 B STRAIGHTEN TOWER		/	582 B <input type="checkbox"/> SWITCH DAMAGED			
539 B ARMS DAMAGED		/	583 B <input type="checkbox"/> DAMAGED GROUND			



## **II. EQUIPMENT TO BE INSPECTED AND MAINTENANCE CODES**

- Towers
- Poles
- Crossarms
- Insulators
- Switches
- Reclosers & Sectionalizers
- Conductor
- Grounds
- Guys
- Anchors
- Risers
- Foundations
- ROW



**MAINTENANCE PROBLEM CODES  
(TABLE II)**

Maintenance Code	Description	Default priority
510	POLE - Broken	A
511	POLE - Visual Rotting	B
512	POLE - Leaning	C
513	POLE - Replace Single Arms	B
514	POLE - Replace Double Arms	B
515	POLE - Repair Braces	B
516	POLE - Replace Braces	B
517	POLE - Replace Anchor	B
518	POLE - Install Anchor	B
519	POLE - Repair/Replace Guy Wire	B
521	POLE - Tighten Guy Wire	B
522	POLE - Replace/Install Guy Shield	B
524	POLE - Guy Not Bonded	B
525	POLE - Lightning Damage	B
526	POLE - Woodpecker Damage	B
527	POLE - Insects	B
531	TOWER - Tower Legs Broken	A
532	TOWER - Numbers Missing	A
533	TOWER - Rusted Steel	C
534	TOWER - Loose Bolts/Hard	B
535	TOWER - Repair Anti-Climb	B
536	TOWER - Vegetation on Tower	F
537	TOWER - Structure Damage	B
538	TOWER - Straighten Tower	B
539	TOWER - Arms Damaged	B
541	CONDUCTOR - Conductor	B
542	CONDUCTOR - Static	B
543	CONDUCTOR - Ground Wire	A
544	CONDUCTOR - Sleeve/Conn	B
545	CONDUCTOR - Resag	B
546	CONDUCTORS - Under 25 ft	B
551	LINE HDW - Insulators/Dam	B
552	LINE HDW - Insulator Plumb	B
553	LINE HDW - Hardware Dam	B
555	LINE HDW - Lightning Arrestor	
561	FOUNDATION - Steel Bad	B
562	FOUNDATION - Bad Concrete	B
563	FOUNDATION - Erosion	B
571	RIGHT OF WAY - Erosion	F
572	RIGHT OF WAY - Encroachments	F
573	RIGHT OF WAY - Debris	F
574	RIGHT OF WAY - Danger Tree	F
575	RIGHT OF WAY - Gate Broke	F
576	RIGHT OF WAY - Oil/Gas Leak	A
581	MISC - Stencil Structure	A
582	MISC - Switch Damaged	B



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583	MISC - Damaged Ground	A
584	MISC - Install Warning Sign	B
585	MISC - Replace Signs	B
586	MISC - Remove Seps	B
587	MISC - Add Dirt & Tamp	B
901	Osmose - Identified priority pole	A
902	Osmose - Identified reject pole	B
903	Osmose - Insp excessive check (not rej)	I
904	Osmose - Climbing Insp re'q ( not rej)	I
929	Equipment - Other Stray Voltage (use comments)	V
930	Pole - Stray Voltage	V
931	Tower - Stray Voltage	V
932	Guy - Stray Voltage	V
933	Ground - Stray Voltage	V
934	Riser - Stray Voltage	V
935	Switch Handle Mechanical Operated - Stray Voltage	V
949	Equipment - Other Stray Voltage (use comments)	V
969	Equipment - Other Stray Voltage (use comments)	V



**III. AERIAL HELICOPTER PATROL****Transmission NY & NE****Sub-transmission NY**

Aerial Helicopter Patrols shall be done on a one-year cycle providing for a visual examination of all Transmission lines. This patrol shall be accomplished by a line-qualified worker recording items such as broken or flashed insulators, leaning structures, broken hardware, tree conditions, ROW problems, and conductor clearance problems. Any item that is observed that might affect the operation, reliability, or safety of the general public must be reported and documented. The use of Exhibit I as a template along with a tape recorder during flight is highly recommended. Conditions/Maintenance problems identified are to be prioritized "A, B, C" as described in this procedure and must be inputted into the database for scheduling and tracking. Additional guidance for tree and insulator problems is shown in Table III and IIIA.

**TREE CLEARANCE****(TABLE III)****Priority A****Voltage****Vertical or Lateral Clearance**

23-46 kV

4' or less

69 kV

6' or less

115 kV

10' or less

230 kV

14' or less

345 kV

18' or less

**INSULATOR GUIDANCE TABLE****(TABLE IIIA)****Number of Good  
Vertical Insulators in String****Priority A:****Voltage**

115 KV

4 or less out of 7

230 KV

7 or less out of 14

345 KV

10 or less out of 17

**Priority B:****Voltage**

115 KV

5 or less out of 7

230 KV

9 or less out of 14

345 KV

12 or less out of 17

**Priority C:****Voltage**

115 KV

6 or more

230 KV

10 or more

345 KV

13 or more



**IV. TOWER FOOTING INSPECTION AND REPAIR**  
**Transmission NY & NE**

The tower footing inspection and repair maintenance activity is scheduled for a 20-year cycle. This activity consists of excavating the tower footing a minimum of twenty-four inches below grade, cleaning the footer, visual inspection, welding or concrete repair if required, application of a protective coating, backfill and compact soil.

**V. WOOD POLE INSPECTION AND TREATMENT**  
**Transmission NY & NE**

The wood pole inspection and treatment maintenance activity is scheduled for a 10-year cycle. This activity consists of excavating the base of a wood pole eighteen inches below grade, shaving/removal of any decayed wood, measurements of the circumference, drilling, measurements for voids, evaluate pole strength per NESC requirements, treat with preservatives, plug drilled holes, backfill and compact soil and perform an overall visual inspection of the structure.

**VI. AREIAL HELICOPTER INFRARED PATROLS**  
**Transmission NY & NE**  
**Sub-transmission NY**

The Aerial Helicopter Infrared Patrol maintenance activity is scheduled for a 3-year cycle with bulk power circuits done yearly. This activity consists of an aerial viewing of transmission line components through a thermal imaging camera. Transmission components found with a temperature between 1 and 20 degrees Centigrade above the "reference temperature"\* should be monitored for change and addressed accordingly. Components found to be greater than 20 degrees C above the "reference temperature" are to be addressed within the next year. Transmission components found to be greater than 40 degrees Centigrade above the reference temperature are to be addressed as soon as possible as system operating conditions allow. In order to verify the location of the component identified by IR with a temperature anomaly, it is suggested that repair crews utilize a live line micro ohmmeter, such as the SensorLink Corp. Ohmstik, as a confirmation tool.

\*Reference Temperature – Reference Temperature refers to the normal real time operating temperature of the conductor or apparatus, which includes all influences that create this temperature such as load, weather and condition. The thermovision camera must have the capability to accurately detect the temperature differential, in degrees C, between the "hot spot" temperature and the nearest point which reflects the expected reference temperature, so as to identify and prioritize the defects found.

**VII. COMPREHENSIVE HELICOPTER PATROL**  
**Transmission NY & NE**

The Comprehensive Helicopter Patrol maintenance activity is a comprehensive methodical examination of all components comprising the transmission system by helicopter. The patrol is documented on a structure by structure component based in a data format with pictures. Components that are identified as critical carry the same definitions as "A priority" work. This type of maintenance activity is conducted on an as needed basis to identify specific problems, reliability issues, or to document condition for planned rebuilds or upgrades.



**VIII. TOWER PAINTING**  
**Transmission NY & NE**

The Tower painting maintenance activity consists of applying a protective coating system to aged steel transmission structures. This activity is usually scheduled on a twenty-year basis to extend the service life of the steel or meet specific aerial marking requirements per FAA regulations.

**IX. MAINTENANCE DATA BASE**

The Maintenance data base consists of information (data) down loaded from the hand held and information (data) entered from the desktop computer. The field hand held can be down loaded to any National Grid desk top computer that is connected to the network, and is logged on as a valid user of the T&D Maintenance program. The National Grid desktop computer is also used to generate various reports and work tickets depending on the users needs. These reports are utilized to schedule and accomplish transmission maintenance work.

**X. MAINTENANCE**

The maintenance activities are scheduled by priority categories with all "A Priority" conditions identified prior to November 1 repaired/corrected by November 30th. The "B" priority conditions are scheduled based on the reliability of the circuit, load served, Line Importance Factor, and age of facilities. The "B Priority" maintenance is to be performed on circuits selected by Transmission Asset Management and identified in the "Energy Delivery Work Plan". All "B Priority" maintenance as outlined in the "Energy Delivery Work Plan" must be completed by November 30 of that year. The "C Priority" maintenance work will be completed as planned and directed by Transmission Asset Management (Capital expenditures) after reviewing annually for trends that would require expenditures. Any "C Priority" work that is not capital expense will be completed at the discretion of the T&D operating department in consultation with Transmission Asset Management.

*ALL MAINTENANCE WORK IS TO BE COMPLETED PER NATIONAL GRID TRANSMISSION STANDARDS.*

**XI. WORK MANAGEMENT**

The time recording of both patrol and maintenance activities is accomplished in the Severn Trent Operating Resource Management System (STORMS).

STORMS requires that the Distribution Inspector/Operations Personnel fill out a daily time sheet. The Transmission Inspector would record their time actually performing the foot patrol inspection of the Transmission system under the TO1160 Activity along with the appropriate work order or a work request if the patrol has been scheduled. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Transmission Planning/Area Resource Coordinator (ARC).

Operations Personnel performing scheduled maintenance on the Transmission System should record their time actually performing maintenance activities under the appropriate work request number set up by their Transmission Planning/ARC in their respective area. Operations Personnel performing maintenance activities that have been not been scheduled should charge the TM1160 activity along with appropriate work order number. STORMS work request numbers are created



when the work has been scheduled by Transmission Planning/ARC. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Transmission Planning/ARC.

## **XII. COMPLETION**

The replacement/repair of an identified maintenance problem code must be completed in the database. The completion of the maintenance problem codes can be done through the edit screen found on the desktop computer. Field personnel that perform the work are required to complete the work order form providing the date completed, and employee ID number. The work order form is returned to the T&D Supervisor or Transmission Line Services Supervisor who will close out the completed maintenance problem codes in the database at their desk top computer or designate the inspector or clerk to perform the close out. Additional maintenance problems that maybe discovered and completed by personnel must be noted on the work order ticket so they can be recorded as work completed on that specific facility.

*ALL MAINTENANCE WORK PERFORMED THAT WAS IDENTIFIED ON THE WORK ORDER OR DISCOVERED DURING THE REPLACEMENT/REPAIR/CORRECTION OF THE ORIGINAL MAINTENANCE PROBLEM MUST BE LISTED ON THE DATABASE AND THEN CLOSED OUT WHEN COMPLETE.*

## **XIII. APPLICABILITY:**

This procedure applies to all personnel involved with or responsible for the inspection and repair of Transmission facilities.

## **XIV. DEFINITIONS:**

Ground Based Patrol - A walking/vehicle assessment of National Grid transmission facilities for the purpose of determining the condition of the facility and its associated components.

Hand Held Computer - An electronic Data recording device that is used in the field to create a record of conditions found.

Desktop Computer – A personal computer that is connected to the National Grid network that is used to down load the Hand Held device and retrieve the information in the form of reports.

Distribution or Transmission Inspector – A line-qualified worker that can identify deficiencies or non-standard construction conditions on National Grid facilities.

Valid user – An individual that has been authorized to use the Transmission and Distribution maintenance program by the program administrator.

Oracle Server – Electronic data storage device that is connected to the network and stores all information collected under the maintenance program.

Aerial Infrared – Helicopter based thermographic imaging of connections and equipment.

Tower Footing – Embedded support structure that supports a Transmission tower.

Aerial Patrols – Helicopter based visual examination of Transmission facilities and equipment.



Comprehensive Helicopter Patrol – A comprehensive methodical examination of all components comprising the transmission system by helicopter.

Stray Voltage - The term “stray voltage” means voltage conditions on electric facilities that should not ordinarily exist.

## **XV. RESPONSIBILITIES**

### Delivery Engineering Services

1. Update program as necessary.
2. Provide field support and training as requested.
3. Report System Maintenance progress monthly.

### Field Operations/Transmission Line Services

1. Ensure the Maintenance Program as outlined in this NG-USA EOP T007 is implemented properly and timely.
2. Select circuits to be patrolled for a running five-year cycle and ensure that the circuits scheduled for patrol are completed each year.
3. Provide a qualified line personnel as the inspector, to provide consistent and accurate identified maintenance concerns/problems.

### CM&S Management

1. At the request of field operations obtain, schedule and manage contractors to perform inspections and perform required maintenance.

### Inspector

1. Demonstrate the ability to identify Transmission maintenance concerns and the aptitude to become proficient in the use of a hand held computer and desktop computer.
2. Demonstrate the understanding and requirements of this NG-USA EOP T007.
3. Possess the ability to do walking patrols, collect information on a hand held, down load to a desk top computer, edit data, provide requested information/reports/work tickets to supervision, and track/close out work completed in the database system.



**SUBJECT:** Transmission Line Patrol – 23kV-345kV

**Doc. No.** NG-USA EOP T007

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**XVI. TRAINING**

1. Delivery Engineering Services with assistance from the database vendor will provide training on the utilization of handheld computers and the selected database.
2. Delivery Engineering Services along with the training department will provide training for the identification of V, A, B, C, and F maintenance items to the qualified worker who will be performing the inspections.




**NG-USA EOP T007**

**“Transmission Line Patrol – 23kV-345Kv”**

**Revision 02/01/05**

Supersedes EOP 211 dated 02/01/02.



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	<b>Date:</b> 02/01/05
<b>ELECTRIC OPERATING PROCEDURES</b>	
<b>SUBJECT:</b> Distribution Line Patrol and Maintenance	<b>SECTION:</b> Transmission & Distribution

**REFERENCE:**

Applicable National Grid Safety Rules and Procedures  
NY PSC Order 04-M-0159  
Stray Voltage Inspection NM EOP 211D  
Underground Inspection NM EOP 211B

**GENERAL INFORMATION:**

The purpose of this procedure is to outline the requirements for the patrol and maintenance activities associated with NMPC Distribution circuits. The Distribution Maintenance Program was designed to provide for a patrol and subsequent maintenance of each distribution circuit once every five years. The patrols are conducted by a Distribution Inspector identifying all required maintenance on a hand held computer. The maintenance items identified through this patrol are separated into five priority categories V, A, B, C and F priority. These priority categories are defined as follows:

*V Priority* – An identified facility/component that is found to have an associated voltage with it (touch/stray voltage). These found conditions are to be made safe immediately, corrected immediately and shall not be left unguarded prior to correction. Corrections made will be noted into the appropriate field of the database. If a V priority is found, please refer to Stray Voltage Inspection NM EOP 211D.

*A Priority* - An identified facility/component or tree condition that must be repaired/replaced as soon as practicable to address public safety and or system reliability. These identified conditions are imminent failure conditions or potentially hazardous conditions.

*B Priority* – An identified facility/component condition that shall be considered for repair/replacement as the feeder is scheduled for maintenance by Distribution Planning and Engineering. These identified conditions will be corrected as preventive maintenance and or facility life extension.

*C Priority* – An identified facility/component condition that is being trended and reviewed by Distribution Planning and Engineering annually that may require replacement through the engineering process (Requires project/Capital expenditures). Non-capital conditions identified under this priority will be corrected at the discretion of field operations.

*F Priority* – An identified forestry condition that should be scheduled as time permits, within the routine right-of-way maintenance and danger tree removal schedules.

***ALL "A PRIORITY" CONDITIONS IDENTIFIED PRIOR TO NOVEMBER 1<sup>ST</sup> MUST BE REPAIRED/CORRECTED BY NOVEMBER 30TH.***

<b>Supersedes Document Dated</b> 02/01/02	<b>Authorized By:</b> Director – Delivery Engineering Services	<b>Approved By:</b> VP-Engineering Services
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**PROGRAM ADMINISTRATOR:**

Delivery Engineering Services

**SCOPE:**

Distribution Maintenance

- I. Patrol (Hand Held Computer)
- II. Equipment To Be Inspected and Maintenance Codes
- III. Maintenance Data Base
- IV. Maintenance
- V. Work Management
- VI. Completion
- VII. Applicability
- VIII. Definitions
- IX. Responsibilities
- X. Training

**I. PATROLS (HAND HELD COMPUTER)**

Distribution Patrols are conducted by a line-qualified worker that can identify deficiencies or non-standard construction conditions on NM facilities. The patrols are scheduled in such a manner that each distribution feeder is examined in the field once every **five** years. The Distribution patrol schedule/status is found in report RPT1310 Feeder Patrol Status. The T&D Superintendents are responsible to create this schedule for their respective Regions. Any new facilities added to the system will be incorporated through our GIS system and added to the appropriate inspection cycle. The Distribution Inspector uses a hand held computer to record region, district, employee ID, feeder number, pole number, tax zone, line number, GPS location, attachments, comments and maintenance problem codes. The Distribution Inspector while patrolling shall also complete maintenance code 118, stencil pole required, if found deficient upon inspection. The Distribution Inspector will input the code into the handheld as required, as well as completing the work unit in the hand held upon field completion while at the site. If the Distribution Inspector finds unmapped facilities from the information supplied from GIS, refer to NG-USA EOP G011, Preparation and Distribution of Electric Facilities Records, for required procedure for corrections.

The maintenance hand held screens are shown in Table I. The Maintenance Problem code listing is shown in Table II.



## HAND HELD FIELD COMPUTER SCREENS (TABLE I)

```
NIAGARA MOHAWK
Distribution Patrol

Reg:48 Frontier
Dis:03 Niagara
Employee#:12345

MAIN MENU
ND 2.5a
01-08-2002 01:56p
1-Header
2-Pole#
3-Transmit
4-Options
5-Utility

<F10> = Quit
<F9> = Quit+Exit
```

```
Fdr#:2261
:Kenmore/Englewo
Tax:5001
Map #:12345
last:[1421] 3
Line#:01 [1]
Pole#:1

Loc:BACK LOT. LARGE
DOG!*****
--
CATU TEL STRLT
1 1 No
```

```
(2261) PH:1
Insulator(s) - I-7
assoc with switch/fus
-CODE-
15134 B 1 Yr 1
:
2:
:
3:
:
4:
:
COMMENTS
```

### II. EQUIPMENT TO BE INSPECTED AND MAINTENANCE CODES

- Poles
- Crossarms
- Transformers
- Anchors
- Guys
- Street Lights On Wood Poles
- Conductors – Primary, Secondary, Services
- Insulators
- Reclosers, Sectionalizers, Regulators
- Switches
- Grounds
- Risers



### MAINTENANCE PROBLEM CODES (TABLE II)

Maintenance Code	Description	Default Priority
099	Street Light - Not Bonded	A
100	Street Light - Not Bonded to Standards	B
101	Street Light - Glass broken/damaged	C
102	Street Light - Arm Broken/damaged	C
103	Street Light - Damaged head	C
104	Street Light - Light on day	C
105	Streetlight - conductor repair req'd	C
110	Pole - Broken	A
111	Pole - Visual rotting ground line	B
112	Pole - Excess checking	B
113	Pole - Copper Naphthenate Treated	B
115	Pole - Riser guard required	B
116	Pole - Visual rotting pole top	B
117	Pole - Leaning pole	C
118	Pole - Stencil required/correction req.	A
120	Crossarm - Damage arm	B
121	Crossarm - Loose/defective pins	B
122	Crossarm - Wooden pins 13.2 kv	B
123	Crossarm - Loose brace, hardware	B
124	Crossarm - Damage double crossarm	B
125	Crossarm - Damage alley arm	B
130	Insulator - Broken/Cracked/Flashed	B
131	Insulator - Floating	A
133	Insulator(s) - non standard for voltage	B
134	Insulator(s) - I-7 assoc with switch/fus	B
140	Primary - Insuff. grnd clearance	A
141	Primary - Dmgd. cond/brkn strands	A
142	Primary - In trees	F
143	Primary - Space cable damaged spacer	B
145	Primary - stirrups	C
146	Primary - Improper Sag	B
147	Primary - Spacer cable bracket defective	B
148	Primary - Spacer cable bracket not bonded	B
150	Transformer - Oil weeping	A
151	Transformer - Bushings brkn/cracked	B
152	Transformer - Missing ground wire	A
153	Transformer - Lighting arrester	B
156	Transformer - NonStd Installation of Gap	B
160	Capacitor - Oil weeping	A
161	Capacitor - Bulging	A
162	Capacitor - Bushings brkn/cracked	B
163	Capacitor - Missing ground wire	A
164	Capacitor - Blown fuse	B
170	Regulator - Oil weeping	A
171	Regulator - Bushings brkn/cracked	B



**Subject:** Distribution Line Patrol & Maintenance

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172	Regulator - Missing ground wire	A
174	Regulator Control Cab. height/ground	B
180	Sectionalizer - oil weeping	A
181	Sectionalizer - Bushings brkn or crack	B
182	Sectionalizer - Missing ground wire	A
183	Sectionalizer - Control Cab Height/Grnd	B
190	Recloser - Oil weeping	A
191	Recloser - Bushings brkn or crack	B
192	Recloser - Missing ground wire	A
193	Recloser - Control Cab Height/Ground	B
200	Cutout - Defective cutout	A
201	Arrestor - Blown arrestors	B
202	ANIMAL GUARDS Req'd	B
203	Switch - Gang Operated defective	B
204	Switch - Single phase defective	B
210	Ground - Ground wire broken/loose	A
211	Ground - Hazard condition	A
212	Ground - Guard Req'd	B
213	Ground - non standard	B
220	Guy - Guy Wire marker	B
221	Guy - Install/replace Strain Insulator	A
222	Guy - Excessive slack in guy	B
223	Guy - Broken guy wire	B
225	Guy - non standard bonding or insulation	B
226	Anchor req'd - joint owned	A
227	Anchor req'd - sole NMPC	A
231	Secondary - In trees	F
232	Secondary - Improper sag	B
234	Secondary - Floating	B
240	Service - Ins. loose from house	B
241	Service - In trees	F
243	Service - non std or unsecured NM action	B
250	ROW - Brush/Tree	F
801	Osmose - Identified priority pole	A
802	Osmose - Identified reject pole	B
803	Osmose - Excessive checking (NR) offroad	I
804	Osmose - Climbing Insp req'd (not rejec)	C
910	Pole - Stray voltage	V
911	Regulator - Stray voltage	V
912	Sectionalizer - Stray voltage	V
913	Recloser - Stray voltage	V
914	Ground - Stray voltage	V
915	Guy - Stray Voltage	V
916	Riser - Stray voltage	V
917	Switch handle Mechanical Operated - Stray Voltage	V
929	Equipment - Other (use comments)	V



### III. MAINTENANCE DATA BASE

The Maintenance data base consists of information (data) down loaded from the hand held, used in the field and information (data) gathered from other sources entered from the desktop computer. The field hand held can be down loaded to any NM desk top computer that is connected to the network and is logged on as a valid user of the T&D Maintenance program. The NM desktop computer is also used to generate various reports and work tickets depending on the users need. These reports are utilized to schedule and accomplish distribution maintenance work.

Reports	
	
RPT1010 Line Patrol	
RPT1020 Maintenance Code Report	
RPT1030 Maintenance Code Summary by Feeder	
RPT1040 Budget Summary	
RPT1050 Work Request Form	
RPT1060 Feeder / Work Unit Crosstab	
RPT1065 CATV / Tel Crosstab	
RPT1070 Pole Inspection Count	
RPT1090 Feeder Miles Maintained	
RPT1100 Feeder Inspections	
Summary Reports	
<input type="checkbox"/> Return to Main Menu	

Summary Reports	
	
RPT1210 Inspection Summary by Region	
RPT1220 Problem Code Report by Region	
RPT1230 Problem Pole Report by Region	
RPT1240 JT Use Report by Region	
RPT1250 JT Use Report by Tax District	
RPT1260 Estimated Maintenance Costs	
RPT1310 Feeder Patrol Status	
<input type="checkbox"/> Return to Reports Menu	

### IV. MAINTENANCE

The maintenance activities are scheduled by priority categories with all "A Priority" conditions identified prior to November 1 repaired/corrected by November 30th. The "B" priority conditions are scheduled based on the reliability of the circuit, load served, and age of facilities. The "B Priority" maintenance is to be performed on circuits selected by Distribution Planning and Engineering, and identified in the "Energy Delivery Work Plan". All "B Priority" maintenance as outlined in the "Energy Delivery Work Plan" must be completed by November 30 of that year. The "C Priority" maintenance work will be completed as planned and directed by the Distribution Planning and Engineering department (Capital expenditures) after reviewing annually for trends that would require expenditures. Any "C" Priority work that is not capital expense will be completed at the discretion of the T&D operating department.

*ALL MAINTENANCE WORK IS TO BE COMPLETED PER NM DISTRIBUTION STANDARDS.*



**V. WORK MANAGEMENT**

The time recording of both patrol and maintenance activities is accomplished in the Severn Trent Operating Resource Management System (STORMS).

STORMS requires that the Distribution Inspector/Operations Personnel fill out a daily time sheet. The Distribution Inspector would record their time actually performing the foot patrol inspection of the Distribution system under the DO1100 Activity along with the appropriate work order or a work request if the patrol has been scheduled. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/Area Resource Coordinator (ARC).

Operations Personnel performing scheduled maintenance on the Distribution System should record their time actually performing maintenance activities under the appropriate work request number set up by their Distribution Planning/ARC in their respective area. Operations Personnel performing maintenance activities that have been not been scheduled should charge the DM1100 activity along with appropriate work order number. STORMS work request numbers are created when the work has been scheduled by Distribution Planning/ARC. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/ARC.

**VI. COMPLETION**

The replacement/repair of an identified maintenance problem code must be completed in the database. The completion of the maintenance problem codes can be done through the edit screen found on the desktop computer. Field personnel that perform the work are required to complete the work order form providing the date completed, and employee ID number. The work order form is returned to the T&D Supervisor who will close out the completed maintenance problem codes in the database at their desk top computer or designate the inspector or clerk to perform the close out. Additional maintenance problems that maybe discovered and completed by personnel must be noted on the work order ticket so they can be recorded as work completed on that specific facility.

ALL MAINTENANCE WORK PERFORMED THAT WAS IDENTIFIED ON THE WORK ORDER OR DISCOVERED DURING THE REPAIR/CORRECTION OF THE ORIGINAL MAINTENANCE PROBLEM MUST BE LISTED ON THE DATABASE AND THEN CLOSED OUT WHEN COMPLETE.

**VII. APPLICABILITY**

This procedure applies to all personnel involved with or responsible for the inspection and repair of OH Distribution facilities. Additionally all URD's and UCD's will be scheduled for inspection on the circuit schedule for this OH Distribution Patrol and Maintenance EOP. Refer to Underground Inspection and Maintenance NM EOP 211B for further information on the underground program.



## **VIII. DEFINITIONS**

**Patrol** - A walking/vehicle assessment of NM distribution facilities for the purpose of determining the condition of the facility and it's associated components.

**Hand Held Computer** - An electronic Data recording device that is used in the field to create a record of conditions found.

**Desktop Computer** - A personal computer that is connected to the NM network that is used to download the Hand Held device and retrieve the information in the form of reports.

**Distribution Inspector** - A line-qualified worker that can identify deficiencies or non-standard construction conditions on NM facilities.

**Valid user** - An individual that has been authorized to use the Transmission and Distribution maintenance program by the program administrator.

**Oracle Server** - Electronic data storage device that is connected to the network that stores all information collected under the maintenance program.

**Stray Voltage** - The term "stray voltage" means voltage conditions on electric facilities that should not ordinarily exist.

## **IX. RESPONSIBILITIES:**

### **Delivery Engineering Services**

1. Update program as necessary.
2. Provide field support and training as requested.
3. Report System Maintenance progress monthly by Region.

### **Field Operations**

1. Ensure the Maintenance Program as outlined in this EOP 211A is implemented properly and timely.
2. Select circuits to be patrolled for a running five-year cycle and ensure that the circuits scheduled for patrol are completed each year.
3. Provide a qualified line personnel as the inspector, to provide consistent and accurate identified maintenance concerns/problems.

### **CM&S Management**

1. At the request of field operations obtain, schedule and manage contractors to perform inspections and perform required maintenance

### **Distribution Inspector**

1. Demonstrate the ability to identify maintenance concerns and the aptitude to become proficient in the use of a hand held computer and desktop computer.
2. Demonstrate the understanding and requirements of this EOP 211A.



3. Possess the ability to do walking patrols, collect information on a hand held, download to a desk top computer, edit data, provide requested information/reports/work tickets to supervision, and track/close out work completed in the database system.

**X. TRAINING:**

1. Delivery Engineering Services with assistance from the database vendor will provide training on the utilization of handheld computers and the selected database.
2. Delivery Engineering Services along with the training department will provide training for the identification of V, A, B, C, and F maintenance items to the qualified employee who will be performing the inspections.




**EOP 211A**

**“Distribution Line Patrol and Maintenance”**

**Revision 02/01/05**

Revisions throughout this procedure.



<b>Niagara Mohawk</b> A National Grid Company  <b>ELECTRIC OPERATING PROCEDURES</b>	<b>Doc No.:</b> EOP 211C
	<b>Page:</b> Page 1 of 5
	<b>Date:</b> 02/01/05
<b>SUBJECT:</b> Street Light Standard Inspection Program	<b>SECTION:</b> General

**REFERENCE:**

Applicable National Grid Safety Rules and Procedures  
NY PSC Order 04-M-0159  
Stray Voltage Inspection NM EOP 211D

**GENERAL INFORMATION:**

The purpose of this procedure is to outline the requirements for the inspection cycle for Street Light Standard installations owned by Niagara Mohawk as required by the New York Public Service Commission's "Electric Safety Standards" issued on January 5, 2005. This procedure specifies the inspection interval and requirements.

The inspection shall include identifying and reporting the physical condition of street lighting equipment on street lighting standards. Street lights attached to wood poles are inspected as part of the Overhead Distribution Inspection Patrol covered by EOP 211A.

All street lighting equipment will be inspected for physical damage, potentially hazardous conditions or obvious deterioration.

Inspections will be recorded on a hand held computer. The maintenance items identified during this inspection will be separated into four priority categories V, A, B, and C priority. These priority categories are defined as follows:

*V Priority* – An identified facility/component that is found to have an associated voltage with it (touch/stray voltage). These found conditions are to be made safe immediately, corrected immediately and shall not be left unguarded prior to correction. Corrections made will be noted into the appropriate field of the database. If a V priority is found, please refer to Stray Voltage Inspection NM EOP 211D.

*A Priority* - An identified facility/component condition that must be repaired/replaced as soon as practicable to address public safety and or system reliability. These identified conditions are imminent failure conditions or potentially hazardous conditions.

*B Priority* – An identified facility/component condition that shall be considered for repair/replacement as the street light circuit is determined for inclusion in the work plan for maintenance by Distribution Planning and Engineering. These identified conditions will be corrected as preventive maintenance and or facility life extension.

*C Priority* – An identified facility/component condition that is being trended and reviewed by Distribution Planning and Engineering and Street Light Asset annually that may require replacement through the engineering process (Requires project/Capital expenditures). Non-capital conditions identified under this priority will be corrected at the discretion of field operations.

Supersedes Document Dated: New Document	Authorized By: Director-Delivery Engrg. Services	Approved By: VP - Engineering Services
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Equipment will be inspected on a five year cycle such that twenty percent of the inspections will be scheduled on an established annual basis.

**PROGRAM ADMINISTRATOR:**

Delivery Engineering Services

**SCOPE:**

- I. Patrols
- II. Equipment to be Inspected and Maintenance Codes
- III. Maintenance Data Base/Reports
- IV. Maintenance
- V. Work Management
- VI. Completion
- VII. Applicability
- VIII. Definitions
- IX. Responsibilities
- X. Training

**I. PATROLS:**

Street Lighting inspections will be performed as patrols and are conducted by a street light qualified worker. The patrols are scheduled in such a manner that street lighting facilities are inspected once every five years. Street Light Asset Management is responsible for creating this schedule for their respective areas. The Distribution Inspector uses a hand held computer to record employee ID, region, district, street lighting installation standard number, GPS location, Priority V, A, B, and C maintenance items, and comments. The listing of these maintenance items are shown in Table I. Any new facilities added to the system will be incorporated through our Street Light Inventory Data (OLDS) and added to the appropriate inspection cycle. The street light standards inspections scheduled for the year shall be completed by November 30<sup>th</sup>. The inspector shall place the street light standard number on the facility if not found numbered during the patrol.

**II. EQUIPMENT TO BE INSPECTED AND MAINTENANCE CODES:**

- Luminaires
- Arms
- Standards
- Foundations
- Conductor



**TABLE I**

**PRIORITY A, B and C MAINTENANCE ITEMS FOR OUTDOOR LIGHTING**

<b>Description</b>	<b>Priority Code</b>
<b>UNDERGROUND SUPPLIED INSTALLATIONS</b>	
Luminaire – Light "ON" day	B
Luminaire – Glass broken/Damaged	B
Luminaire – Missing - see note below	I
Luminaire – Damaged head	C
Luminaire – Wattage Label missing or faded	C
Luminaire – Wires exposed	A
Luminaire – Needs Replacement	B
Luminaire – Failed Lamp	B
Luminaire – Failed Starter	B
Luminaire – Failed Fuse	B
Luminaire – Bad Connections	B
Luminaire – No Power	B
Arm – Physical Damage / Significant rust	B
Standard – Physical / Structural Damage / Leaning / Significant rust	B
Standard – Maintenance Painting	C
Standard – Handhole Access Cover missing / or exposed wiring	A
Standard – Exposed wiring or wiring with frayed insulation or bare spots.	A
Standard – Traffic bollards requiring repair	C
Standard – Temporary Overhead wiring	B
Standard – Not grounded	A
Standard – Not grounded per standard	B
Standard – Down/missing – see note below	I
Foundation – Physical Damage or Leaning	B
Foundation – Anchor Bolts damaged	B

**Note:** If the standard is missing or missing a street light head, the item shall be reviewed with records, if found to be a required and active asset it shall be changed to an A priority

**III. MAINTENANCE DATA BASE/REPORTS**

The maintenance data base consists of records downloaded from the hand held computers and information entered from the desktop computers. The records can be downloaded to the database through any desktop computer that is connected to the network and is logged on as a valid user of the Street Light Standard Inspection program. The desktop computer is also used to generate various reports and work tickets, depending on the user's need. These reports/work tickets are utilized to schedule and accomplish distribution maintenance work.

**IV. MAINTENANCE**

The maintenance activities are scheduled by priority categories with all "A Priority" conditions identified prior to November 1 repaired/corrected by November 30th. The "B" priority conditions are scheduled based on the reliability of the circuit, and age of facilities. The "B Priority" maintenance is to be performed as selected by Distribution Planning and Engineering and identified in the "Energy Delivery Work Plan". All "B Priority" maintenance as outlined in the "Energy Delivery Work Plan" must be completed by



November 30 of that year. The "C Priority" maintenance work will be completed as planned and directed by the Distribution Planning and Engineering department and Street Light Asset Management (Capital expenditures) after reviewing annually for trends that would require expenditures. Any "C Priority" work that is not capital expense will be completed at the discretion of the T&D operating department.

## **V. WORK MANAGEMENT**

The time recording of both patrol and maintenance activities is accomplished in the Severn Trent Operating Resource Management System (STORMS).

STORMS requires that the Distribution Inspector/Operations Personnel fill out a daily time sheet. The Distribution Inspector would record their time actually performing the foot patrol inspection of the Distribution system under the DO4025 Activity along with the appropriate work order or a work request if the patrol has been scheduled. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/Area Resource Coordinator (ARC).

Operations Personnel performing scheduled maintenance on the Distribution System should record their time actually performing maintenance activities under the appropriate work request number set up by their Distribution Planning/ARC in their respective area. Operations Personnel performing maintenance activities that have been not been scheduled should charge the DM4025 activity along with appropriate work order number. STORMS work request numbers are created when the work has been scheduled by Distribution Planning/ARC. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/ARC.

## **VI. COMPLETION**

The repair/correction of an identified maintenance item must be reported in the database. This reporting can be done through the edit screen found on the desktop computer. Field personnel that perform the repair/correction are required to complete the work order form providing the date completed, and employee ID number. The work order form is returned to the T&D Supervisor who will report the completed maintenance items in the database at their desktop computer, or designate the distribution inspector or a clerk to perform the reporting. Additional maintenance items, not in the database, that may be discovered and completed by personnel must be noted on the work order ticket so they can be recorded as work completed on that specific facility.

*ALL MAINTENANCE WORK PERFORMED THAT WAS IDENTIFIED ON THE WORK ORDER OR DISCOVERED DURING THE REPAIR/CORRECTION OF THE ORIGINAL MAINTENANCE ITEM MUST BE LISTED IN THE DATABASE AND THEN REPORTED WHEN COMPLETE.*

## **VII. APPLICABILITY**

This procedure applies to all personnel involved with or responsible for the inspection and maintenance of street lighting standards and associated facilities owned by Niagara Mohawk.

## **VIII. DEFINITIONS**

Patrol – A walking/vehicle assessment of distribution facilities for the purpose of determining the condition of the facility and it's associated components.

Hand Held Computer – A portable, self-contained electronic data recording device used to create a record of conditions found in the field.



**Desktop Computer** – A personal computer, stationary or portable, connected to the network, and used to download the hand held device and retrieve the information in the form of reports.

**Distribution Inspector** – A street light qualified employee who can identify deficiencies, or non-standard construction conditions, on the Company's distribution facilities.

**Valid User** – An individual who has been authorized to use the Street Lighting Maintenance Program by the Program Administrator.

**Oracle Server** – An electronic data storage device running the Oracle software, connected to the network that stores all information collected under the maintenance program.

**Stray Voltage** - The term "stray voltage" means voltage conditions on electric facilities that should not ordinarily exist.

## **IX. RESPONSIBILITIES**

### **Delivery Engineering Services**

1. Update program as necessary
2. Provide field support and training as requested.
3. Report System Maintenance progress monthly by Region.

### **Field Operations**

1. Ensure that the Street Lighting Inspection Program, as outlined in this Niagara Mohawk EOP, is implemented properly and timely.
2. Ensure that the areas scheduled for patrol are completed each year.
3. Provide qualified personnel as the distribution inspectors, to provide consistent and accurate data or to contact CM&S for contracting.

### **Distribution Inspector**

1. Demonstrate the ability to identify maintenance items and the aptitude to become proficient in the use of a hand held computer and desktop computer.
2. Demonstrate the understanding and requirements of this NM EOP.
3. Possess the ability to do patrols, collect information on a hand held, down load to a desktop computer, edit data, provide requested information/reports/work tickets to supervision, and track/close out work completed in the database.

### **CM&S**

1. At the request of Field operations obtain, schedule and manage contractors to perform inspections and perform required maintenance.

### **Street Light Asset Management**

1. To develop a five-year inspection schedule of all facilities covered by this EOP.

## **VII. TRAINING**

1. Delivery Engineering Services with assistance from the database vendor will provide training on the utilization of handheld computers and the selected database.
2. Delivery Engineering Services along with the training department will provide training for the identification of V, A, B, and C maintenance items to the qualified worker who will be performing the inspections.



**EOP 211 C**

**“Street Light Standard Inspection Program”**

**02/01/05**

This is a new procedure.



<b>Niagara Mohawk</b> A National Grid Company  <b>ELECTRIC OPERATING PROCEDURES</b>	<b>Doc No.:</b> EOP 211B
	<b>Page:</b> Page 1 of 6
	<b>Date:</b> 02/01/05
<b>SUBJECT:</b> Underground Inspection and Maintenance	<b>SECTION:</b> General

**REFERENCE:**

NY PSC Order 04-M-0159  
Applicable National Grid Safety Rules and Procedures  
Distribution Line Patrol and Maintenance EOP 211a  
Stray Voltage Inspection NM EOP 211D

**GENERAL INFORMATION:**

The purpose of this procedure is to outline the requirements for the patrol and maintenance activities associated with Niagara Mohawk's underground transmission and distribution facilities as ordered by the New York Public Service Commission on January 5, 2005.

This program is designed for patrol and designated maintenance of underground facilities on a five year schedule. The Inspector will record all required maintenance on the approved Niagara Mohawk database.

The underground distribution facility maintenance items identified through this patrol are separated into four priority categories V, A, B, and C priority. These priority categories are defined as follows:

*V Priority* – An identified facility/component that is found to have an associated voltage with it (touch/stray voltage). These found conditions are to be made safe immediately, corrected immediately and shall not be left unguarded prior to correction. Corrections made will be noted into the appropriate field of the database. If a V priority is found, please refer to Stray Voltage Inspection NM EOP 211D.

*A Priority* - An identified facility/component or tree condition that must be repaired/replaced as soon as practicable to address public safety and or system reliability. These identified conditions are imminent failure conditions or potentially hazardous conditions.

*B Priority* – An identified facility/component condition that shall be considered for repair/replacement as the feeder is scheduled for maintenance by Distribution Planning and Engineering. These identified conditions will be corrected as preventive maintenance and or facility life extension.

*C Priority* – An identified facility/component condition that is being trended and reviewed by Distribution Planning and Engineering annually that may require replacement through the engineering process (Requires project/Capital expenditures). Non-capital conditions identified under this priority will be corrected at the discretion of field operations.

***ALL "A PRIORITY" CONDITIONS IDENTIFIED PRIOR TO NOVEMEBR 1<sup>ST</sup> MUST BE REPAIRED/CORRECTED BY NOVEMBER 30TH.***

Supersedes Document Dated: New Document	Authorized By: Director-Delivery Engrg. Services	Approved By: VP - Engineering Services
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**PROGRAM ADMINISTRATOR:**

Delivery Engineering Services

**SCOPE:**

Distribution Maintenance

- I. Patrol
- II. Equipment to be Inspected and Maintenance Codes
- III. Maintenance database
- IV. Maintenance
- V. Work management
- VI. Completion
- VII. Applicability
- VIII. Definitions
- IX. Responsibilities
- X. Training

**I. PATROLS**

Inspection of underground equipment will be scheduled in such a manner that each Underground Facility will be examined once every five years. These patrols shall be completed by November 30<sup>th</sup> of the schedule year.

At least one-fifth of all underground utility components should be inspected each year. URD and UCD facilities shall be inspected on the existing overhead distribution circuit schedule. Additionally all riser poles are inspected in accordance with the Transmission and Distribution Overhead Inspection Programs, NG-USA EOP T007 and NM EOP 211A. Customer owned manholes and vaults that enclose Niagara Mohawk equipment shall require the inspection of these Niagara Mohawk facilities.

The T&D Superintendent's are responsible to create the patrol schedule for their respective Regions for the remainder of underground facilities. The Distribution inspector uses a hand held computer to record region, district, employee ID, feeder number, structure ID number, GPS location, tax zone, line number, attachments, comments and maintenance problem codes. The Inspector while patrolling shall also complete the following maintenance codes if found deficient upon inspection: 617 – manhole missing nomenclature, 639 - network transformer- missing nomenclature, 660 – switchgear missing nomenclature, 681 – transformer missing nomenclature, 707 – vaults improper nomenclature. The Inspector will input the code into the handheld as required, as well as completing the work unit in the handheld upon field completion while at the site. If the Distribution Inspector finds unmapped facilities from the information supplied from GIS, refer to NG-USA EOP G011, Preparation and Distribution of Electric Facilities Records, for required procedure for corrections.

**II. EQUIPMENT TO BE INSPECTED AND MAINTENANCE CODES**

This EOP requires the visual inspection of the following facilities which require opening, and may require pumping to assure a proper inspection:

- Manholes
- Vaults
- Handholes – non-fiberglass
- Splice boxes
- Junction boxes
- Pad mount transformers
- Pad mount switchgears
- Submersible equipment



Table 1 below details the inspection program and maintenance codes.

### INSPECTION PROGRAM AND MAINTENANCE CODES

TABLE 1

Maintenance Code	Description	Expense or Capital	Default priority
600	Handholes - Broken/damaged/unsecured	E	B
602	Handholes - Missing nomenclature	E	C
603	Handholes - Secondary needs repair	E	B
610	Manhole - Bonded	E	B
611	Manholes - Cable/Joint leaking	E	A
612	Manholes - Cables bonded	E	B
614	Manholes - Cracked/broken	C	B
615	Manholes - Fire proofing	E	C
616	Manholes - Improper grade	E	B
617	Manholes - Missing nomenclature	E	A
620	Manholes - Rerack	E	B
621	Manholes - Ring/cover repair/replace	C	B
630	Network Protector - Barriers broken/dama	E	A
632	Network Protector - Oil leak	E	A
633	Network Protector - Worn/damaged gasket	E	A
635	Network transformer - Bushing Broken/Cra	E	B
637	Network transformer - Low oil	E	B
638	Network transformer - Missing Ground	E	A
639	Network transformer - Missing nomenclature	E	A
642	Network transformer - Oil Weeping	E	A
643	Network transformer - Rusted/ Paint peel	E	C
651	Switchgear - Barrier broken/damaged/unsecured	E	A
652	Switchgear - Base broken/damaged	C	B
654	Switchgear - Cable Not Bonded	E	A
656	Switchgear - Door Broken/Damaged	E	A
659	Switchgear - Missing ground	E	A
660	Switchgear - Missing Nomenclature	E	A
662	Switchgear - Rusted/Paint peeling	E	C
672	Transformer - Bushing Broken/Cracked	E	B
673	Transformer - Door Broken/damaged/unsecured	E	A
675	Transformer - Elbows tracking/burned	E	B
680	Transformer - Missing Ground	E	A
681	Transformer - Missing nomenclature	E	A
684	Transformer - Oil Weeping	E	A
685	Transformer - Pad broken/damaged	E	B
686	Transformer - Protection (ballards) damaged	C	B
687	Transformer - Rusted/ Paint peeling	E	C
690	Trench - Exposed Cable	E	A
692	Trench Path - Sunken	E	B
700	Vaults - Cable missing bond	E	A
702	Vaults - Cracked/broken	C	B
703	Vaults - Damaged/broken cover	E	B
704	Vaults - Damaged/broken door	E	B
705	Vaults - Damaged/broken ladder	E	A
706	Vaults - Improper grade	E	B



707	Vaults - Improper nomenclature	E	A
708	Vaults - Light not working	E	B
713	Vaults - Ventilation failure	E	B
720	Submersible equip. - Excess corrosion	E	C
721	Submersible equip. - Physical damage	E	C
722	Submersible equip. - Leaking	E	C
730	Anodes - Missing	E	C
731	Anodes - Need replacement	C	C
950	Handhole - Stray Voltage	E	V
951	Manhole - Stray Voltage	E	V
952	Switchgear - Stray Voltage	E	V
953	Transformer - Stray Voltage	E	V
954	Vault - Cover/Door Stray Voltage	E	V
969	Equipment - Other (use comments)	E	V

### **III. MAINTENANCE DATABASE**

The Maintenance database consists of information (data) downloaded from the hand held and information (data) entered from the desktop computer. The field hand held can be downloaded to any NM desk top computer that is connected to the network and is logged on as a valid user of the UG Maintenance program. The NM desktop computer is also used to generate various reports and work tickets depending on the user's need. These reports are utilized to schedule and accomplish distribution maintenance work.

### **IV. MAINTENANCE**

The maintenance activities are scheduled by priority categories with all "A Priority" conditions identified prior to November 1 repaired/corrected by November 30th. The "B" priority conditions are scheduled based on the reliability of the circuit, load served, and age of facilities. The "B Priority" maintenance is to be performed on circuits selected by Distribution Planning and Engineering, and identified in the "Energy Delivery Work Plan". All "B Priority" maintenance as outlined in the "Energy Delivery Work Plan" must be completed by November 30 of that year. The "C Priority" maintenance work will be completed as planned and directed by the Distribution Planning and Engineering department (Capital expenditures) after reviewing annually for trends that would require expenditures.

### **V. WORK MANAGEMENT**

The time recording of both patrol and maintenance activities is accomplished in the Severn Trent Operating Resource Management System (STORMS).

STORMS requires that the Distribution Inspector/Operations Personnel fill out a daily time sheet. The Distribution Inspector would record their time actually performing the foot patrol inspection of the Distribution system under the DO1100 Activity along with the appropriate work order or a work request if the patrol has been scheduled. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/Area Resource Coordinator (ARC).

Operations Personnel performing scheduled maintenance on the Distribution System should record their time actually performing maintenance activities under the appropriate work request number set up by their Distribution Planning/ARC in their respective area. Operations Personnel performing maintenance activities that have not been scheduled should charge the DM1100 activity along with appropriate work order number. STORMS work request numbers are created when the work has been scheduled by Distribution Planning/ARC. Work orders or work request numbers can be obtained from the Operations Supervisor or from the Distribution Planning/ARC.



## **VI. COMPLETION**

The replacement/repair of an identified maintenance problem code must be completed in the database. The completion of the maintenance problem codes can be done through the edit screen found on the desktop computer. Field personnel that perform the work are required to complete the work order form providing the date completed, and employee ID number. The work order form is returned to the T&D Supervisor who will close out the completed maintenance problem codes in the database at their desk top computer or designate the inspector or clerk to perform the close out. Additional maintenance problems that may be discovered and completed by personnel must be noted on the work order ticket so they can be recorded as work completed on that specific facility.

ALL MAINTENANCE WORK PERFORMED THAT WAS IDENTIFIED ON THE WORK ORDER OR DISCOVERED DURING THE REPAIR/CORRECTION OF THE ORIGINAL MAINTENANCE PROBLEM MUST BE LISTED ON THE DATABASE AND THEN CLOSED OUT WHEN COMPLETE.

## **VII. APPLICABILITY**

This procedure applies to all personnel involved with or responsible for the inspection or maintenance of underground transmission and distribution facilities.

## **VIII. DEFINITIONS**

**Desktop Computer:** A personal computer that is connected to the National Grid network and used to download the Hand Held device and retrieve the information in the form of reports.

**Hand Held Computer:** An electronic data recording device that is used in the field to create a record of conditions found.

**Hand-Hole:** An enclosure identified for use in underground systems, provided with an open or closed bottom, and sized to allow personnel to reach into, but not enter, for the purpose of installing, operating, or maintaining equipment or wiring or both.

**Inspector:** An underground qualified worker who can identify deficiencies or non-standard construction conditions on NM facilities.

**Manhole:** An enclosure identified for use in underground systems, provided with an open or closed bottom, and sized to allow personnel to enter, for the purpose of installing, operating, or maintaining equipment or wiring or both.

**Patrol:** An assessment of NM distribution facilities for the purpose of determining the condition of the facility and any associated components.

**Server:** Electronic data storage device that is connected to the network and stores all information collected under the maintenance program.

**Service Box:** See Hand-hole

**Stray Voltage:** The term "stray voltage" means voltage conditions on electric facilities that should not ordinarily exist.

**Submersible Equipment:** Electric equipment such as transformers and switches that, are generally located within a Hand-hole, Manhole, or Vault.



**URD:** Underground Residential Distribution

**UCD:** Underground Commercial Distribution

**Underground Distribution Facilities:** Manholes, vaults, hand-holes and service boxes, padmounted equipment and the components and equipment contained in these structures. (See GENERAL INFORMATION above).

**User:** An individual who the program administrator has authorized to use the inspection reporting program.

**Vault:** An enclosure, above or below ground, which personnel may enter and which is used for the purpose of installing, operating, or maintaining equipment or wiring or both.

## **IX. RESPONSIBILITIES**

### **System Transmission & Distribution**

1. Update program as necessary.
2. Provide field support and training as requested.
3. Report System Maintenance progress monthly by Region.

### **T&D Management & Supervision**

1. Ensure the Underground Maintenance Program as outlined in this EOP is implemented properly and timely.
2. Select manhole/vault/duct circuits to be patrolled for a running five-year cycle and ensure that the circuits scheduled for patrol are completed each year.
3. Provide qualified personnel as the inspectors, to provide consistent and accurate identified maintenance concerns/problems.

### **Distribution Inspector**

1. Demonstrate the ability to identify maintenance concerns and the aptitude to become proficient in the use of a hand held computer and desktop computer.
2. Demonstrate the understanding and requirements of this EOP.
3. Possess the ability to do walking patrols, collect information on a hand held, download to a desk top computer, edit data, provide requested information/reports/work tickets to supervision, and track/close out work completed in the database.

### **CM&S**

1. At the request of field operations obtain, schedule and manage contractors to perform inspections and perform required maintenance.

## **X. TRAINING**

1. Delivery Engineering Services with assistance from the database vendor will provide training on the utilization of handheld computers and the selected database.
2. Delivery Engineering Services along with the training department will provide training for the identification of V, A, B, C, and F maintenance items to the qualified employee who will be performing the inspections.



**EOP 211B**

**“Underground Inspection PSC”**

**02/01/05**

This is a new procedure.



**Substation V&O Inspection Standard****Introduction**

Substation Inspection or Visual and Operational (V&O) Inspection of each Substation and Switchyard is a key element in the National Grid USA preventive maintenance program. V&O Inspections are performed with the apparatus in service and are designed to detect abnormal conditions before the apparatus is damaged or a customer outage occurs. Data collected during the V&O Inspection is one of the elements used by MPS to prioritize individual apparatus for complete and diagnostic inspections.

**Schedule**

Each transmission and distribution substation will have a V&O Inspection at least bimonthly. Major transmission substations and generation switchyards will be inspected at least monthly.

**V&O Guidelines**

To provide uniform and effective V&O Inspections throughout National Grid, the EOP Book should be referenced for detailed information on the inspection of each type of apparatus. Some of the typical items to be checked include: air, hydraulic and gas pressures, operation counters, oil levels and temperatures, and visual condition.

The station should be inspected for cracked or broken line terminators, bus supports and post insulators, heat discolored wire and wire terminations and blown surge arresters. All fuses and disconnects should be checked for proper seating and heat discoloration.

Alarm and communication radios operation should be verified. The telephones are checked for proper operation.

Station Service secondary supplies should be checked alive and transfer switches checked for correct position.

Structures and foundations should be inspected for deterioration, damage and paint condition.

Substation security measures must be checked for proper operation and signs of unauthorized entry. This includes: fencing, gates, warning signs, entry alarms, locks and chains.

General substation housekeeping should also be taken care of at this time.

**Substation Fence** – Test for stray voltage at the point of entry. Class 2 rubber gloves are required until the fence is tested clear of stray voltage. If a stray voltage condition is found and verified by the Test Procedure in EOP 211D Section III, the site is to be guarded until made safe by Company personnel or if municipally owned, made safe by the owner or company. Guarded for the purposes of this EOP is defined as guarded by a person if the stray voltage found is greater than 8 volts. If the stray voltage measures less than 8 volts it can be guarded either in person or by a protective barrier that prevents public contact. It is expected that sound judgment shall be utilized in this application. Reference EOP 211D Stray Voltage Testing.



**SUBSTATION - V & O INSPECTION PROCEDURE****PURPOSE**

The following procedure describes how to properly complete a Substation - V&O Inspection, using the computer generated Substation - V&O Inspection Report and Checklist.

V&O (Visual and Operational) Inspection of each Substation and Switchyard is a key element in the National Grid USA (N-Grid) preventive maintenance program. V&O Inspections are performed with the apparatus in service and are designed to detect abnormal conditions before the apparatus is damaged or a customer outage occurs. Data collected during the V&O Inspection is one of the items used by MPS to prioritize individual apparatus for inspections.

This procedure is based on the philosophy that a crew consisting of two persons will be utilized to perform the V&O Inspection and in conjunction with the inspection minor problems will be repaired as they are found. One person may perform this procedure alone, however no repair work can be done.

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**SUBSTATION - V & O INSPECTION PROCEDURE****PROCEDURE****1.0 Safety and Entering Property****1.1 Lower Antenna on Vehicle.**

The Safety Manual [1301C] requires before entering a substation or switchyard care shall be taken to see that the antenna is well clear of any conductors or equipment with which it may come in contact.

**1.2 Wear Hard Hat and Safety Glasses.**

The Safety Manual [403(A) & 404(A)(B)] requires the use of class B head protection (hard hats) and eye protection at all times where electrical, mechanical or structural work is being performed, or where hazard of injury to the head or eyes exists.

**1.3 Test the Substation Fence** – Test for stray voltage at the point of entry. Class 2 rubber gloves are required until the fence is tested clear of stray voltage. If a stray voltage condition is found and verified by the Test Procedure in Section III, the site is to be guarded until made safe by Company personnel or if municipally owned, made safe by the owner or company. Guarded for the purposes of this EOP is defined as guarded by a person if the stray voltage found is greater than 8 volts. If the stray voltage measures less than 8 volts it can be guarded either in person or by a protective barrier that prevents public contact. It is expected that sound judgment shall be utilized in this application.

**1.4 Check Yard** - Quick inspection for anything broken, vandalized, grounds cut or removed, noises, fence condition, gates, locks, warning signs, alarms.

**1.5 Notify the Control Authority** - Inform them of the V&O Inspection and of alarm testing.

a) The Safety Manual - Sections [1301(A) and 1302(A)] requires that the person in charge of the station and the Control Authority be notified of any work within the station.

b) Ask Control Authority if any equipment has been tagged out or relays blocked.

**1.6 Review Lists** - Check for Approved Apparatus Lists, Ungrounded Apparatus Lists, and Energized Apparatus Lists.

**2.0 Report Heading**

Fill out top of both sides of the Substation - V&O Inspection Report and top of the Checklist.



**SUBSTATION - V & O INSPECTION PROCEDURE**

During the V&O Inspection all abnormal conditions should be marked in red pen or pencil, this includes check blocks. Abnormal check blocks should also be explained under remarks. Check that job order number has been entered.

- 2.1 Substation – Verify that the complete name and number of the substation being inspected has been entered.
- 2.2 Inspected by - Fill the names of the person or persons performing the inspection.
- 2.3 Sheet - Number each sheet used in the inspection and put the total pages used for the station on all sheets.
- 2.4 Date - Fill in date of V&O Inspection.
- 2.5 Time - Record starting time of inspection including am/pm. The time helps coordinate the information and its meaning.
- 2.6 Ambient Temperature - Record the general outside temperature. The temperature is required for gas circuit breakers and power transformers.
- 2.7 Control House Temperature - Record the inside control house temperature.

**3.0 Control House**

- 3.1 Station Log Book -
  - a) Enter the date, time and employee names who are performing the V&O Inspection.
  - b) Check the Station Log Book for abnormal conditions that can be corrected during the V&O Inspection.
  - c) After the V&O Inspection, record in the Log Book, with red pen, all abnormal problems found, corrected or not.

**Note:** Record in red pen anything abnormal and notify supervisor of major problems.

**3.2 Control Panels -**

- a) Indicating Lights - Check that the indicating lights are working on the Control Board. Check the available stock of spare bulbs; stock as necessary.
- b) Inspect rear of Control boards for any signs of overheating, burned wiring, moisture, etc.
- c) Noises - Listen for any unusual noises from relays, modules, RAPRs, timer circuits.
- d) Relay Targets - (for control panel mounted relays)



**SUBSTATION - V & O INSPECTION PROCEDURE**

- 1) Check for relay targets or alarms on the control boards.
- 2) Record targets and alarms on the V&O Report with the apparatus affected and in Log Book. Be sure to indicate Dispatcher Designation, phase and type of relays or alarm descriptions.
- 3) Reset and report relay targets and alarms to the Control Authority and supervisor.

If relays are located in breaker cabinet, this should be done during the Breaker Inspection (7.4).

- e) Reclosing Relay - Check that reclosing relay and/or switch is in the normal position and that the relay is in the start or zero position.
  - 1) If blocked with a DO NOT OPERATE tag, currently dated. Note, but leave blocked.
  - 2) If blocked without a tag or with an out dated tag, notify the control authority and/or supervisor.
- f) Ground Trip - Check that ground trip switch is normal position.
  - 1) If blocked with a DO NOT OPERATE tag, currently dated. Note, but leave blocked.
  - 2) If blocked without a tag or with an out dated tag, notify the control authority and/or supervisor.

**3.3 Annunciator and Test Switches -****a) Annunciator panel**

- 1) Move toggle switches, that are not tagged, to the test position to check lights (this will send an alarm to dispatch).
- 2) To clear trouble condition, turn the toggle switch to the reset position.
- 3) Leave toggle switches in the on position.
- 4) Any switches found in the off position or tagged, check with supervisor before testing.

**b) Test Switches**

- 1) Check for alarm light. If on, continue with steps 2 and 3.
- 2) Open knife blades one by one and leave open until the light goes out and the alarm clears.





**SUBSTATION - V & O INSPECTION PROCEDURE**

- 3) Now close the other knife switches just opened, checking for alarm indications. Operating the knife switches does not reset this type of alarm system. The light only stays out when the condition has cleared.

**3.4 Station Alarms -**

- a) Inspect condition of radio system for damage, and proper operation.
- b) Send a test alarm to control authority for general alarm check of all points.
- c) Make sure door is closed so the receiver for voice communication will be disabled.

**3.5 Tags and Switching Order Pads -**

- a) Check the available stock of Operating Tags, stock as necessary.  
RED Tags  
BLUE Tags (if required)  
DO NOT OPERATE Tags  
Grounding Device Identification Tickets
- b) Check the stock of Switching Order Pads, stock as necessary.
- c) Check that pens (red and blue/black) and pencils are available, stock as necessary.

**3.6 Lighting -**

- a) Inspect lighting in control house, replace any burned out bulbs. Record if Ballasts or sockets are needed.
- b) Test emergency lighting.

**3.7 Heaters - Inspect heaters and thermostats for proper operation. Make sure fans are not broken or bound up and they are in good working order.**

**3.8 Station Service and Transfer Switch -**

- a) Transfer Switch - Check transfer switch to be on preferred supply and any signs of trouble or overheating.
- b) Preferred Voltage - Check and record secondary supply voltages at transfer panel.





**SUBSTATION - V & O INSPECTION PROCEDURE**

- c) Emergency Voltage - Check and record secondary supply voltages at transfer panel.
- d) AC and DC Panels - Check that switches or circuit breakers are in the proper position.

**3.9 Heavy Duty Station Grounds -**

- a) Check that 4/0 grounds in station are in sets of 3 and that they are hung up properly.
- b) Check that the equipment end and jug handle clamps are in good working order. Lubricate as required.
- c) Check that the insulation is not cracked or cut and that none of the conductor strands are broken.
- d) Replace or repair damaged protective grounds. Do Not leave damaged grounds at the station.

**3.10 Switch Sticks -**

- a) Inspect Switch Sticks and Grounding Sticks for damage and proper operation.
- b) Switch Sticks and Grounding Sticks should be stored properly and cleaned if necessary.

**3.11 Fire Equipment -**

- a) Inspect fire extinguishers to be properly stored in their marked locations. Update inspection cards.
- b) Note any out of date fire extinguishers on the V&O Report for future replacement.
- c) The Safety Manual [115(D)] requires discharged fire extinguishers to be reported to the appropriate supervisor for recharging. Under no circumstances shall a discharged or partially discharged fire extinguisher be left at a substation.

**3.12 SPCC Plan Posted - (if an SPCC Location)**

- a) Check that the notification list is posted.
- b) Check that the SPCC Plan is available at the substation.

**3.13 SPCC Equipment Checklist - (if an SPCC Location)**





**SUBSTATION - V & O INSPECTION PROCEDURE**

Check that oil spill clean-up equipment is available and in good condition.

3.14 Phone Lists Updates - Check that local area cards and Control Authority cards are updated and posted to ensure that phone numbers are available for switching and trouble calls. Check that the emergency telephone list is correct and posted at each telephone location.

3.15 Clean and General Condition -

- a) Clean control house floors, facilities, empty wastebaskets and dust switch board.
- b) Inspect for water leaks in roof and walls.
- c) Check for signs of animal entry into control house.
- d) Re-install panel or cabinet covers, which may have been removed during maintenance, or trouble.
- e) Put on yard lights, so they can be checked during the Yard Inspection.

**4.0 Battery & Charger**

Safety - The Safety Manual [1306(D)] Personal protective equipment needed: safety glasses, face shield, acid resistant gloves and apron.

Note: The Safety Manual [1306(A)] Do not smoke or introduce any flames or sparks near the battery area.

4.1 Reference Number or Designation - Verify that the proper designation of battery and charger shown in this column, such as #1 Battery, NEPCo Battery or the N-Grid Reference Number assigned matches the equipment in the field. Some stations have more than one battery and charger in the control house or other locations.

4.2 Voltage Rating - Record or verify voltage rating of the battery bank. This is another way to determine which battery is being inspected.

4.3 Pilot Cell -

- a) Cell Number - Check and record the cell number of the pilot cell.
- b) Temperature - Check and record the temperature of pilot cell. This represents the battery temperature.
- c) Specific Gravity - Check and record specific gravity of pilot cell. Never add water before taking specific gravity readings.





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d) Volts - Check and record pilot cell voltage.

4.4 Charger -

- a) Load Amps - Check and record constant load amps on charger ammeter.
- b) Float Voltage - Check and record float voltage on charger voltmeter. If the float voltage is above or below the required value, it should be adjusted and noted on the V&O Report.

4.5 Grounds - Check and record voltage to ground indicators on charger in positive and in negative direction. Any severe grounds should be investigated and recorded in red pen in the log book and on the V&O Report.

4.6 Overall -

- a) Volts -
  - 1) Turn off charger's AC supply. Wait for 2 minutes.
  - 2) Check and record the over-all battery voltage.
  - 3) Turn on charger's AC supply and make check of it's operation.
- b) Liquid Level - Check each cell for proper electrolyte level. The proper amount is between high and low level marks on the battery. Add distilled water to each cell that is low. Record the total amount of distilled water added to the battery.

4.7 Equalize charge - If water was added or specific gravity of pilot cell was low, the battery should be equalized for 24 hours.

<b>Note:</b> Charger should be checked the following day to see if cycle was completed and battery came up to proper voltage and charger return to float level.
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4.8 Checklist -

- a) No Smoking Sign - Check that a No Smoking sign is in the vicinity of battery area. If not, signs should be ordered.
- b) Eye Wash Bottle - Check that an Eye wash bottle is located in the vicinity of batteries. Check that the bottle is unopened and that the expiration date is not expired. (three years from date on bottle) Replace if necessary.
- c) Vent Caps/Arresters - Check that the vent caps or flame arresters and dust caps are properly installed and are clean and dry.



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- d) Connections - Check each terminal posts for any corrosion, dirt, moisture or accumulation of power. Clean as necessary. Observe electrical connections of each cell, looking for discoloration, pitting, or burn marks. Gently tug on each connection to ensure tightness.
- e) Plates Buckling - Check for excessive buckling or bending of the plates or separator material.
- f) Sediment - Check for excessive sediment laying in the bottom of the battery container or wedged between the plates and walls of the container.
- g) Rack and Paint Condition - Notice the general condition of rack and nearby walls and floor. Look for dirt, moisture, and corrosive stains from battery. Also, check painted finish on both rack and floor.
- h) Grounding - Inspect grounding of charger and battery rack.
- i) Leakage - Check for any leakage of electrolyte on floors, batteries, rack or walls. Neutralize and wipe up area of floors and tops of batteries, if necessary.

4.9 Remarks - List remarks if any.

**5.0 Security Inspection**

- 5.1 Vandalism - Switchyards and substations are enclosed by security fences and walls, which protect people and wildlife from the electrical hazards inside. For security purposes, walk the perimeter fence, inspecting for any signs of damage or signs of vandalism.

Security problems will be corrected and reported immediately to supervisor.

5.2 Fence and Barbed Wire -

- a) Barbed Wire - Inspect the barbed wire strands to be intact and tight. Repair and record any abnormal condition.
- b) Fabric - Inspect for holes or breaks in the chain link. Make the fence secure before leaving substation. Repair and record any abnormal condition.
- c) Ties - Inspect for loose or missing fence tie wires. Tighten or replace any ties found to have a problems.
- d) Erosions - Inspect the area along the fence for signs of erosion or digging under the fence. Space below fence should be less than 3 inches.
- e) Grounding - Inspect ground conductor and connection to be intact and connected to every other fence post. Posts on both sides of gates should be grounded also.





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- f) Posts - Inspect post to be sound and not rusted through at ground level. Check that the post has not been raised by frost.
- 5.3 Gates - Check gates for proper operation. Gates should swing easily out of the way. When closed, the gates should meet in the middle with minimal space and should be secured with lock and chain. Both gate posts should be grounded. Make required repairs or adjustments.
- 5.4 Gate Locks and Chains - Check to see that all gate locks operate properly. Chain should be made-up as tight as possible, not allowing entrance between gates. Replace any poor operating lock with new W.B. lock. Check control house door locks to be operational.
- 5.5 Warning Signs - Check for proper "Danger High Voltage" warning signs every 50 feet along perimeter of fence, on gates and on non-hinged side of gate. (see N-Grid Standard #0105)
- 5.6 Yard Lights - Check all yard lights for proper operation. (Yard lights should have been turned on during control house inspection.) Repair broken bulbs, glass fixtures, spot light heads, or other lighting that needs attention.

If work can not be completed safely while maintaining safe work clearances or if special equipment such as a bucket truck is needed, note requirements on the V&O report.

Yard Lighting is important for responding to night time trouble or for emergency maintenance work that may be required.

- 5.7 Vegetation - Check for any growth of vegetation in fence and gate area. Record, so the Arborist can be notified to have it removed or sprayed.

**6.0 Yard Inspection**

These checks are to identify problems and initiate corrective procedures. This check actually begins at the entrance to the substation switchyard and is to verify that all equipment is in good order

**6.1 Checklist -**

- a) All Porcelain - Check visually for any broken or chipped skirts, carbon traces or flashed over insulators and general deterioration, dirt accumulation on exterior surfaces of porcelain.

Broken or damaged insulators should be recorded on V&O Report.

Broken porcelain should be picked up off the ground.

- b) Noises - Upon walking through yard, note any unusual noises in the substation. Record on V&O Report.



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- c) Ground Connections - Check visually throughout the V&O Inspections for any cut, broken or missing ground connections to structures or guy wires. Static wires are inspected at this time and any abnormalities should be noted.
- d) Evidence of Heating - Check for any signs of damage to equipment, or heating of disconnects, bushings connections, bus supports, structures and any flashovers.

<b>Note:</b> Rain usually does most of the required cleaning of insulators, but substations near generating plants or industry may require cleaning of insulators. Scheduled when out of service and should be noted.
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- e) Disconnects, Switches, Fuses - Check visually for signs of overheating, discoloring, pitting, improper alignment, broken operating rods and linkage, ground connections, fuse indicators, cleanliness, carbon traces, support insulators and proper grounding of switch handle.
- f) Station Service Transformers
  - 1) Oil Leaks - Check for oil leaks on transformer tank, bushings and the ground.
  - 2) Bushing - Check for broken, overheated or discolored bushings.
  - 3) Fuses - Check visually fuses on primary of transformers.
  - 4) Output Voltage - Check and record secondary output voltage with Multimeter. (if not recorded previously during control house checks)
- g) Paint Condition - Check overall paint condition of the buildings and the structures. Record equipment needing attention.
- h) Clean and General Conditions - Clean up substation yard of trash or general debris left around. If area requires major clean up or crushed stone requires leveling, note on V&O Report.

**7.0 Circuit Breakers & Reclosers**

- 7.1 Circuit Designation - Check circuit breaker to be labeled properly and verify circuit designation as shown on V&O inspection form.
- 7.2 Previous Date and Counter Reading - Shows date and counter reading from last recorded V&O inspection.
- 7.3 Counter - Check and record operations counter on breaker mechanism. Update counter card assigned to breaker.
- 7.4 Faults - List how many fault operations since last V&O inspection.
- 7.5 Relays and Targets - (for breaker cabinet mounted relays)





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- a) Relay Targets - Check and record breaker relay targets on the counter card and V&O Report. Reset targets. At completion of the V&O Inspection, record targets in Log Book and report them to control authority and supervision.

Be sure to indicate Dispatcher Designation, phase and type of relays or alarm descriptions.

If relays are located in control house, this should have been previously done during the Control House Inspection (3.2b).

- b) Reclosing Relay - Check that reclosing relay or switch is in the normal position and that the relay is in the start or zero position.

1) If blocked with a DO NOT OPERATE tag, currently dated. Note, but leave blocked.

2) If blocked without a tag or with an out dated tag, notify the control authority and/or supervisor.

- c) Ground Trip - Check that ground trip switch is normal position.

1) If blocked with a DO NOT OPERATE tag, currently dated. Note, but leave blocked.

2) If blocked without a tag or with an out dated tag, notify the control authority and/or supervisor.

7.5 Indicating Lights - Check and record that the indicating lights are working in the Breaker Control Cabinet.

7.6 Previous Recloser Battery Voltage - Shows recloser battery voltage from last recorded V&O inspection.

7.7 Reclosers Battery Check -

Perform load test on recloser control battery. Record D.C. voltage before and during the test. The voltage swing should be no more than three volts and the voltage level should be above 23 volts.

Fully charged batteries will normally read 26 to 28 volts.

Refer to field testing battery write-up and change battery write-up.

7.8 Air Compressor -

Any oil or moisture should be wiped down inside cabinet at this time to check where leaks are coming from.

- a) Cut-In - Drain down air receiver tank slowly to remove any accumulated moisture. Drain until compressor starts and record cut-in pressure.





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Note: If all of the moisture is not removed, before the compressor starts, let the compressor build pressure and stop before continuing to drain. This will prevent the possible tripping of some breakers or the sending of additional alarms.

Note: If the temperature is below 40°F do not perform blow down, because the valve may freeze.

- b) Cut-Out - Record cut-out pressure when compressor stops.
- c) Previous Hours - Shows compressor operating hours from last V&O inspection.
- d) Hours - Record compressor operating hours.
- e) Oil Level - Check the compressor oil level with the compressor stopped.
- f) Checklist - (Air Compressor)
  - 1) V-Belts - Check for any broken, cracked or loose belts. If the belt needs to tighten, be sure not to over tighten because this will cause excessive strain on the motor and compressor bearings.  
**(WARNING - deenergize motor before adjusting belts.)**
  - 2) Compressor Motor - Make sure the motor frame is not loose. The motor should be checked for noises and over heating during the cut in and cut out pressure checks.
  - 3) Air Filters - Check the condition of air filters associated with the air compressor system. Clean or replace as necessary.
  - 4) Gaskets - Check to see if any gaskets are leaking oil or air when the compressor is running.
  - 5) Valves - Listen for any leaks from valves.

**7.9 Hydraulic -**

Any oil or moisture should be wiped from inside cabinet at this time to check where the leaks are coming from.

- a) Cut-In - Transfer hydraulic fluid from high pressure to receiver tank slowly until pump starts and record cut in pressure.
- b) Cut-Out - Record cut-out pressure when pump stops.
- c) Previous Hours - Shows the pumps operating hours from last V&O inspection.
- d) Hours - Record the pumps operating hours.





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e) Oil Level - Check and record the hydraulic fluid level in sight gauge. The fluid should be visible in the lower end of the sight gauge at all times.

f) Checklist - (Hydraulic)

- 1) Gaskets - Check to see if any oil is leaking out the gaskets.
- 2) Tubing/Fittings - Check for oil leaks in tubing and fittings.
- 3) Accumulator - Check for leaks and any indication of damage.

7.10 Oil (Oil Circuit Breaker/Recloser) -

- a) Level - Check and record breaker oil level and indicate which phase, if any are low.
- b) Leaks - Check and record any leaks on the bushings, tanks, door covers or valves. Clean any leak that can be done safely and report as described in the Leak Section. (Appendix C)

7.11 Gas (Gas Circuit Breakers) -

- a) Pressure - Check and record gas pressure.
- b) Temperature - Check and record gas/ambient temperatures.
- c) Normal - Check pressure versus temperature chart and record normal fill pressure for ambient temperature. Note if the breaker gas pressure is abnormal.

7.12 Checklist (Circuit Breaker) -

- a) Bushing Damage - Check for any damage to bushings from ground level. Determine if any broken glass, pitting, flash over, overheating, chipping, or cracks need to be reported. If needed, inspect with binoculars.
- b) Bushing Oil Level - Check each bushing oil level to be at normal levels.
- c) Position Indicator - Check that position indicator agrees with breaker position (open or closed).
- d) Spring charged - Check that the charging springs are charged for the operating mechanism of the breaker.
- e) Painted Surfaces - Check conditions of painted areas. Note areas where there is rust or corrosion which needs repair.
- f) Reclosing Relay – see section 7.3 (b)





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- g) Noise - Check and report unusual noises from the mechanism, air compressor or miscellaneous equipment of breaker.
- h) Control Fuses - Check control and heater circuits for voltage to prove fuses are not blown.
- i) Moisture - Check for signs of moisture and animal entry in control cubicles. Inspect weatherproofing and cabinets for leaks.
- j) Cabinet Vents (air) - Check vents in doors and cabinet are not blocked and air filters are clean.
- k) Cabinet Heater - Check thermostats and heaters are in proper working order. Heater control switches are in the "ON" position during the required season.

Vacuum Breakers and Reclosers - Check the heat is on for primary cabinet. For VSA Reclosers the underside of the tank can be felt.

- l) Foundation - Inspect for any erosion, cracking or cement broken away indicating weakness. Inspect breaker leads expansion joints for signs of over extension.

7.13 Remarks - List remarks if any.

**8.0 Voltage Regulators & L.T.C.**

8.1 Circuit Designation - Check regulators to be properly labeled and verify circuit designation as shown on V&O inspection form. If an LTC, describe as LTC of transformer. (i.e. LTC #1Trf)

8.2 Phase Designation - Verify phase designation as shown on V&O inspection form.

**Note:** Keep legal clearance from all energized parts.

8.3 Reference Number - Verify voltage regulator or LTC reference number as shown on V&O inspection form.

8.4 Previous Date and Counter Reading - Shows date and counter reading from last recorded V&O inspection.

8.5 Counter - Check and record operations counter.

8.6 Position Indicator -

- a) Minimum, Present and Maximum - Check and record drag hands on the position indicator.
- b) Reset - Reset minimum and maximum drag hands.





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- 8.7 Volts - Check and record voltage across terminals marked output voltage with multimeter.
- 8.8 Load Management 2.5% (5%) Check - Perform load management test by:
- a) Placing the remote/local switch to local control
  - b) Turn the selector switch to 2.5% (5%) position or position #1 on G.E. regulators.
  - c) Observe the regulators operation. Note if regulator does not step in the lower direction or the counter does not operate.
  - d) Place controls in normal operating position.
  - e) Observe the regulators operation in the raise direction.
  - f) Reset drag hands.
- 8.9 Oil -
- a) Oil Level - Check and record oil level in sight glass.
  - b) Oil Color - Check and record oil color in sight glass. This indicates signs of overheating, burning, high carbon content or internal problems.
  - c) Leaks - Check for any leaks from tank, valve or breather system. Clean any leak that can be done safely and report as described in the Leak Section. (Appendix C)
- 8.10 Checklist -
- a) Bushing Damage - Inspect all bushings for cracks, breakage or chipping. Check connections for signs of overheating.

**Note:** Keep legal clearance from all energized parts.

- b) Tank Grounds - Check that all ground connections are properly connected and are not cut or broken.
- c) Noise - Check for abnormal noise in operation of voltage regulator during V&O Inspection checks.
- d) Cabinet Vents (air) - Check and clean any cabinets vents that might be blocked by papers, duct seal, etc. and if needed order new screens to prevent bees from entering cabinets.
- e) Arresters - Check external by-pass arrester for discolor, signs of overheating or blown. If arrester is blown, regulator should be turned off in place. Notify Supervisor immediately.





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- f) Breather - Breather at bottom of regulator tank should be checked to verify that it is not plugged so circulation of air will go through regulator and out upper breather to prevent condensation and keeps walls dry and free from rust.

**8.9 LTC's with Vacuum bottles (GE LRT 200) - Test protective circuit as follows.**

- a) If red fault light on control panel is not lit (this is the normal condition).
- 1) Hold test switch on panel in the test position.
  - 2) Place control switch to the raise position.
  - 3) If the protective system is functioning properly. The drive motor will raise, then lower it self momentarily. At this point the red fault light will light and lock out the controls. Check by operating in the raise and lower directions, no movement should occur.
  - 4) Press reset switch
  - 5) Repeat the test placing the control switch in the lower position. The protective system should function the same as in step 3.
  - 6) Press reset switch and repeat test in lower direction.
  - 7) If any steps fail contact supervisor.
- b) If red fault light on control panel is lit.
- 1) Reset alarm light
  - 2) Place control switch in the raise position.
  - 3) If mechanism successfully completes tap change leave control in the normal position.
  - 4) If Red fault light comes on, place controls in the off position and contact supervisor.

**8.10 Remarks - List remarks if any.**

**9.0 Transformers**

- 9.1 Circuit Designation - Check transformer to be labeled properly and verify circuit and phase designation as shown on V&O inspection form. LTC information is recorded with voltage regulators.

**9.2 Nitrogen Pressures (gas checks) -**



**SUBSTATION - V & O INSPECTION PROCEDURE**

- a) Cylinder (Blanketed System) - Check and record nitrogen cylinder pressure on transformer gas system. Cylinder should be changed if pressure is 200 lbs. or less.
- b) Transformer - Check and record nitrogen pressure in transformer from gas pressure indicator gauge.
  - 1. Blanketed System - Pressure should be between .5 and 5 lbs. in positive direction. This positive pressure is controlled by a combination of a pressure regulator and relief devices.
  - 2. Sealed Tank Systems - Pressure in this type of system can vary from positive 5 lbs. to negative 5 lbs. and is kept between those values by a vacuum/pressure device. If the pressure is below 1 lb., gas can be added to the system. If there is a leak in the system, lost gas will be made up by air and the leak will go undetected.
  - 3. Gas/Oil Sealed Systems - Pressure should be 1.5 lbs. to 3 lbs. positive. The pressure is kept positive by a head of oil in a two part expansion tank. If the pressure is below 1 lb., gas can be added to the system to raise the oil back into the upper compartment.
  - 4. Atmosseal/COPS Conservator Systems - These systems protect the oil by using an air bag in a conservator tank, sealing the transformer. There is no nitrogen or nitrogen pressure.
  - 5. Free Breathing Conservator Systems - This system has a conservator tank partially filled with oil. The tank is vented to atmosphere through a breather. There is no nitrogen or nitrogen pressure.

**9.3 Fans and Pumps - (Cooling Equipment)**

- a) Fans - Check and operate fans. Switch control from auto to manual and run for 15 minutes do not turn off and on intermittently. Bad capacitors in capacitance-run motors result in excessive motor current causing trip off on thermal overload. When cooled, motor restarts. Note any unusual noises, leaking capacitors and slow or non-running fans. Inspect all external electrical connections to the fans. Check for fan blade clearance and fan guards to be secure.
- b) Pumps - Check and operate oil pumps and verify that the oil flow indicators work properly. Clean any leak that can be done safely and report as described in the leak section (Appendix C).



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Controls - Change selector switch from group 1 to group 2 or back, if so equipped.

**9.4 Temp °C max/ind. - (Operating Temperatures)**

- a) Top Oil - Check and record top oil temperatures (maximum and indicating values) from the liquid temperature gauge.
- b) H, X & Y Winding Temperature - Check and record winding temperature (maximum and indicating values) from the winding temperature indicators. Some transformers have a winding temperature gauges on each winding.
- c) Reset - Reset maximum drag hands.
  - 1. The maximum temperature drag hands on instruments with a reset stem are reset by unscrewing the cover knob and pulling the stem down.
  - 2. The maximum temperature drag hands on instruments with a reset magnet are reset by placing a magnet against the glass directly opposite the indicator and moving the magnet in the desired direction. This can be done by taping a magnet to a switch stick for indicators near top of transformer.

**9.5 Oil level - Check and record oil level on the oil level indicator. The 25°C mark indicates the correct oil level for the transformer which is operating at 25°C.****9.6 Leaks - Check any leaks on the bushings, tanks, covers, flanges, pump or valves. Clean any leak that can be done safely and report as described in the leak section (Appendix C).****9.7 Checklist -**

- a) Bushing Damage - using binoculars, if needed, examine for any cracks, porcelain chipping, damage, surface leakage, loose connections.

<b>Note:</b> Keep legal clearance from all energized parts.
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- b) Bushing Oil Level - Check bushing oil level sight glass for proper level. Unless mechanical damage, the fill level should be satisfactory for life of the bushing.
- c) Tank Grounds - Check that all ground connections and pads are okay and have not been disturbed.
- d) Cabinet Heater & Vents - The transformer cabinet is checked for signs of leaks, such as watermarks, moisture, etc. Verify that cabinet thermostats and heaters are in working order and all vents are free of any obstruction. It is good practice to clean and remove paper, leaves, mice nests, beehives or any foreign objects that might effect operation of the controls.





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- e) Silica Gel - Check for proper color (proper color is blue). If it is any other color it must be replaced. Silica gel absorbs moisture before it enters the transformer.
- f) Mechanical Relief - Mechanical relief device relieves excessive pressure (greater than 10 to 15 lbs.) by venting gas from transformer to atmosphere. Located on top of transformer most devices have a visual signal flag that pops up. If up, notify supervisor immediately.
- g) Coolers - Examine for dirt, leaves, paper or anything else that may prevent air flow. If possible, obstructions are to be removed. If not, obstructions are noted for future maintenance. Also, wiring to fans and pumps are checked for cracks, in insulation, fraying and other signs of deterioration.
- i) Noise Level - Check and report unusual noises from the transformer, fans, pumps and other auxiliary equipment.

9.8 Remarks - List any remarks.

**10.0 Capacitors**

10.1 Circuit Designation - Check capacitor to be labeled properly and verify circuit designation as shown on V&O inspection form.

Note: Keep legal clearance from all energized parts.

10.2 Switch Position - Check and record the as found capacitor switch position. (open/closed)

10.2 Counters -

- a) Controls - Check and record the control's operations counter. Note: Record operations counter on vacuum switch or breaker of capacitor bank in circuit breaker & reclosers section of V&O inspection form.

10.3 Control Operation - Verify the automatic operation of capacitor bank control by comparing the previous counter reading. If operation can not be verified, test capacitor controls.

Note: Capacitor should be operated, if possible, by automatic control.  
Capacitors must not be re-energized for five minutes.

10.4 Time Clock -

- a) Indicating - Check and record the time on the time clock.
- b) Actual - Check and record the actual time.
- c) Corrected - If the time difference is more than one half hour, reset the time clock to proper time.





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- 10.5 Bulges - Visually inspect each unit for any abnormal tank bulges, ruptures and corrosion. Record any abnormal conditions on V&O Report.
- 10.6 Leaks - Visually inspect each unit for any leaks. Record any leaks on V&O Report. Care should be taken to prevent any leakage from entering the environment.
- 10.7 Fuses -
- a) Check and record blown individual capacitor fuses. If more than two fuses are blown in one phase, the capacitor bank should be removed from service.
  - b) Check and record blown capacitor bank fuses. If a bank fuse has blown the capacitor bank should be removed from service.
- 10.8 Checklist -
- a) Bushing Damage - Visually inspect for any cracks, porcelain chipping, damage, surface leakage, loose connections.

Note: Keep legal clearance from all energized parts.

- b) Grounds - Visually inspect that all neutral/ground connections are made to each capacitor unit. Check that the rack base is connected to the system ground.
  - c) Bank Guard System - Control and sensing transformer.
- 10.9 Remarks - List any remarks on V&O form.

**11.0 Surge Arresters**

V&O Inspections include a visual inspection of the distribution class arresters in the substation. No information need be recorded, except for abnormal conditions. Distribution class surge arresters are used to protect getaway cables and bus sections.

- 11.1 Circuit Designation - Verify circuit designation for each transformer or bus surge arresters as shown on V&O inspection form.
- 11.2 Relief Diaphragm - Visually check for any signs of blow out at top and bottom of arrester. Check the 3 phases okay, if no visible signs of problems are found.
- 11.3 A, B and C Phase - (for each phase)
- a) Counter - Check and record discharge counter on arrester counter device.
  - b) Milliamps - Check and record milliamp reading on arrester milliamp gauge, if so equipped.





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**11.4 Checklist -**

- a) Porcelain - Check porcelain for damage or flashes.
- b) Connections - Visually check the primary and ground connections for heating or discoloration.

**11.5 Remarks - List any remarks.**

**12.0 Motor Operated Disconnects and Circuit Switchers**

**12.1 Circuit Designation** - Check the disconnect/airbreak to be labeled properly and verify circuit designation as shown on V&O inspection form.

**12.2 Previous Counter** - Shows counter reading of motor operator from last recorded V&O inspection.

**12.3 Counters** - Check and record operations counter located in motor operator.

**12.4 Live Line Indicator** - Check and record that live line indicator lights are on at the control panel.

**12.5 Timers Reset** - Check that the sequence timers are in their normal position.

**12.6 Preferred/Emergency** - Check and record if the airbreak is designated as preferred or emergency.

**12.7 Closed/Opened** - Check and record airbreaks position, open or closed. Also, check open and close indicating lights on control panel. On Circuit Switchers, check that the interrupter is closed (yellow target indicates contacts open).

**12.8 Automatic/Manual** - Check and record position of auto/manu switch. Contact control authority if not in proper position.

**12.9 Gas Indicator (Circuit Switchers)** - Record color of target on brain section of Circuit Switcher - If target is red this indicates loss of gas, notify supervisor immediately.

**12.10 Checklist -**

- a) Fully Open or Closed - Visually check that all switches are in proper operating position.
- b) Locks - Check that all airbreaks are properly locked and that the lock is in good condition.

The Safety Manual - Section [1305(B)] requires that all gang operated airbreak switches at substations must be locked whether in the open or closed position.





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- c) Interlocks - Check all key interlocks for any broken keys, cylinders, or any other broken parts. Verify visually that all are in good working order.
- d) Rods and Linkage - Check and verify that all rods and linkage are in good condition. Note anything broken or loose parts, or any signs of wear.
- e) Handle Grounded - Check to be sure braided strap on airbreak rod is in good condition and connected to the ground grid.
- f) Grounds - Check for proper ground connections from ground grid to motor mechanism and structure.
- g) Fuses - Check control and heater circuits for voltage to prove fuses are not blown.
- h) Heaters and Vents - Check thermostats and heaters are in proper working order. Heater control switches are in the "ON" position during the required season. Check vents in mechanism are not blocked.

12.11 Remarks - List any remarks.

**13.0 Miscellaneous Apparatus Checklists**

13.1 Instrument/Metering Transformers - C.T. and P.T.

- a) Noise - Check for any abnormal noises.
- b) Level - Check for oil level on oil filled apparatus.
- c) Leaks - Check for oil leaks. Clean any leak that is safe and report as described in the leak section (Appendix C).
- d) Porcelain - Check for cracks in porcelain or butyl.
- e) Overheating - Check for any signs of overheating.
- f) Connections - Check primary and secondary connections visually.

13.2 Line Traps/Reactors - Dry Type

- a) Cleanliness - Check visually for cleanliness. Check for any foreign materials on coils. (i.e. bird nests)
- b) Support Insulators - Check support insulators to be clean and intact.
- c) Connections - Check primary and secondary connections visually. (over heating)
- d) Concrete - Check concrete reactor frame for any cracks or breakage.





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- e) Winding Distortion - Visually check for any distortion on coils.

**13.3 Cables and Terminations (Potheads) -**

- a) Tracking - Check for tracking along termination and base of pothead.
- b) Overheating - Check for signs of overheating.
- c) Leaks - Check for leaking compound from termination.

**13.4 Busses**

- a) Noise - Check for any abnormal noises with bus in operation.
- b) Overheating - Check for any signs of overheating.
- d) Insulators - Visually check bus for distortion or broken, damaged or tracked insulators.

**13.5 Arrestors**

- a) Porcelain – Check porcelain for damage or flashes.
- b) Connections – Visually check the primary and ground connections for heating or discoloration.

**14.0 Final Checklist**

- a) Yard lights - Shut off yard lights, at control panel.
- b) Station Log Book - Observations should be entered in log book such as: targets found, breaker operations, any defective or broken equipment.
- c) Control Authority - Call control authority to notify them that the V&O Inspection has been completed and you will be leaving the station. Report any abnormal conditions, alarms or relay targets.
- d) Securing Station - Make sure control house lights are off and doors secured. Closed gate and locked securely with chain.
- e) V&O Report - Turn in V&O Inspection Report to supervisor.





**SUBSTATION - V & O INSPECTION PROCEDURE**

**Appendix A. - REQUIRED TOOLS AND EQUIPMENT**

**Personal Items**

1. Rubber gloves and covers
2. Hard hat and safety glasses

**Truck Items**

1. Ladder
2. Multi-meter
3. Flashlight
4. Magnet
5. Broom and dust pan
6. Rags
7. Electrical tape
8. Trash bags
9. Binoculars (if available)
10. Recloser Battery load check meter
11. Small screwdriver and pliers
12. Acid resistant gloves
13. Face Shield and Apron

**V&O Items**

1. Substation - V&O Inspection Report forms and clipboard
2. Station Log Books
3. Dispatching cards
4. Spare counter cards
5. Pen, pencils and erasers (red pencil for trouble)
6. Tags

RED Tags

BLUE Tags

DO NOT OPERATE Tags

Grounding Device Identification Tickets

7. Switching Order pads

8. Spare W.B. Locks:

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**SUBSTATION - V & O INSPECTION PROCEDURE**

	long shank	S.C. 105873
	short shank	S.C. 105872
9.	Chain for gates	
10.	Spare approved warning signs	S.C. 483450
11.	Switch Board Lamps:	
	Swbd. LED (Red)	S.C.100183
	Lens Cap (Red)	S.C. 695322
	Swbd. LED (Green)	S.C. 100184
	Lens Cap (Green)	S.C. 695321
	Swbd. LED (Amber & White)	S.C. 100185
	Lens Cap (Amber)	S.C. 695320
	Lens Cap (White)	S.C. 100186
	Swbd.Lamp 24EX	S.C. 844590
	Swbd.Indicator 145 Volt, 15W	S.C. 841410
	Indicating Bulb 49 miniature 2v, .06A	S.C. 843078
	Indicating Bulb 47	S.C. 843100
	18 Volt Miniature 0.11A Automotive	S.C. 843110
	Indicating 35V, .06A	S.C. 843132
	Indicating 43A	S.C. 843250
	Swbd.Lamp 24X	S.C. 844610
	Swbd.Lamp 55C	S.C. 844630
	Indicating Lamp 120 P.S.B. (for V.S.A. Reclosers)	S.C. 841359
12.	Incandescent Lamps:	
	Incandescent Lamp 75 Watt	S.C. 841739
	Incandescent Lamp 100 Watt	S.C. 841840
	Incandescent Lamp 135 Watt	S.C. 842001
	Incandescent Lamp 200 Watt	S.C. 842150
	Mogul Base Lamp 500 Watt	S.C. 842390
	Floodlamp PAR 38 100 Watt	S.C. 842045
13.	Fluorescent Lamps:	
	8 FT Single Pin Lamp 75 Watt	S.C. 841050
	4 FT Bi - Pin Lamp 40 Watt	S.C. 840950
	4 FT Single Pin Lamp 40 Watt	S.C. 840940



**SUBSTATION - V & O INSPECTION PROCEDURE**

8 FT Recessed Pin Lamp 105 Watt

S.C. 841130

14. Spare fuses (control and trip)
15. Spare nitrogen bottles

**Battery Items**

1. 5 Gallon distilled water and battery filler S.C. 599778
2. Battery NO SMOKING Signs S.C. 483448
3. Extra hydrometer S.C. 474448
4. Extra thermometer S.C. 487304
5. Baking Soda
6. Spare eyewash bottles S.C. 890600
7. Brush to clean battery posts
8. Battery grease

**Appendix B. - TROUBLE REPORTING**

Trouble - The term trouble is defined as any condition which occurs on the equipment that has or will terminate the ability of that equipment to perform its required function.

- I. **SEVERE TROUBLE** - A severe trouble condition is a situation that is immediately hazardous to the system and/or personnel. These troubles are immediately reported to the Control Authority and to the person in charge of the substation. The employee shall secure the area and warn unauthorized people to stay clear of the danger.

**Examples**

- Dead station battery
- Blown bushings or cable terminator
- Downed live lines
- Multiple broken support insulators
- Electrical fires
- Grounds cut in station
- Loss of station service power
- Broken pole or structure
- Blown by pass/shunt arresters on regulators





**SUBSTATION - V & O INSPECTION PROCEDURE**

- Unusually noise
- II. NOT IMMEDIATELY FIXABLE TROUBLE - These troubles are reported to the Control Authority. The person in charge of the substation shall also be notified of the non-fixable items and it shall be noted on the V&O form in red, to be fixed at a later date.

**Examples**

- Surge Arrester blown
- Broken operating rods on disconnects
- Broken bus support insulators
- Low oil levels
- III. FIXABLE TROUBLE - Fixable items should be repaired as they are discovered during the V&O Inspection. This insures that the station is maintained in the best possible operating condition and prevents unnecessary return trips. The items fixed should be noted on the V&O Report.

**Examples**

- Battery electrolyte filling
- Replacing broken lamps
- Changing filters
- Installing missing covers
- Installing signs (if missing)
- Repairing holes in fence
- Installing new locks
- Cleaning and repairing oil leaks
- Tightening compressor belts
- Changing recloser batteries
- Replacing control fuses
- Changing nitrogen bottles
- Changing Silica Gel turned pink or white
- Cleaning and repairing leaks





**SUBSTATION - V & O INSPECTION PROCEDURE**

**Appendix C. - OIL LEAK REPORTING**

Oil filled apparatus must be inspected for any signs of leaks. The V&O Inspection Report now requires that the oil leak status be indicated for each piece of oil filled apparatus.

When inspecting the apparatus during a V&O Inspection, mark the appropriate column with the letter that indicates the leak status. The available status ratings are:

**Clean (C)** - This indicates the apparatus is dry and shows no evidence of oil leaks.

**Repaired (R)** - If a leak is found and repaired during the V&O Inspection, use the repaired status and note the repairs made.

**Leak(minor) (L)** - A Leak is defined by the PCB Manual as anytime the external surface of a piece of apparatus is wet with oil. Must write remark of what was leaking.

**Moderate Leak (M)** - By definition is any instance when oil is detected running off or about to run off the external surface of containers or electrical apparatus.

No status letter is defined for an oil leak that is more severe than a moderate leak. Any leak considered to be of a magnitude greater than a moderate leak shall be responded to as an oil spill. Notify the supervisor of the condition at once and begin repair and the clean up.

The repaired leak may then be reported on the V&O Inspection Report as an "R", with a description the repairs made and the clean up done for the leak.



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Agway Pellet Station 4776	5999 US Route 11	Canton	St. Lawrence	13617		NM Electric (T/D) Station	N	N	Y
Albany High School Station 403	58 Partridge St.	Albany	Albany	12203	913403	NM Electric (T/D) Station	N	N	Y
Albany Steam Plant Station	380 River Road	Glenmont	Albany	12077		NM Electric (T/D) Station	N	Y	N
Albion Station 80	127 East Bank Street	Albion	Orleans	14411	713535	NM Electric (T/D) Station	N	N	Y
Alcoa Station 902	1814 State Route 131	Town of Massena	St. Lawrence	13662		NM Electric (T/D) Station	N	Y	N
Alder Creek Station 701	9611 State Dam Road	Alder Creek	Oneida	13301		NM Electric (T/D) Station	N	N	Y
Alps Station 417	1988 NY 43	Alps	Rensselaer	12018	913417	NM Electric (T/D) Station	Y	Y	N
Altamont Station 283	642 Route 146	Guilderland	Albany	12009	913283	NM Electric (T/D) Station	N	N	Y
Amherst Terminal Station	1720 North Forest Road	Amherst	Erie	14221	713093	NM Electric (T/D) Station	N	Y	N
Amsterdam Station 326	770 State Highway 5S	Amsterdam	Montgomery	12010		NM Electric (T/D) Station	N	Y	
Andover Station 09	31 Maple Street	Andover	Allegany		713635	NM Electric (T/D) Station	N	Y	Y
Angola Station 80	179 North Main	Angola	Erie	14006	713602	NM Electric (T/D) Station	N	Y	N
Antwerp Station 801	200 Old Route 11	Antwerp	Jefferson	13608		NM Electric (T/D) Station	N	N	Y
Arnold Pit 4746	3425 State Route 58	Fowler	St. Lawrence	13642	813860	NM Electric (T/D) Station	N	N	Y
Arnold Station 656	937 Arnold Avenue	Utica	Oneida	13502		NM Electric (T/D) Station	N	N	Y
Ash Street Station 223	431 Genant Drive	Syracuse	Onondaga	13204	813223	NM Electric (T/D) Station	N	Y	Y
Ashley Station 331	127 County Route 16	Fort Ann	Washington	12827		NM Electric (T/D) Station	N	N	Y
Athens Station	9304 Route 9w	Athens	Greene	12015		NM Electric (T/D) Station	Y	Y	N
Attica Station 12	249 East Main Street	Attica	Wyoming	14011	713637	NM Electric (T/D) Station	N	N	Y
Ausable Forks Station 846	204 Silver Lake Road	Town of Black Brook	Clinton	12912		NM Electric (T/D) Station	N	N	Y
Avenue A Station 291	1 Avenue A	Albany	Albany	12208	913291	NM Electric (T/D) Station	N	N	Y
Avon Station 43	235 East Main Street	Avon	Livingston	14414	713503	NM Electric (T/D) Station	N	N	Y
Bagdad Station	2367 Cemetery Hill Road	Collins	Erie	14070	713603	NM Electric (T/D) Station	N	Y	N
Baker Street Station 150	1719 Winch Road	Busti	Chautaugua	14750	713776	NM Electric (T/D) Station	N	N	Y
Ballina Station 221	Nine Road	Cazenovia	Madison	13035	813221	NM Electric (T/D) Station	N	N	Y
Ballston Station 12	177 Route 67	Ballston Spa	Saratoga	12020		NM Electric (T/D) Station	N	Y	N
Balmat Station 904	1767 State Highway 812	Town of Fowler	St. Lawrence	13609		NM Electric (T/D) Station	N	Y	Y
Barker Station 78	8685 Haight Road	Somerset	Niagara	14102	713639	NM Electric (T/D) Station	N	N	Y
Bartell Road Station 325	9344 Brewerton Road	Cicero	Onondaga	13029	813325	NM Electric (T/D) Station	N	N	Y
Basom Station 15	7229 Allegheny Road	Alabama	Genesee	14103	713640	NM Electric (T/D) Station	N	N	Y
Batavia Station 01	53 Franklin Street	Batavia	Genesee	14020	713526	NM Electric (T/D) Station	N	N	Y
Battenkill Station 342	299 Old Schuylerville Road	Greenwich	Washington			NM Electric (T/D) Station	N	Y	N
Battle Hill Station 949	418 Battle Hill Road	Town of Gouverneur	St. Lawrence	13642		NM Electric (T/D) Station	N	Y	N
Bay Street Station 233	242 Bay Road	Glens Falls	Warren	12801		NM Electric (T/D) Station	N	N	Y
Belmont Station 260	7340 Oswego Road	Clay	Onondaga	13090	813260	NM Electric (T/D) Station	N	N	Y
Bemus Point Station 159	4916 Merritt Road	Ellery	Chautaugua	14712	713805	NM Electric (T/D) Station	N	N	Y
Bennett Road Station 99	10955 Bennett Road	Dunkirk	Chautaugua	14048	713771	NM Electric (T/D) Station	N	N	Y
Berry Road Station 153	4930 Berry Road	Fredonia	Chautaugua	14063	713844	NM Electric (T/D) Station	N	N	Y
Bethlehem Station 21	447 Feura Bush Road	Glenmont	Albany	12077	913021	NM Electric (T/D) Station	N	N	Y
Bevis Hill Station 286	1091 Balltown Road	Niskayuna	Schenectady	12309	913286	NM Electric (T/D) Station	N	N	Y
Birch Avenue Station 322	90 Birch Avenue	Lake George	Warren	12845		NM Electric (T/D) Station	N	N	Y
Black River Station 70	23149 Howe Road Route 3	Leray	Jefferson	13612		NM Electric (T/D) Station	N	Y	N
Bloomington Station 841	1627 NYS Rte. 3	Bloomington	Essex	12913		NM Electric (T/D) Station	N	N	Y
Blue Stores Station 303	2208 Route 9	Germantown	Columbia	12526	913303	NM Electric (T/D) Station	N	N	Y
Bolton Station 284	Potter Hill Road Route 9N	Bolton Landing	Warren	12814		NM Electric (T/D) Station	N	N	Y
Bombay Station 897	1882 State Route 95	Village of Bombay	Franklin	12914		NM Electric (T/D) Station	N	N	Y
Boonville Station 707	1753 State Route 12D	Boonville	Lewis	13433		NM Electric (T/D) Station	N	Y	Y
Boyntonville Station 333	944 Kautz Hollow Road	Johnsonville	Rensselaer	12094	913333	NM Electric (T/D) Station	N	N	Y
Brady Station 957	301 Brady Road	Town of Madrid	St. Lawrence	13660		NM Electric (T/D) Station	N	N	Y
Brasher Station 851	180 County Route 53	Town of Brasher	St. Lawrence	13613		NM Electric (T/D) Station	N	N	Y
Bremen Station 815	9409 Route 812	Town of New Bremen	Lewis	13327		NM Electric (T/D) Station	N	N	Y
Brewerton Station 7	9567 Chestnut Street	Cicero	Onondaga	13029	813007	NM Electric (T/D) Station	N	N	Y
Bridge Street Station 295	3169 Erie Boulevard East	Dewitt	Onondaga	13214	813295	NM Electric (T/D) Station	N	N	Y
Bridgeport Station 168	Kirkville Road	Bridgeport	Onondaga	13030	813168	NM Electric (T/D) Station	N	N	Y
Brier Hill Station 953	2509 State Highway 37	Town of Morristown	St. Lawrence	13614		NM Electric (T/D) Station	N	N	Y
Brigham Road Station 64	10526 Brigham Road	Dunkirk	Chautaugua	14048	713641	NM Electric (T/D) Station	N	N	Y
Brighton Avenue Station 8	430 East Brighton Avenue	Syracuse	Onondaga	13210	813008	NM Electric (T/D) Station	N	Y	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Bristol Hill Station 109	2504 Route 3	Volney	Oswego	13069	813109	NM Electric (T/D) Station	N	Y	N
Brockport Station 74	387 Holley Street	Brockport	Monroe	14420	713534	NM Electric (T/D) Station	N	N	Y
Brook Road Station 369	45 Brook Road	Saratoga	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Browns Falls Station 711	263 Browns Falls Road	Town of Fine	St. Lawrence	13670	813711	NM Electric (T/D) Station	N	Y	Y
Brunswick Station 264	52 White Church Road	Troy	Rensselaer	12180	913264	NM Electric (T/D) Station	N	N	Y
Buckley Corners Station 454	4730 Route 23	Hudson	Columbia	12534	913454	NM Electric (T/D) Station	N	N	Y
Buckley Road Station 140	7333 Buckley Road	Clay	Onondaga	13212	813140	NM Electric (T/D) Station	N	N	Y
Burdeck Street Station 265	929 Burdeck Street	Rotterdam	Schenectady	12306	913265	NM Electric (T/D) Station	N	N	Y
Burgoyne Avenue Station 337	58 Harrison Avenue	Kingsbury	Washington	12839		NM Electric (T/D) Station	N	N	Y
Burnet Avenue Station 9	912 Burnet Avenue	Syracuse	Onondaga	13203	813009	NM Electric (T/D) Station	N	Y	Y
Busti Station 68	1140 Forest Avenue Extension	Busti	Chautaugua	14701	713643	NM Electric (T/D) Station	N	N	Y
Butler Station 362	Butler Road Route 9	Moreau	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Butternut Station 255	6322 Fisher Road	Dewitt	Onondaga	13057	813255	NM Electric (T/D) Station	N	N	Y
Butts Road Station 72	14748 Route 31East	Albion	Orleans	14411	713772	NM Electric (T/D) Station	N	N	Y
Byron Station 18	6808 McElver Road	Byron	Genesee	14422	713585	NM Electric (T/D) Station	N	N	Y
Caledonia Station 44	70 Guthrie Road	Caledonia	Livingston	14423	713645	NM Electric (T/D) Station	N	N	Y
Cambridge Station 29	52 Coila Street	Cambridge	Washington	12816		NM Electric (T/D) Station	N	Y	N
Camillus Station 10	25 Maxwell Road	Camillus	Onondaga	13031	813010	NM Electric (T/D) Station	N	N	Y
Canadice Station 32	Richmond Center Road	Richmond				NM Electric (T/D) Station	N	Y	N
Canajoharie Station 31	208 Erie Boulevard	Canajoharie	Montgomery	13317	913031	NM Electric (T/D) Station	N	N	Y
Canawagus Station	94 River Road	Caledonia	Livingston	14423	713837	NM Electric (T/D) Station	N	N	Y
Cardiff Station 13	5501 Orloff Road	LaFayette	Onondaga	13084	813013	NM Electric (T/D) Station	N	N	Y
Caroga Lake Station 219	175 Outlet Road	Johnstown	Fulton	12095		NM Electric (T/D) Station	N	N	Y
Carr Street Station 3877	64 Carr Street	East Syracuse	Onondaga	13057	813877	NM Electric (T/D) Station	N	Y	N
Carthage Station 717	228 West Street	Carthage	Jefferson	13619		NM Electric (T/D) Station	N	Y	Y
Cassadaga Station 61	14 Fresbee Road	Cassadaga	Chautaugua	14718	713647	NM Electric (T/D) Station	N	N	Y
Castleton Station 36	109 Seaman Avenue	Castleton-on-Hudson	Rensselaer	12033	913036	NM Electric (T/D) Station	N	N	Y
Cattaraugus Station 15	9495 Tannery Road	New Albion	Cattaraugus		713648	NM Electric (T/D) Station	N	N	Y
Cavanaugh Road Station 616	5790 Cavanaugh Road	Marcy	Oneida	13403		NM Electric (T/D) Station	N	N	Y
Cazenovia Station 220	Farnham Street	Cazenovia	Madison		813220	NM Electric (T/D) Station	N	N	Y
Cedar Station 453	126 Queensbury Avenue	Queensbury	Warren	12804	913473	NM Electric (T/D) Station	N	N	Y
Cement Mountain Station 455	539 State Route 29	Easton	Washington	12871		NM Electric (T/D) Station	N	Y	N
Center Street Station 379	220 Kane Road	Fonda	Montgomery	12068		NM Electric (T/D) Station	N	N	Y
Central Avenue Station 235	1140 Central Avenue	Colonie	Albany	12205	913235	NM Electric (T/D) Station	N	N	Y
Central Square Station 15	2341 County Route 12	Hastings	Oswego	13636	813015	NM Electric (T/D) Station	N	N	Y
Chadwicks station 668	9357 Roberts Road	New Hartford	Oneida	13413		NM Electric (T/D) Station	N	N	Y
Charley Lake Station 254	Irish Lane at Gilmantown Road	Wells	Hamilton	12190		NM Electric (T/D) Station	N	N	Y
Charlton Station 222	2296 Route 67	Galway	Saratoga	12074		NM Electric (T/D) Station	N	N	Y
Chasm Falls Station 852	163 County Route 25	Town of Malone	Franklin	12953	813852	NM Electric (T/D) Station	N	N	Y
Chautaugua Station 57	4740 West Lake Road	Cassadaga	Chautaugua	14722	713649	NM Electric (T/D) Station	N	N	Y
Cherry Valley Station 41	209 Main Street	Cherry Valley	Otsego	13320		NM Electric (T/D) Station	N	N	Y
Chestertown Station 42	Knapp Hill Road	Chestertown	Warren	12817		NM Electric (T/D) Station	N	N	Y
Chittenango Station 16	Brinkerhoff Hill Road	Chittenango	Madison		813016	NM Electric (T/D) Station	N	N	Y
Chrysler Avenue Station 257	1700 Brower Street	Schenectady	Schenectady	12307	913257	NM Electric (T/D) Station	N	N	Y
Church Street Station 43	211 Church Street	Amsterdam	Montgomery	12010	913650	NM Electric (T/D) Station	N	N	Y
Cicero Station 17	8460 Brewerton Road	Cicero	Onondaga	13039	813017	NM Electric (T/D) Station	N	N	Y
Clay Hill Station 251	2 Mechanic Street	Hoosick Falls	Rensselaer	12090	913251	NM Electric (T/D) Station	N	Y	N
Clay Station 229	8811 Caughdenoy Road	Clay	Onondaga	13041	813229	NM Electric (T/D) Station	Y	Y	N
Cleveland Station 11	53 West Street	Cleveland	Oswego	13042	813011	NM Electric (T/D) Station	N	N	Y
Clinton Road Station 366	131 Clinton Road	Canajoharie	Montgomery	13317		NM Electric (T/D) Station	N	N	Y
Clinton Station 604	19 McBride Avenue	Clinton	Oneida	13323		NM Electric (T/D) Station	N	N	Y
Cloverbank Station 91	2815 Cloverbank Road	Hamburg	Erie	14075	713653	NM Electric (T/D) Station	N	N	Y
Clymer Station 55	8518 East Main Street	Clymer	Chautaugua	14724	713560	NM Electric (T/D) Station	N	N	Y
Cobleskill Station 214	236 North Street	Cobleskill	Coharie	12043		NM Electric (T/D) Station	N	N	Y
Coffeen Street Station 760	21267 Route 12F	Watertown	Jefferson	13601		NM Electric (T/D) Station	N	Y	Y
Cole Sand & Gravel Station 131	River Road	Caledonia	Monroe	14423	713851	NM Electric (T/D) Station	N	Y	N
Collins Station 83	14109 Bagdad Road	Collins	Erie	14034	713654	NM Electric (T/D) Station	N	N	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Collinsville Station 716	3918 East Road	Town of West Turin	Lewis	13368		NM Electric (T/D) Station	N	N	Y
Colony Station 899	25 Colony Road	Town of Edwards	St. Lawrence	13635		NM Electric (T/D) Station	N	Y	N
Colorforms Station	340 Wales Avenue	City of Tonawanda	Erie			NM Electric (T/D) Station	N	Y	N
Colosse Station 321	38 County Route 58	Mexico	Oswego	13114	813321	NM Electric (T/D) Station	N	N	Y
Colton Station 471	6734 County Route 24	Town of Pierrepont	St. Lawrence	13676	813909	NM Electric (T/D) Station	N	Y	N
Colvin Avenue Station 313	79 Colvin Avenue	Albany	Albany	12206	913313	NM Electric (T/D) Station	N	N	Y
Commerce Avenue Station 235	50 Commerce Avenue	Albany	Albany	12295	913434	NM Electric (T/D) Station	N	N	Y
Comstock Station 48	11458 State Route 22	Fort Ann	Washington	12827		NM Electric (T/D) Station	N	N	Y
Conesus Lake Station 52	6309 West Swamp Road	Conesus	Livingston	14435	713655	NM Electric (T/D) Station	N	N	Y
Conkling Station 652	1602 Saint Agnes Street	Utica	Oneida	13501		NM Electric (T/D) Station	N	N	Y
Constantia Station 19	115 County Route 23	Constantia	Oswego	13044	813019	NM Electric (T/D) Station	N	N	Y
Corfu Station 22	59 Allegheny Road	Corfu	Genesee	14036	713586	NM Electric (T/D) Station	N	N	Y
Corinth Station 285	26 Sherman Avenue	Corinth	Saratoga	12822		NM Electric (T/D) Station	N	N	Y
Corliss Park Station 338	28 New Tumpike Avenue	Lansingburgh/Troy	Rensselaer	12182	913338	NM Electric (T/D) Station	N	N	Y
Coming Station 970	336 County Route 16	Dekalb	St. Lawrence			NM Electric (T/D) Station	N	N	Y
Cortland Station 502	Route 11	Cortlandville	Cortland		813502	NM Electric (T/D) Station	N	Y	Y
Court Street Station 121	3109 Court Street	Salina	Onondaga	13206	813121	NM Electric (T/D) Station	N	N	Y
Cross Street Pump	20 Cross Street	Troy	Rensselaer	12180	913361	NM Electric (T/D) Station	N	N	Y
Crown Point Station 249	13 Ferry Road	Crown Point	Essex	12928		NM Electric (T/D) Station	N	N	Y
Cuba Lake Station 37	5654 State Route 305	Cuba	Allegany		713549	NM Electric (T/D) Station	N	N	Y
Cuba Station 05	13 Keller Street	Cuba	Allegany		713546	NM Electric (T/D) Station	N	N	Y
Curry Road Station 365	2699 Curry Road	Rotterdam	Schenectady	12303	913365	NM Electric (T/D) Station	N	N	Y
Curtis Street Station 224	1380 Route 176	Town of Granby	Oswego	13069	813224	NM Electric (T/D) Station	N	Y	N
Cuyler Station 24	Tripoly Road	Cuyler			813024	NM Electric (T/D) Station	N	N	Y
Darien Station 16	1385 Sumner Road	Darien	Genesee	14040	713657	NM Electric (T/D) Station	N	N	Y
David Station 979	1002 Park Street	City of Ogdensburg	St. Lawrence	13669		NM Electric (T/D) Station	N	N	Y
Debalso Station 684	115 New Hartford Street	New Hartford	Oneida	13413		NM Electric (T/D) Station	N	N	Y
Deerfield Station 606	10129 Mulaney Road	Deerfield	Oneida	13403		NM Electric (T/D) Station	N	N	Y
Defreestville Station 302	1719 Washington Avenue Extension	N Greenbush/Albany	Rensselaer	12144	913302	NM Electric (T/D) Station	N	N	Y
Dekalb Station 984	80 Cousintown Road	Town of Canton	St. Lawrence	13630		NM Electric (T/D) Station	N	N	Y
Delameter Station 93	8175 Delameter Road	Evans	Erie	14006	713826	NM Electric (T/D) Station	N	N	Y
Delanson Station 269	412 Alexander Road	Delanson	Schenectady	12053		NM Electric (T/D) Station	N	N	Y
Delaware Avenue Station 330	272 Delaware Avenue	Albany	Albany	12209	913330	NM Electric (T/D) Station	N	N	Y
Delevan Station 11	3064 California Hill Road	Yorkshire	Cattaraugus		713658	NM Electric (T/D) Station	N	N	Y
Delmar Station 279	112 Adams Street	Delmar	Albany	12054	913279	NM Electric (T/D) Station	N	N	Y
Delphi Station 262	Reservoir Road	Cazenovia	Madison		813262	NM Electric (T/D) Station	N	N	Y
Dennison Station 960	120 Dennison Road	Town of Massena	St. Lawrence	13662		NM Electric (T/D) Station	N	Y	N
Depot Road Station 425	5860 Depot Road	Altamont	Albany	12009	913425	NM Electric (T/D) Station	N	N	Y
Dewitt Station 241	6320 Fisher Road	Dewitt	Onondaga	13057	813241	NM Electric (T/D) Station	Y	Y	N
Dexter Station 726	22912 Route 180	Dexter	Jefferson	13634		NM Electric (T/D) Station	N	N	Y
Dorwin Station 26	224 Ruhamah Avenue	Onondaga	Onondaga	13205	813026	NM Electric (T/D) Station	N	N	Y
Dow Street Station	2521 South Dow Street	Falconer	Chautaugua	14733	713858	NM Electric (T/D) Station	N	Y	N
Drumlins Station 132	219 Tecumseh Road	Dewitt	Onondaga	13224	813132	NM Electric (T/D) Station	N	N	Y
Dugan Road Station 22	1740 Dugan Road	Olean	Cattaraugus		713765	NM Electric (T/D) Station	N	N	Y
Duguid Station 265	5390 Duguid Road	Manlius	Onondaga	13066	813265	NM Electric (T/D) Station	N	N	Y
Dunkirk Station	106 North Point Drive	Dunkirk	Chautaugua	14048	71101	NM Electric (T/D) Station	Y	Y	N
E WORCESTER	Depot Street	East Worces				NM Electric (T/D) Station	N	N	Y
E. J. West Station 38	Conklinville Road, County RT. 4	Hadley	Saratoga	12835		NM Electric (T/D) Station	N	Y	N
Eagle Bay Station 382	1 Route 28	Inlet	Hamilton	13360		NM Electric (T/D) Station	N	N	Y
Eagle Harbor Station 92	3673 Eagle Harbor Road	Albion	Orleans	14411	713659	NM Electric (T/D) Station	N	N	Y
East Batavia Station 28	5182 East Main Street Road	Batavia	Genesee	14020	713524	NM Electric (T/D) Station	N	N	Y
East Conklin Terminal Station 314	401 Smith Avenue	Onondaga	Onondaga	13120	813314	NM Electric (T/D) Station	Y	Y	N
East Dunkirk Station 63	6 Bookstaver Avenue	Dunkirk	Chautaugua	14048	713217	NM Electric (T/D) Station	N	N	Y
East Fulton Station 100	Route 3	Volney	Oswego	13069	813100	NM Electric (T/D) Station	N	N	Y
East Golah Station 51	900 Honeoye Falls # 6 Road	Rush	Monroe	14543	713777	NM Electric (T/D) Station	N	N	Y
East Molloy Road Station 151	6068 Fairway Drive	Dewitt	Onondaga	13057		NM Electric (T/D) Station	N	N	Y
East Newstead Station 06	6880 Scotland Road	Newstead	Erie	14001	716831	NM Electric (T/D) Station	N	N	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
East Norfolk Station 913	5 Island Street	Village of Norfolk	St. Lawrence	13667		NM Electric (T/D) Station	N	N	Y
East Otto Station 28	7858 East Flats Road	E. Otto	Cattaraugus		713662	NM Electric (T/D) Station	N	N	Y
East Pulaski Station 324	30 East Wood Road	Pulaski	Oswego	13142	813324	NM Electric (T/D) Station	N	N	Y
East Schodack Station 501	2350 East Schodack Road	Schodack	Rensselaer	12063	913447	NM Electric (T/D) Station	N	N	Y
East Springfield Station 477	137 County Highway 54	East Springfield	Otsego	13333		NM Electric (T/D) Station	N	N	N
East Syracuse Station 27	420 West Terrace Street	Dewitt	Onondaga	13057	813027	NM Electric (T/D) Station	N	N	Y
East Watertown Station 817	25795 East Gotham Road	Watertown	Jefferson	13601		NM Electric (T/D) Station	N	N	Y
East Worcester Station 430	31 Depot Street	East Worcester	Otsego	12064		NM Electric (T/D) Station	N	N	Y
Eden Center Station 88	2699 Hemlock Road	Eden	Erie	14057	713665	NM Electric (T/D) Station	N	N	Y
Edic Station 662	6087 Edic Road	Marcy	Oneida	13403		NM Electric (T/D) Station	Y	Y	N
Edwards Station 916	1821 County Route 24	Town of Edwards	St. Lawrence	13635		NM Electric (T/D) Station	N	N	Y
Eel Weir Station 915	87 Lee Drive	Town of Oswegatchie	St. Lawrence	13669		NM Electric (T/D) Station	N	Y	N
Elba Station 20	88 South Main Street	Elba	Genesee	14058	713666	NM Electric (T/D) Station	N	N	Y
Elbridge Station 312	5574 Kester Road	Elbridge	Onondaga	13112	813312	NM Electric (T/D) Station	Y	Y	N
Ellicott Station 65	2855 Girls Road Rear	Ellicott	Chautaugua	14701	713667	NM Electric (T/D) Station	N	N	Y
Elm Street Station	100 Elm Street	Buffalo	Erie	14202	713676	NM Electric (T/D) Station	N	Y	N
Elm Street Station 898	24 Junction Road	Village of Malone	Franklin	12953		NM Electric (T/D) Station	N	N	Y
Elnora Station 344	850 Route 146A	Clifton Park	Saratoga	12065	913442	NM Electric (T/D) Station	N	N	Y
Elsmere Station 407	25 Mason Road	Elsmere	Albany	12054	913406	NM Electric (T/D) Station	N	N	Y
Emmet Street Station 256	879 Albany Street	Schenectady	Schenectady	12307	913256	NM Electric (T/D) Station	N	N	Y
Ephratah Station 18	4260 State Highway 10	Saint Johnsville	Fulton	13452		NM Electric (T/D) Station	N	Y	
Euclid Station 267	8511 Morgan Road	Clay	Onondaga	13041	813267	NM Electric (T/D) Station	N	N	Y
Everett Road Station 420	127 Everett Road	Loudonville/Colonie	Albany	12205	913420	NM Electric (T/D) Station	N	N	Y
Fabius Station 55	1425 Route 91	Fabius	Onondaga	13063	813055	NM Electric (T/D) Station	N	N	Y
Fairdale Station 135	1338 County Route 3	Hannibal	Oswego	13074	813135	NM Electric (T/D) Station	N	N	Y
Fairdale Tap Recloser Station 169	1456 County Route 8	Granby	Oswego	13069	813169	NM Electric (T/D) Station	N	Y	N
Fairmount Station 118	5349 Gulf Road	Onondaga	Onondaga	13031	813118	NM Electric (T/D) Station	N	N	Y
Falconer Station	80 South Dow Street	Falconer	Chautaugua	14733	713554	NM Electric (T/D) Station	N	Y	N
Farmersville Station 27	1082 Elton Road	Farmersville	Cattaraugus		713668	NM Electric (T/D) Station	N	N	Y
Faman Road Station 476	Faman Road	Moreau	Saratoga			NM Electric (T/D) Station	N	N	Y
Fay Street Station 103	200 Fay Street	City of Fulton	Oswego	13069	813103	NM Electric (T/D) Station	N	Y	N
Fayette Street Station 28	811 West Fayette Street	Syracuse	Onondaga	13204	813028	NM Electric (T/D) Station	N	N	Y
Fayetteville Station 18	106 Washington Street	Manlius	Onondaga	13066	813014	NM Electric (T/D) Station	N	N	Y
Fenner Wind Farm Station 225	3820 Peterboro Road	Fenner	Madison			NM Electric (T/D) Station	N	Y	N
Feura Bush Station 503	24 Power Park Drive	Bethlehem	Albany	12158	913503	NM Electric (T/D) Station	N	Y	N
Fine Station 978	52 Folsom Road	Town of Fine	St. Lawrence	13639		NM Electric (T/D) Station	N	N	Y
Finley Lake Station 71	10324 School Street	Mina	Chautaugua	14736	713669	NM Electric (T/D) Station	N	N	Y
Firehouse Road Station 449	49 Firehouse Road	Halfmoon	Saratoga	12065	913449	NM Electric (T/D) Station	N	N	Y
Fisher Avenue Station 270	Fisher Avenue	Cortland	Cortland	13077	813270	NM Electric (T/D) Station	N	N	Y
Fly Road Station 261	6701 Benedict Road	Dewitt	Onondaga	13057	813261	NM Electric (T/D) Station	N	N	Y
Fort Covington Station 896	610 Frye Road	Fort Covington	Franklin	12937		NM Electric (T/D) Station	N	N	Y
Fort Gage Station 319	2125 Route 9	Lake George	Warren	12845		NM Electric (T/D) Station	N	N	Y
Forts Ferry Station	100 Spurrybush Road	Latham	Albany	12210		NM Electric (T/D) Station		Y	N
Frankfort Station 677	245 Williams Street	Frankfort	Herkimer	13340		NM Electric (T/D) Station	N	N	Y
Franklin Falls Station 843	1563 County Route 48	Town of Franklin	Franklin	12913	813843	NM Electric (T/D) Station	N	Y	Y
Franklinville Station 24	50 Elm Street	Franklinville	Cattaraugus		713671	NM Electric (T/D) Station	N	N	Y
FREE ST	E. Hiawatha Blvd. (south of Seventh North St.)	Syracuse			813031	NM Electric (T/D) Station	N	N	Y
French Creek Station 56	1310 Redding Road	French Crk	Chautaugua	14736	713809	NM Electric (T/D) Station	N	N	Y
Frewsburg Station 69	27 Railroad Street Rear	Carroll	Chautaugua	14738	713672	NM Electric (T/D) Station	N	N	Y
Front Street Station 360	19 River Street	Schenectady	Schenectady	12305	913360	NM Electric (T/D) Station	N	N	Y
Gabriels Station 835	740 State Route 86	Town of Brighton	Franklin	12970		NM Electric (T/D) Station	N	N	Y
Galeville Station 213	615 Old Liverpool Road	Salina	Onondaga	13088	813213	NM Electric (T/D) Station	N	N	Y
Gardenville Station - New	993 Indian Church Road	West Seneca	Erie	14224	713501	NM Electric (T/D) Station	Y	Y	N
Gardenville Station - Old	885 Indian Church Road	W.Seneca		14224	713501	NM Electric (T/D) Station	Y	Y	N
Gardenville Station - Old (25 Cycle)	885 Indian Church Road	West Seneca	Erie	14224	713501	NM Electric (T/D) Station		Y	N
Gasport Station 90	8000 Slayton Settlement Road	Royalton	Niagara	14067	713674	NM Electric (T/D) Station	N	N	Y
Genesee Street Station 260	1125 Broadway	Albany	Albany	12204	913260	NM Electric (T/D) Station	N	N	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Geneseo Station 55	4676 Lakeville Groveland Road	Geneseo	Livingston	14454	713810	NM Electric (T/D) Station	N	N	Y
Gibson Station 106	3270 Lockport Road	Niagara Falls	Niagara	14305	713303	NM Electric (T/D) Station	N	N	Y
Gilbert Mills Station 247	4383 New York State Route 3	Schroepel	Oswego	13069	813247	NM Electric (T/D) Station	N	N	Y
Gilmantown Road Station 154	Gilmantown Road	Hamilton	Hamilton	12164		NM Electric (T/D) Station	N	N	Y
Gilpin Bay Station 956	4082 State Route 30	Santa Clara	Franklin	12945		NM Electric (T/D) Station	N	N	Y
Glens Falls Station 75	6 Shermanstown Road	Glens Falls	Warren	12801		NM Electric (T/D) Station	N	Y	N
Glenwood Station 227	1055 Glenwood Avenue	Syracuse	Onondaga	13207	813227	NM Electric (T/D) Station	N	N	Y
Gloversville Station 72	23 Foster Street	Gloversville	Fulton	12078		NM Electric (T/D) Station	N	N	Y
Golah Station	300 Golah Road	Rush	Monroe	14543	713522	NM Electric (T/D) Station	N	N	Y
Granby Center Station 293	Oswego County Route 8	Granby	Oswego	13069	813293	NM Electric (T/D) Station	N	N	Y
Grand Street Station 433	109 Aker Drive	Cobleskill	Schoharie	12043		NM Electric (T/D) Station	N	N	Y
Greenbush Station 78	33 Brossel Road	E. Greenbush	Rensselaer	12061	913078	NM Electric (T/D) Station	N	Y	N
Greenhurst Station 60	3045 Sheldon Hall Road	Ellery	Chautaugua		713589	NM Electric (T/D) Station	N	N	Y
Grooms Road Station 345	740 Grooms Road	Clifton Park	Saratoga	12065	913345	NM Electric (T/D) Station	N	N	Y
GROVELAND CORRECTIONAL STA	Route 36 n/o Rte 258	Groveland				NM Electric (T/D) Station	N	N	Y
Groveland Station 41	7429 Groveland Hill Road	Groveland	Livingston	14462	713676	NM Electric (T/D) Station	N	N	Y
Guy Park Station 239	1771 State Highway 5	Fort Johnson	Montgomery	12070		NM Electric (T/D) Station	N	N	Y
Hague Road Station 418	859 Route 9N	Ticonderoga	Essex	12836		NM Electric (T/D) Station	N	N	Y
Hammermill Station 280	103 Mitchell Street	City of Oswego	Oswego	13126	813280	NM Electric (T/D) Station	N	N	Y
Hammond Station 370	100 1/2 Mill Street	Hammond	St. Lawrence	13646		NM Electric (T/D) Station	N	N	Y
Hancock Station 137	1089 East Molloy Road	Salina	Onondaga	13211	813137	NM Electric (T/D) Station	N	N	Y
Harper Station	Royal Avenue	Niagara Falls	Niagara	14303	713302	NM Electric (T/D) Station	N	Y	N
Harper Station (25 Cycle)	4499 Royal Avenue	Niagara Falls	Niagara	14303	713302	NM Electric (T/D) Station	N	Y	N
Harris Road Station 235	5077 Harris Road	Onondaga	Onondaga	13031	813235	NM Electric (T/D) Station	N	Y	Y
Hartfield Station 79	6012 Old Route 17	Chautauqua	Chautaugua	14757	713580	NM Electric (T/D) Station	N	N	Y
Headson Station 146	3167 Erie Boulevard East	Dewitt	Onondaga	13214	813146	NM Electric (T/D) Station	N	Y	N
Hemlock Station 38	7380 Water Street	Hemlock	Livingston	14466	713678	NM Electric (T/D) Station	N	N	Y
Hemstreet Station 328	295 Stillwater Bridge Road	Schaghticoke	Rensselaer	12154	913328	NM Electric (T/D) Station	N	N	Y
Henry Street Station 316	18 Basin Street	Glens Falls	Glens Falls	12801		NM Electric (T/D) Station	N	N	Y
Heuvelton Station 923	85 Union Street	Heuvelton	St. Lawrence	13654	813923	NM Electric (T/D) Station	N	Y	Y
Hill Street Station 311	346 South Main Street	Gloversville	Fulton	12078		NM Electric (T/D) Station	N	N	Y
Hinsdale Station 218	206 Sanderson Drive	Camillus	Onondaga	13031	813218	NM Electric (T/D) Station	N	N	Y
Hoag Station 221	27 Uphams Corner Road	Nassau	Rensselaer	12062	913221	NM Electric (T/D) Station	N	N	Y
HOLLAND PATENT	Ward St. & Steuben St.	Hiland Pnt				NM Electric (T/D) Station	N	N	Y
Homer Station 129	Wall Street	Homer	Cortland		813129	NM Electric (T/D) Station	N	N	Y
Hoosick Station 314	61 Sewer Plant Road	Hoosick	Rensselaer	12090	913314	NM Electric (T/D) Station	N	N	Y
Hopkins Road Station 253	4979 Hopkins Road	Salina	Onondaga	13088	813253	NM Electric (T/D) Station	N	N	Y
Hudson Falls Station 88	531 Lower Allen Street	Hudson Falls	Washington	12839		NM Electric (T/D) Station	N	N	Y
Hudson Station 87	100 Fairview Avenue	Greenport	Columbia	12534	913087	NM Electric (T/D) Station	N	N	Y
Huntley Station	3500 River Road	Town of Tonawanda	Erie	14150		NM Electric (T/D) Station	Y	Y	N
Indian Lake Station 310	Route 30	Indian Lake	Hamilton	12842		NM Electric (T/D) Station	N	N	Y
Indian River Station 323	28288 Rogers Road	Leray	Jefferson	13637		NM Electric (T/D) Station	N	N	Y
Industry Station 47	205 Rush Scotsville Road	Rush	Monroe	14474	713590	NM Electric (T/D) Station	N	N	Y
Inghams Station 20	118 Powerhouse Road	Little Falls	Herkimer	13365		NM Electric (T/D) Station	N	Y	
Inman Road Station 370	2425 Troy Schenectady Road	Niskayuna	Schenectady	12309	913370	NM Electric (T/D) Station	N	N	Y
Jamesville Reclosing Station 152	4419 Apulia Road	Dewitt	Onondaga	13078	813152	NM Electric (T/D) Station	N	Y	N
Jewett Road Station 291	1017 Old Seneca Turnpike	Skaneateles	Onondaga	13152	813291	NM Electric (T/D) Station	N	N	Y
Johnson Road Station 352	571 Columbia Street Extension	Cohoes	Albany	12047	913352	NM Electric (T/D) Station	N	N	Y
Johnsonville Station 315	650 Master Street	Johnsonville	Rensselaer	12094	913315	NM Electric (T/D) Station	N	N	Y
Johnstown Station 61	3 Elizabeth Street	Johnstown	Fulton	12095		NM Electric (T/D) Station	N	N	Y
Judd Road Station 630	Judd Road	Whitesboro	Oneida	13492		NM Electric (T/D) Station	N	N	Y
Juniper Station 500	76 Delmar Bypass Extension	Delmar	Albany	12054	913446	NM Electric (T/D) Station	N	N	Y
Kamer Station 317	3 Jupiter Lane	Colonie	Albany	12205	913317	NM Electric (T/D) Station	N	N	Y
Kenmore Terminal Station 158	2290 Kenmore Avenue	Buffalo	Erie	14207	713796	NM Electric (T/D) Station	N	N	Y
Kensington Terminal Station	366 Scajaquada Street	Buffalo	Erie	14215	713053	NM Electric (T/D) Station	N	Y	N
Knapp Road Station 226	13789 Knapp Road	Newstead	Genesee	14001		NM Electric (T/D) Station	N	N	Y
Knapp Road Station 432	Knapp Hill Road	Chestertown	Warren	12817		NM Electric (T/D) Station	N	N	Y



## ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Knights Creek Station 06	3328 County Road 9	Scio	Allegany		713683	NM Electric (T/D) Station	N	N	Y
Krumkill Station 238	123 Krumkill Road	Albany	Albany	12208	913238	NM Electric (T/D) Station	N	N	Y
Labrador Station 230	Route 91	Truxton			813230	NM Electric (T/D) Station	N	Y	Y
Lafayette Station 301	4180 Dave Tilden Road	Onondaga	Onondaga	13078	813301	NM Electric (T/D) Station	Y	Y	N
Lake Clear Station 833	6412 State Route 30	Town of Harrietstown	Franklin	12945		NM Electric (T/D) Station	N	N	Y
Lake Colby Station 927	173 Trudeau Road	Saint Armand	Essex	12983		NM Electric (T/D) Station	N	Y	Y
Lake Road No. 2 Station 299	439 Lake Road	Town of Scriba	Oswego	13126	813299	NM Electric (T/D) Station	N	N	Y
Lakeport Station 122	Chittenango-Lakeport Road	Sullivan			813122	NM Electric (T/D) Station	N	N	Y
Lakeview Station 182	1740 North Creek Road	Hamburg	Erie	14075		NM Electric (T/D) Station	N	N	Y
Lakeville Station 40	3514 West Lake Road	Livonia	Livingston	14480	713684	NM Electric (T/D) Station	N	N	Y
Langford Station 180	4200 Shirley Road	North Collins	Erie	14111	713685	NM Electric (T/D) Station	N	N	Y
Lansingburgh Station 93	298 5th Avenue	Lansingburgh/Troy	Rensselaer	12182	913093	NM Electric (T/D) Station	N	N	Y
Lapp Station 26	130 Gilbert Street	Leroy	Genesee	14482	713609	NM Electric (T/D) Station	N	N	Y
Latham Station 282	529 Troy Schenectady Road	Latham/Colonie	Albany	12110	913282	NM Electric (T/D) Station	N	N	Y
Lawrence Avenue Station 976	78 Lawrence Avenue	Potsdam	St. Lawrence	13676		NM Electric (T/D) Station	N	N	Y
Leeds Station 377	802 Leeds-Athens Road	Athens/Catskill	Greene	12414	913377	NM Electric (T/D) Station	Y	Y	N
Lehigh Station 669	9 Lehigh Street	Camden	Oneida	13316		NM Electric (T/D) Station	N	N	Y
Lenox Station 513	706 Lenox Avenue	Oneida	Oneida	13421		NM Electric (T/D) Station	N	N	Y
Leray Station 813	100 West Street	Black River Village	Jefferson	13612		NM Electric (T/D) Station	N	N	Y
Levant Station 98	1743 Clay Pond Road	Poland	Chautaugua	14733	713775	NM Electric (T/D) Station	N	N	Y
Levitt Station 665	810 West Embargo Street	Rome	Oneida	13440		NM Electric (T/D) Station	N	N	Y
Liberty Street Station 94	58 River Street	Troy	Rensselaer	12180	913094	NM Electric (T/D) Station	N	Y	N
Lighthouse Hill Station 61	2628 County Route 22	Town of Orwell	Oswego	13302	813061	NM Electric (T/D) Station	N	Y	Y
Lima Station 36	1869 Genesee Street	Lima	Livingston	14485	713686	NM Electric (T/D) Station	N	N	Y
Linden Station 21	5279 Raymond Road	Linden	Genesee	14054	713687	NM Electric (T/D) Station	N	N	Y
Lisbon Station 963	60 Church Street	Village of Lisbon	St. Lawrence	13658		NM Electric (T/D) Station	N	N	Y
Little River Station 955	6100 County Route 27	Town of Canton	St. Lawrence	13617		NM Electric (T/D) Station	N	Y	Y
Livingston Correctional Station 130	3629 OGS Drive	Groveland	Livingston	14462	713843	NM Electric (T/D) Station	N	N	Y
Livonia Station 37	60 Big Tree Street	Livonia	Livingston	14487	713688	NM Electric (T/D) Station	N	N	Y
Lockport Station	707 Hinman Road	Lockport	Niagara	14094	713500	NM Electric (T/D) Station	N	Y	N
Long Lane Station 504	603 Creble Road	Bethlehem	Albany	12158	913504	NM Electric (T/D) Station	N	Y	N
Loon Lake Station 837	20 Oak Lane	Town of Franklin	Franklin	12989		NM Electric (T/D) Station	N	N	Y
Lords Hill Station 150	2860 Route 80	Onondaga	Onondaga	13084	813150	NM Electric (T/D) Station	N	N	Y
Lorings Station 276	Lorings Crossing Road	Cortlandville	Cortland		813276	NM Electric (T/D) Station	N	N	Y
Lowville Station 773	5681 Water Road	Village of Lowville	Lewis	13367		NM Electric (T/D) Station	N	N	Y
Lyme Station 733	28202 County Route 179	Chaumont	Jefferson	13622		NM Electric (T/D) Station	N	N	Y
Lyndonville Station 95	51 Church Street	Lyndonville	Orleans	14098	713689	NM Electric (T/D) Station	N	N	Y
Lynn Street Station 320	2196 Lynn Street	Rotterdam	Schenectady	12306	913320	NM Electric (T/D) Station	N	N	Y
Lysander Station 297	8329 Sixty Road	Lysander	Onondaga	13027	813297	NM Electric (T/D) Station	N	N	Y
Machias Station 13	3455 Route 242	Machias	Cattaraugus		713550	NM Electric (T/D) Station	N	Y	N
Madison Station 654	2037 North Madison Street	Rome	Oneida	13440		NM Electric (T/D) Station	N	N	Y
Mallory Road Station 40	2341 County Route 12	Central Sq/Hastings	Oswego		813125	NM Electric (T/D) Station	N	Y	N
Malone Station 895	334 Webster Street	Town of Malone	Franklin	12953		NM Electric (T/D) Station	N	Y	Y
Malta Station 443	96 Saratoga Boulevard	Malta	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Manlius Station 40	114 Mill Street	Manlius	Onondaga	13104	813040	NM Electric (T/D) Station	N	N	Y
Maplehurst Station 04	1350 Route 446	Hinsdale	Cattaraugus		713690	NM Electric (T/D) Station	N	N	Y
Maplewood Station 307	62 Elm Street	Watervliet	Albany	12189	913307	NM Electric (T/D) Station	N	Y	N
Market Hill Station 324	299 Market Street	Amsterdam	Montgomery	12010		NM Electric (T/D) Station	N	N	Y
Marshville Station 299	6687 State Highway 10	Canajoharie	Montgomery	13317		NM Electric (T/D) Station	N	Y	
Mayfield Station 356	51 North School Street	Mayfield	Fulton	12117		NM Electric (T/D) Station	N		Y
McAdoo Station 914	586 County Route 16	Town of Canton	St. Lawrence	13680		NM Electric (T/D) Station	N	N	Y
McBride Street Station 123	1310 South McBride Street	Syracuse	Onondaga	13202	813123	NM Electric (T/D) Station	N	N	Y
McClellan Street Station 304	791 Central Parkway	Schenectady	Schenectady	12304	913304	NM Electric (T/D) Station	N	N	Y
McCrea Street Station 272	15 McCrea Street	Fort Edward	Washington	12828		NM Electric (T/D) Station	N	N	Y
McGraw Station 228	Bennett Street	McGraw	Cortland		813228	NM Electric (T/D) Station	N	N	Y
McIntyre Station 969	64 McIntyre Road	Town of Oswegatchie	St. Lawrence	13669		NM Electric (T/D) Station	N	Y	N
McKownville Station 327	1543 Western Avenue	Guilderland/Albany	Albany	12203	913327	NM Electric (T/D) Station	N	N	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Mechanicville Station 971	933 Hudson River Road	Halfmoon	Saratoga	12118	911022	NM Electric (T/D) Station	N	Y	N
Meco Station 318	477 Johnson Avenue	Johnstown	Fulton	12095		NM Electric (T/D) Station	N	Y	N
Medina Station	400 Erin Road	Ridgeway	Orleans	14103	713531	NM Electric (T/D) Station	N	Y	N
Menands Station 101	128 Broadway	Menands	Albany	12204	913101	NM Electric (T/D) Station	N	Y	N
Merrillsville Station 838	32 Pine Grove Lane	Town of Franklin	St. Lawrence	12989		NM Electric (T/D) Station	N	N	Y
Messina Station 42	198 Leo Avenue	Dewitt	Onondaga	13206	813042	NM Electric (T/D) Station	N	N	Y
Mexico Station 43	142 Lincoln Avenue	Town of Mexico	Oswego	13114	813043	NM Electric (T/D) Station	N	N	Y
MIDDLE FALLS	Rt. 29/Rt. 4	Greenwich				NM Electric (T/D) Station	N	N	Y
Middleburg Station 390	166 Wells Avenue	Middleburg	Schoharie	12122		NM Electric (T/D) Station	N	N	Y
Middleport Station 77	30 South Vernon Street	Middleport	Niagara	14105	713401	NM Electric (T/D) Station	N	N	Y
Middleville Station 666	22 Reservoir Road	Middleville	Herkimer	13406		NM Electric (T/D) Station	N	N	Y
Midler Station 145	6010 Court Street	Dewitt	Onondaga	13206	813145	NM Electric (T/D) Station	N	N	Y
Mill Street Station 748	250 Mill Street	Watertown	Jefferson	13601		NM Electric (T/D) Station	N	N	Y
Miller Street Station 117	Miller Street	Cortland			813117	NM Electric (T/D) Station	N	N	Y
Milton Avenue Station 266	4010 Milton Avenue	Camillus	Onondaga	13031	813266	NM Electric (T/D) Station	N	N	Y
Mine Road Station 777	127 County Route 19	Town of Edwards	St. Lawrence	13635		NM Electric (T/D) Station	N	Y	N
Minoa Station 44	298 Baird Street	Manlius	Onondaga	13116	813044	NM Electric (T/D) Station	N	Y	Y
Mohican Station 247	Bluebird Road	Moreau	Warren	12803		NM Electric (T/D) Station	N	N	Y
Moir Station 859	982 US Route 11	Town of Moira	Franklin	12957		NM Electric (T/D) Station	N	N	Y
Morristown Station 933	9503 State Route 58	Town of Morristown	St. Lawrence	13664		NM Electric (T/D) Station	N	N	Y
Mortimer Station	1430 Brighton-Henrietta Town Line Road	Brighton	Monroe	14610	713520	NM Electric (T/D) Station		Y	N
Mountain Station	709 Upper Mountain Road	Lewiston	Niagara	14092	713243	NM Electric (T/D) Station	N	Y	N
Mumford Station 50	47 Guthrie Rd	Caldonia	Livingston	14423	713694	NM Electric (T/D) Station	N	N	Y
Munson Corners Station 130	Saunders Road	Cortlandville			813130	NM Electric (T/D) Station	N	Y	Y
Nassau Station 113	7 John Street	Nassau	Rensselaer	12123	913113	NM Electric (T/D) Station	N	N	Y
Nestle Company Station 245	7 Burt Street	Fulton	Oswego	13069	813245	NM Electric (T/D) Station	N	N	Y
New Haven Station 256	3565 County Route 6	New Haven	Oswego	13114	813256	NM Electric (T/D) Station	N	N	Y
New Krumkill Station 421	Krumkill Road	Albany	Albany	12208	913421	NM Electric (T/D) Station	N	N	Y
New Scotland Station 325	152 New Scotland South Road	New Scotland	Albany	12159	913325	NM Electric (T/D) Station	Y	Y	N
New Walden Station	1880 Dale Road	Cheektowaga	Erie	14225	713848	NM Electric (T/D) Station	N	Y	N
Newark Station 300	Newark Street	Cohoes	Albany	12047	913300	NM Electric (T/D) Station	N	N	Y
Newstead Station 14	6000 Buell Street	Newstead	Erie	14001	713692	NM Electric (T/D) Station	N	N	Y
Newton Falls Station 774	791 County Route 60	Town of Clifton	St. Lawrence	13666		NM Electric (T/D) Station	N	N	Y
Newtonville Station 305	642 New Loudon Road	Latham	Albany	12110	913305	NM Electric (T/D) Station	N	N	Y
Nicholville Station 860	152 Port Kent Road	Town of Lawrence	St. Lawrence	12930		NM Electric (T/D) Station	N	Y	Y
Nile Station	4465 Route 275	Friendship	Allegany		713615	NM Electric (T/D) Station	N	Y	N
Niles Station 294	919 Mandana Road	Skaneateles	Onondaga	13152	813294	NM Electric (T/D) Station	N	N	Y
Niles Tap Station T401	Elizabeth Street	Skaneateles	Onondaga			NM Electric (T/D) Station	N	Y	N
Norfolk Station 934	100-D Remington Avenue	Village of Norfolk	St. Lawrence	13667		NM Electric (T/D) Station	N	Y	N
North Akron Station	13789 Knapp Road	Newstead	Erie	14001	713583	NM Electric (T/D) Station	N	Y	N
North Angola Station	2 Gowans Road	Angola	Erie	14006	713616	NM Electric (T/D) Station	N	Y	N
North Ashford Station 36	7025 Henrietta Road	Ashford	Cattaraugus		713584	NM Electric (T/D) Station	N	Y	N
North Bangor Station 864	1231 County Route 22	Town of Bangor	Franklin	12986		NM Electric (T/D) Station	N	N	Y
North Carthage Station 816	22398 County Route 42	Wilna	Jefferson	13619	813816	NM Electric (T/D) Station	N	Y	Y
North Chautauqua Station	7024 McKay Road	Mayville	Chautauqua	14757	713596	NM Electric (T/D) Station	N	N	Y
North Collins Station 92	1978 Brant-North Collins Road	Brant	Erie	14027	713599	NM Electric (T/D) Station	N	N	Y
North Creek Station 122	Route 28	North Creek	Warren	12853		NM Electric (T/D) Station	N	N	Y
North Eden Station 82	8222 North Main Street	Eden	Erie	14057	713781	NM Electric (T/D) Station	N	N	Y
North Gouverneur Station 983	24 Little Bow Road	Town of Gouverneur	St. Lawrence	13642		NM Electric (T/D) Station	N	Y	Y
North Lakeville Station	3398 West Lake Road Route 256	Geneseo	Livingston	14480	713591	NM Electric (T/D) Station	N	Y	N
North Lawrence Station 861	2082 State Route 11C	Lawrence	St. Lawrence	12967		NM Electric (T/D) Station	N	N	Y
North LeRoy Station (Transmission)	8778 West Bergen Road	Leroy	Genesee	14482	713617	NM Electric (T/D) Station	N	Y	N
North LeRoy Station 04	8772 West Bergen Road	Leroy	Genesee	14482		NM Electric (T/D) Station	N	N	Y
North Olean Station 30	310 West Oak Street	Olean	Cattaraugus		713598	NM Electric (T/D) Station	N	N	Y
North River Recloser	NYS Route 28 Reference Marker 28-2209-147	NORTH RIVER	Hamilton	12856		NM Electric (T/D) Station	N	Y	N
North Troy Station 123	166 Plank Road	Troy	Rensselaer	12182	913123	NM Electric (T/D) Station	N	Y	N
Northville Station 332	542 State Highway 30	Northville	Fulton	12134		NM Electric (T/D) Station	N		Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Norwood Station 928	121 County Route 48	Village of Norwood	St. Lawrence	13668	813936	NM Electric (T/D) Station	N	N	Y
Oak Hill Station 62	2855 Girls Road	Ellicott	Chautaugua	14701	713695	NM Electric (T/D) Station	N	N	Y
Oakfield Station 03	67 Maple Avenue	Oakfield	Genesee	14125	713528	NM Electric (T/D) Station	N	N	Y
Oathout Station 402	674 Watervliet Shaker Road	Latham	Albany	12110	913402	NM Electric (T/D) Station	N	N	Y
Ogdenbrook Station 423	352 Upper Sherman Avenue	Queensbury	Warren	12804		NM Electric (T/D) Station	N	N	Y
Ogdensburg Station 938	25 Mill Street	City of Ogdensburg	St. Lawrence	13669		NM Electric (T/D) Station	N	N	Y
Ogdensburg Stone Station 932	800 Cedar St	City of Ogdensburg	St. Lawrence	13669		NM Electric (T/D) Station	N	N	Y
Ohav Shalom	38 Endicott Avenue	Albany	Albany	12208		NM Electric (T/D) Station	N	N	Y
Old Forge Station 383	130 Railroad Avenue	Old Forge	Herkimer	13420		NM Electric (T/D) Station	N	N	Y
Oneida Station 501	4966 Hill Road	Verona	Oneida	13478		NM Electric (T/D) Station	N	Y	Y
Orangeville Station 19	3411 Buffalo Road	Orangeville	Wyoming	14569	713696	NM Electric (T/D) Station	N	N	Y
Oriskany Station 648	520 Utica Street	Oriskany	Oneida	13424		NM Electric (T/D) Station	N	N	Y
Otten Station 412	47 Ottenburg Road	Dresden	Washington	14441		NM Electric (T/D) Station	N	N	Y
Packard Station	1650 New Road	Niagara Falls	Niagara	14304	713242	NM Electric (T/D) Station	Y	Y	N
Palette Stone Station 103						NM Electric (T/D) Station	N	Y	N
Paloma Station 254	367-1/2 West Third Street	City of Oswego	Oswego	13126	813254	NM Electric (T/D) Station	N	N	Y
Panama Station 70	1580 Eddy Road	Panama	Chautaugua	14767	713697	NM Electric (T/D) Station	N	N	Y
Parish Station 49	316 South Railroad Street	Town of Parish	Oswego	13131	813049	NM Electric (T/D) Station	N	N	Y
Parishville Station 939	56 Powerhouse Road	Town of Parishville	St. Lawrence	13676	813934	NM Electric (T/D) Station	N	N	Y
Park Street Station 144	620 Park Street	Syracuse	Onondaga	13203	813144	NM Electric (T/D) Station	N	N	Y
Partridge Street Station 128	58 Partridge Street	Albany	Albany	12203	913128	NM Electric (T/D) Station	N	Y	N
Patroon Station 323	36 Kneeland Avenue	Albany	Albany	12205	913323	NM Electric (T/D) Station	N	Y	N
Paul Smiths Station 384	7662 State Route 30	Town of Brighton	Franklin	12970		NM Electric (T/D) Station	N	N	Y
Peat Street Station 250	133 Kidd Avenue	Syracuse	Onondaga	13210	813250	NM Electric (T/D) Station	N	N	Y
Pebble Hill Station 290	230 Andrews Road	Dewitt	Onondaga	13214	813290	NM Electric (T/D) Station	N	Y	Y
Perryville Station 50	Chittenango-Perryville Road	Sullivan			813050	NM Electric (T/D) Station	N	N	Y
Peterboro Station 514	570 North Peterboro Street	Canastota	Oneida	13032		NM Electric (T/D) Station	N	N	Y
Petrolia Station 19	5174 Bill Allen Hill Road	Scio	Allegany		713700	NM Electric (T/D) Station	N	N	Y
Phoenix Station 51	94 State Street	Phoenix	Oswego	13135	813051	NM Electric (T/D) Station	N	N	Y
Piercefield Station 502	15375 State Route 3	Town of Piercefield	St. Lawrence	12973		NM Electric (T/D) Station	N	N	Y
Pine Grove Station 59	7817 Thompson Road	Cicero	Onondaga	13212	813059	NM Electric (T/D) Station	N	N	Y
Pinebush Station 371	20 Karner Road	Guiderland	Albany	12084	913371	NM Electric (T/D) Station	N	N	Y
Pleasant Station 664	45 Pleasant Street	Utica	Oneida	13501		NM Electric (T/D) Station	N	N	Y
Poland Station 621	31 Mill Street	Poland	Herkimer	13431		NM Electric (T/D) Station	N	N	Y
Poland Station 66	1035 Poland Center Road	Poland	Chautaugua	14747	713701	NM Electric (T/D) Station	N	N	Y
Pompey Station 120	3127 Route 91	Pompey	Onondaga	13078	813120	NM Electric (T/D) Station	N	N	Y
Port Henry Station 385	59 Switchback Road	Moriah	Essex	12960		NM Electric (T/D) Station	N	N	Y
Port Leyden Station 755	6891 Leyden Road	Town of Leyden	Lewis	13433		NM Electric (T/D) Station	N	N	Y
Portage Street Station 754	432 Portage Street	Watertown	Jefferson	13601		NM Electric (T/D) Station	N	N	Y
Porter Station 657	6012 Edic Road	Marcy	Oneida	13403		NM Electric (T/D) Station	Y	Y	N
Portland Station 75	Walker Road	Portland	Chautaugua		713759	NM Electric (T/D) Station	N	N	Y
Pottersville Station 424	Route 9	Chester	Warren	10918		NM Electric (T/D) Station	N	N	Y
Price Corners Station 14	2960 Coldspring Road	Randolph	Cattaraugus		713820	NM Electric (T/D) Station	N	N	Y
Prospect Hill Station 413	67 Middletown Road	Waterford	Saratoga	12188	913413	NM Electric (T/D) Station	N	N	Y
Pulaski Station 68	126 Lake Street	Village of Pulaski	Oswego	13142	813068	NM Electric (T/D) Station	N	N	Y
Quality Inn	Everett Road	Albany	Albany	12203		NM Electric (T/D) Station	N	N	Y
Queensbury Station 295	20 Country Club Road	Queensbury	Warren	12804		NM Electric (T/D) Station	N	Y	N
Raquette Lake Station 398	170 Route 28	Raquette Lake	Hamilton	13436		NM Electric (T/D) Station	N	N	Y
Rathbun Station 160	Ski Club Road	Cazenovia			813160	NM Electric (T/D) Station	N	Y	N
Raybrook Station 839	1081 NYS Rte. 86	Village of Raybrook	Essex	12977		NM Electric (T/D) Station	N	N	Y
Rensselaer Station 132	50 Aiken Avenue	Rensselaer	Rensselaer	12144	913132	NM Electric (T/D) Station	N	N	Y
Reservoir Station 102	2056 West Perimeter Road	Coldspring	Cattaraugus		713860	NM Electric (T/D) Station	N	N	Y
Reynolds Road Station 334	432 Blooming Grove	North Greenbush	Rensselaer	12180	913334	NM Electric (T/D) Station	Y	Y	N
Richmond Station 32	4826 County Road 37	Richmond	Ontario	14471	713703	NM Electric (T/D) Station	N	N	Y
Richville	Exit Rte 11 onto Richville-Bigelow Rd for 1.5 mi	Gouverneur				NM Electric (T/D) Station	N	N	Y
Ridge Road Station 219	Ridge Road	Cazenovia			813219	NM Electric (T/D) Station	N	N	Y
Ridge Station	222 Lehigh Avenue	Lackawanna	Erie		713083	NM Electric (T/D) Station	N	Y	N



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## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Riparius Station 293	Route 8	Chester	Warren	10918		NM Electric (T/D) Station	N	N	Y
Ripley Station 53	15 Burton Avenue	Ripley	Chautaugua	14775	713559	NM Electric (T/D) Station	N	N	Y
Riverside Station 288	15 Erie Boulevard	Albany	Albany	12207	913288	NM Electric (T/D) Station	N	Y	N
Riverview Station 847	452 Soucy Road	Town of Black Brook	Clinton			NM Electric (T/D) Station	N	N	Y
Roberts Road Station 154	500 Roberts Road	Dunkirk	Chautaugua	14048	713221	NM Electric (T/D) Station	N	N	Y
Rock City Falls Station 404	11 Cottrell Lane	Milton	Saratoga	12547	913404	NM Electric (T/D) Station	N	N	Y
Rock City Station 623	201 Southern Avenue	Little Falls	Herkimer	13365		NM Electric (T/D) Station	N	N	Y
Rock Cut Station 286	580 East Brighton Avenue	Syracuse	Onondaga	13210	813286	NM Electric (T/D) Station	N	N	Y
Rome Station 762	233 Kingsley Avenue	Rome	Oneida	13440		NM Electric (T/D) Station	N	Y	Y
Rosa Road Station 137	1500 Hillside Avenue	Niskayuna	Schenectady	12309	913137	NM Electric (T/D) Station	N	Y	N
Rotterdam Station 138	18 Schermerhorn Road	Rotterdam	Schenectady	12306	913138	NM Electric (T/D) Station	Y	Y	N
Royalton Station 98	5681 Royalton Center Road	Royalton	Niagara	14067	713706	NM Electric (T/D) Station	N	N	Y
Rush Station 34	707 West Rush Road	Rush	Monroe	14543	713707	NM Electric (T/D) Station	N	N	Y
Ruth Road Station 381	4112A Albany Street	Colonie	Albany	12304	913381	NM Electric (T/D) Station	N	N	Y
Saint Claires Hospital	600 McClellan Street	Schenectady	Schenectady	12304		NM Electric (T/D) Station	N	N	Y
Saint Johnsville Station 335	45 Hough Street	Saint Johnsville	Montgomery	13452		NM Electric (T/D) Station	N	N	Y
Saint Peters Hospital 411	315 South Manning Boulevard	Albany	Albany	12208	913411	NM Electric (T/D) Station	N	N	Y
Saint Regis Station 977	349 State Route 37C	Town of Bombay	Franklin	13655	813977	NM Electric (T/D) Station	N	N	Y
Salisbury Station 678	411 Burrell Road	Little Falls	Herkimer	13495		NM Electric (T/D) Station	N	N	Y
Sanborn Station	2171 Saunders Settlement Road	Sanborn	Niagara		713244	NM Electric (T/D) Station	N	Y	N
Sand Creek Station 452	603 Sand Creek Road	Colonie	Albany	12205	913452	NM Electric (T/D) Station	N	N	Y
Sand Road Station 131	149 Sand Road	Salina	Onondaga	13212	813131	NM Electric (T/D) Station	N	N	Y
Sandstone Storage Yard 925	124 County Route 59	Village of Hannawa	St. Lawrence	13676		NM Electric (T/D) Station	N	Y	N
Sandy Creek Station 66	2101 County Route 15	Sandy Creek Village	Oswego	13145	813066	NM Electric (T/D) Station	N	N	Y
Saratoga Station 142	51 Excelsior Avenue	Saratoga	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Sarles Station 500	172 Sarles Ferry Road	Easton	Washington	12871		NM Electric (T/D) Station	N	N	Y
Sawyer Avenue Station	354 Kaufman Avenue	Town of Tonawanda	Erie	14150		NM Electric (T/D) Station	N	Y	N
Schenevus Station 261	39 Depot Street	Schenevus	Otsego	12155		NM Electric (T/D) Station	N	N	Y
Schodack Station 451	2033 Brookview Road	Schodack	Rensselaer	12033	913451	NM Electric (T/D) Station	N	N	Y
Schoharie Station 234	111 Mix Lane	Schoharie	Schoharie	12157		NM Electric (T/D) Station	N	N	Y
School Street Station 975	School Street	Cohoes	Albany	12045	913031	NM Electric (T/D) Station	N	Y	N
Schroon Lake station 429	47 Brookfield Avenue	Easton	Essex	12936		NM Electric (T/D) Station	N	N	Y
Schuyler Station 663	2354 Broad Street	Schuyler	Oneida	13501		NM Electric (T/D) Station	N	Y	N
Schuylerville Station 39	Burgoyne Road Route 4	Saratoga	Saratoga	12866		NM Electric (T/D) Station	N	Y	N
Scofield Road Station 450	Scofield Road	Lake Luzerne	Warren	12846		NM Electric (T/D) Station	N	N	Y
Scotia Station 255	300 Washington Avenue	Scotia	Schenectady	12302	913255	NM Electric (T/D) Station	N	N	Y
Scotland Road Switch Structure	7480 Scotland Road	Newstead	Erie	14001		NM Electric (T/D) Station	N	Y	N
Scriba Station 319	439 Lake Road	Town of Scriba	Oswego	13126	813319	NM Electric (T/D) Station	Y	Y	N
Sealright Station 273	322 South First Street	Town of Fulton	Oswego	13069	813273	NM Electric (T/D) Station	N	N	Y
Selkirk Station 149	23 Speeder Road	Selkirk/Bethlehem	Albany	12150	913149	NM Electric (T/D) Station	N	N	Y
Seminole Station 339	16 Seminole Avenue	Albany	Albany	12203	913339	NM Electric (T/D) Station	N	N	Y
Seneca Hill Station 206	3672 County Route 57	Volney	Oswego	13069	813206	NM Electric (T/D) Station	N	N	Y
Seneca Junction Station 20	5490 Route 417	Carrollton	Cattaraugus		713711	NM Electric (T/D) Station	N	N	Y
Seneca Terminal Station	447 Bailey Avenue	Buffalo	Erie		713052	NM Electric (T/D) Station	N	Y	N
Sentinel Heights Station 128	3749 Sentinel Heights Road	Onondaga	Onondaga	13084	813128	NM Electric (T/D) Station	N	N	Y
Seventh Avenue Station 244	2901 7th Avenue	Troy	Rensselaer	12180	913244	NM Electric (T/D) Station	N	N	Y
Seventh North Street Station 231	7437 Henry Clay Boulevard	Clay	Onondaga	13088	813231	NM Electric (T/D) Station	N	N	Y
Sewalls Island Station 766	462 Pearl Street	Watertown	Jefferson	13601	813766	NM Electric (T/D) Station	N	N	Y
Shaleton Station 81	2301 Pleasant Avenue	Hamburg	Erie	14085	713563	NM Electric (T/D) Station	N	N	Y
Sharon Station 363	1347 Highway Route 20	Sharon Springs	Schoharie	13459		NM Electric (T/D) Station	N	N	Y
Shelby Station 76	4063 Bates Road	Shelby	Orleans	14103	713803	NM Electric (T/D) Station	N	N	Y
Sheppard Road Station 29	6389 Sheppard Road	Pavillion	Genesee	14525	713812	NM Electric (T/D) Station	N	N	Y
Sherman Station 333	8800 Trenton Falls Road	Barnesville	Oneida	13304		NM Electric (T/D) Station	N	N	Y
Sherman Station 54	106 Hart Street	Sherman	Chautaugua	14781	713557	NM Electric (T/D) Station	N	N	Y
Shore Road Station 281	7 Main Street	Ballston Lake	Saratoga	12019	913281	NM Electric (T/D) Station	N	N	Y
Silver Lake Station 845	2498 Silver Lake Road	Town of Black Brook	Clinton	12989		NM Electric (T/D) Station	N	N	Y
Sinclairville Station 72	15 Sylvester Road	Sinclairville	Chautaugua	14782	713405	NM Electric (T/D) Station	N	N	Y



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## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Smith Bridge Station 464	Route 9	Wilton	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Solvay Station 57	216 Bridge Street	Geddes	Onondaga	13209	813057	NM Electric (T/D) Station	N	Y	N
Sorrell Hill Station 269	7959 Crego Road	VanBuren	Onondaga	13027	813269	NM Electric (T/D) Station	N	N	Y
South Bay Station 60	7909 Ontario Avenue	Cicero	Onondaga	13039	813060	NM Electric (T/D) Station	N	N	Y
South East Batavia Station	163 Cedar Street	Batavia	Genesee	14020	713834	NM Electric (T/D) Station	N	Y	N
South Oswego Station 292	300 Liberty Street	City of Oswego	Oswego	13126	813292	NM Electric (T/D) Station	N	Y	N
South Philadelphia Station 764	32825 Route 11	Philadelphia	Jefferson	13673		NM Electric (T/D) Station	N	N	Y
South Randolph Station 32	11656 Archer Hill Road	Randolph	Cattaraugus		713408	NM Electric (T/D) Station	N	N	Y
South Ripley Station	10708 North East-Sherman Road	Ripley	Chautaugua	14775	713850	NM Electric (T/D) Station	N	Y	N
South Street Station 297	40 South Street	Saratoga Springs	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
South Washington Street Station 614	183 Marginal Road	Herkimer	Oneida	13350	614	NM Electric (T/D) Station	N	N	Y
South Wellsville Station 23	2440 State Route 19	Wellsville	Allegany		713714	NM Electric (T/D) Station	N	N	Y
Southwood Station 244	6301 East Seneca Turnpike	Dewitt	Onondaga	13078	813244	NM Electric (T/D) Station	N	N	Y
Spencers Corners Station 863	1 Cady Road	Town of Malone	Franklin	12953		NM Electric (T/D) Station	N	N	Y
Spier Falls Station 34	296 Spier Falls Road	Moreau	Saratoga	12822		NM Electric (T/D) Station	N	Y	N
Springfield Station 167	5789 Thompson Road	Dewitt	Onondaga	13214	813167	NM Electric (T/D) Station	N	N	Y
Star Lake Station 727	4693 State Route 3	Town of Clifton	St. Lawrence	13690		NM Electric (T/D) Station	N	N	Y
Starr Road Station 334	Saunders Road	Cortlandville	Cortland		813134	NM Electric (T/D) Station	N	N	Y
State Street Station 954	123 State Street	Village of Canton	St. Lawrence	13617		NM Electric (T/D) Station	N	N	Y
Station 003	30 Staats Street	Buffalo	Erie	14201	713003	NM Electric (T/D) Station	N	N	Y
Station 012	809 Perry Street	Buffalo	Erie	14210	713012	NM Electric (T/D) Station	N	N	Y
Station 014	25 Short Street	Buffalo	Erie	14207	713014	NM Electric (T/D) Station	N	N	Y
Station 021	3978 Main Street	Amherst	Erie	14226	713021	NM Electric (T/D) Station	N	N	Y
Station 022	346 Kenmore Avenue	Buffalo	Erie	14223	713022	NM Electric (T/D) Station	N	N	Y
Station 023	906 Kenmore Avenue	Buffalo	Erie	14216	713023	NM Electric (T/D) Station	N	N	Y
Station 024	1596 Kenmore Avenue	Buffalo	Erie	14216	713024	NM Electric (T/D) Station	N	N	Y
Station 024A	1648 Kenmore Avenue	Buffalo	Erie	14216	713124	NM Electric (T/D) Station	N	Y	N
Station 025	678 Tonawanda Street	Buffalo	Erie	14207	713025	NM Electric (T/D) Station	N	N	Y
Station 026	1675 Hertel Avenue	Buffalo	Erie	14216	713026	NM Electric (T/D) Station	N	N	Y
Station 027	100 Jewett Avenue	Buffalo	Erie	14214	713027	NM Electric (T/D) Station	N	N	Y
Station 028	2858 Bailey Avenue	Buffalo	Erie	14215	713028	NM Electric (T/D) Station	N	N	Y
Station 029	339 Potomac Avenue	Buffalo	Erie	14213	713029	NM Electric (T/D) Station	N	N	Y
Station 030	50 Spillman Place	Buffalo	Erie	14208	713030	NM Electric (T/D) Station	N	N	Y
Station 031	454 East Delavan	Buffalo	Erie	14214	713031	NM Electric (T/D) Station	N	N	Y
Station 032	2462 Bailey Avenue	Buffalo	Erie	14215	713032	NM Electric (T/D) Station	N	N	Y
Station 033	508 West Avenue	Buffalo	Erie	14213	713033	NM Electric (T/D) Station	N	N	Y
Station 034	439 Best Street	Buffalo	Erie	14208	713034	NM Electric (T/D) Station	N	N	Y
Station 035	23 Walden Avenue	Buffalo	Erie	14211	713035	NM Electric (T/D) Station	N	N	Y
Station 036	11 Sumner Place	Buffalo	Erie	14211	713036	NM Electric (T/D) Station	N	N	Y
Station 037	269 Hudson Street	Buffalo	Erie	14201	713037	NM Electric (T/D) Station	N	N	Y
Station 038	500 Spring Street	Buffalo	Erie	14204	713038	NM Electric (T/D) Station	N	N	Y
Station 039	856 William Street	Buffalo	Erie	14206	713039	NM Electric (T/D) Station	N	N	Y
Station 040	1494 William Street	Buffalo	Erie	14206	713040	NM Electric (T/D) Station	N	N	Y
Station 041	302 Perry Street	Buffalo	Erie	14204	713041	NM Electric (T/D) Station	N	N	Y
Station 042	600 Ohio Street	Buffalo	Erie	14203	713814	NM Electric (T/D) Station	N	N	Y
Station 043	1744 Seneca Street	Buffalo	Erie	14210	713043	NM Electric (T/D) Station	N	N	Y
Station 044	1926 South Park Avenue	Buffalo	Erie	14220	713044	NM Electric (T/D) Station	N	N	Y
Station 046	2386 South Park Avenue	Buffalo	Erie	14220	713046	NM Electric (T/D) Station	N	N	Y
Station 047	3530 River Road	Buffalo	Erie	1450	713047	NM Electric (T/D) Station	N	N	Y
Station 048	58 Gelston Street	Buffalo	Erie	14213	713048	NM Electric (T/D) Station	N	N	Y
Station 048A	58 Gelston Street	Buffalo	Erie	14213	713348	NM Electric (T/D) Station	N	Y	N
Station 049	45 Best Street	Buffalo	Erie	14209	713049	NM Electric (T/D) Station	N	N	Y
Station 050	Foot of Porter Avenue	Buffalo	Erie	14201	713050	NM Electric (T/D) Station	N	N	Y
Station 051	628 Elk Street	Buffalo	Erie	14210	713051	NM Electric (T/D) Station	N	N	Y
Station 052	854 Hertel Avenue	Buffalo	Erie	14216	713071	NM Electric (T/D) Station	N	N	Y
Station 053	3210 Bailey Avenue	Buffalo	Erie	14215	713072	NM Electric (T/D) Station	N	N	Y
Station 054	5140 Main	Amherst	Niagara	14211	713054	NM Electric (T/D) Station	N	N	Y



**ATTACHMENT 6**

**Substation List**

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Station 055	1961 Electric Avenue	Lackawanna	Niagara	14218	713055	NM Electric (T/D) Station	N	N	Y
Station 056	32 Barton Court	Tonawanda	Erie	14217	713056	NM Electric (T/D) Station	N	N	Y
Station 057	1834 Colvin Boulevard	Tonawanda	Erie	14150	713057	NM Electric (T/D) Station	N	N	Y
Station 058	4521 Harlem Road	Amherst	Erie	14226	713128	NM Electric (T/D) Station	N	N	Y
Station 059	809 Perry Street	Buffalo	Erie	14210	713059	NM Electric (T/D) Station	N	N	Y
Station 060	145 Haussauer Road	Amherst	Erie	14068	713060	NM Electric (T/D) Station	N	Y	N
Station 061	394 Heather Road	Cheektowag	Erie	14225	713061	NM Electric (T/D) Station	N	N	Y
Station 063	553 Highland Avenue	Tonawanda	Niagara	14223	713085	NM Electric (T/D) Station	N	N	Y
Station 064	1571 Whitehaven Road	Gr. Island	Erie	14072	713815	NM Electric (T/D) Station	N	N	Y
Station 066	3030 Union Road	Cheek	Erie	14227	713066	NM Electric (T/D) Station	N	N	Y
Station 067	6449 Main Street	Amherst	Erie	14221	713075	NM Electric (T/D) Station	N	N	Y
Station 068	538 Elmwood Avenue	Buffalo	Erie	14222	713076	NM Electric (T/D) Station	N	N	Y
Station 071	499-500 Robinson Road	North Tonawanda	Niagara	14120		NM Electric (T/D) Station	N	N	Y
Station 071 - South Newfane	3745 Lockport-Olcott Road	South Newfane	Niagara	14094	713400	NM Electric (T/D) Station	N	N	Y
Station 074	644 Military Road	Tonawanda	Erie	14150	713204	NM Electric (T/D) Station	N	N	Y
Station 076 - Shawnee Road	5722 Shawnee Road	Cambria	Niagara		713827	NM Electric (T/D) Station	N	N	Y
Station 077	54 East Avenue	Tonawanda	Erie		713209	NM Electric (T/D) Station	N	N	Y
Station 078	Foot of Fassett Street	North Tonawanda	Niagara	14120	713078	NM Electric (T/D) Station	N	N	Y
Station 079	5 Ridge Street	Noth Tonawanda	Niagara	14120	713210	NM Electric (T/D) Station	N	N	Y
Station 080 - Eighth Street	531 Eighth Street	Niag Falls	Niagara	14301	713230	NM Electric (T/D) Station	N	N	Y
Station 081 - Beech Avenue	1301 Beech Avenue	Niagara Falls	Niagara	14305	713228	NM Electric (T/D) Station	N	N	Y
Station 082 - Eleventh Street	1902 Eleventh Street	Niagara Falls	Niagara	14305	713245	NM Electric (T/D) Station	N	N	Y
Station 083 - Welch Avenue	2250 Welch Avenue	Niagara Falls	Niagara	14303	713229	NM Electric (T/D) Station	N	N	Y
Station 085 - Stephenson Avenue	7420 Stephenson Avenue	Niagara Falls	Niagara	14304	713232	NM Electric (T/D) Station	N	N	Y
Station 086 - Lewiston Heights	5340 Military Road	Lewiston	Niagara	14092	713235	NM Electric (T/D) Station	N	N	Y
Station 087 - Lewiston	320 North 5th Street	Lewiston	Niagara	14092	713246	NM Electric (T/D) Station	N	N	Y
Station 088 - Youngstown	721 South 3rd Street	Youngstwn	Niagara	14174	713234	NM Electric (T/D) Station	N	N	Y
Station 089 - Ransomville	2680 Youngstown-Lockport Road	Porter	Niagara	14131	713236	NM Electric (T/D) Station	N	N	Y
Station 091 - CAMBRIA	4871 Cambria-Wilson Rd. Rt 425 (n/o Lower M	Cambria		14094	713646	NM Electric (T/D) Station	N	N	Y
Station 093 - Wilson	2520 Lake Avenue	Wilson	Niagara	14172	713540	NM Electric (T/D) Station	N	N	Y
Station 096 - Milpine	1539 Military Road	Niagara Falls	Niagara	14304	713247	NM Electric (T/D) Station	N	N	Y
Station 097 - Summit Park	2268 Jagow Road	Wheatfield	Niagara	14304	713791	NM Electric (T/D) Station	N	N	Y
Station 100 - East Cambria	5220 Lockport Junction Road. Rte 270	Cambria	Niagara	14094	713588	NM Electric (T/D) Station	N	N	Y
Station 105 - Swann Road	1295 Swann Road	Lewiston	Niagara		713233	NM Electric (T/D) Station	N	N	Y
Station 121 - Clinton	2710 Clinton Street	West Seneca	Erie	14224	713073	NM Electric (T/D) Station	N	N	Y
Station 122 - Tonawanda News	20 Sommer Street	North Tonawanda	Niagara		713214	NM Electric (T/D) Station	N	N	Y
Station 124 - Alameda Ave	78 Alameda Avenue	Amherst	Erie		713086	NM Electric (T/D) Station	N	N	Y
Station 126 - Gibson St	159 Gibson Street	City of Tonawanda	Erie		713126	NM Electric (T/D) Station	N	N	Y
Station 127 - Delaware Rd	517 Delaware Road	Kenmore	Erie		713087	NM Electric (T/D) Station	N	N	Y
Station 129 - Brompton Rd	311 Brompton Road	Tonawanda	Erie	14150	713129	NM Electric (T/D) Station	N	N	Y
Station 130	2007 Niagara Falls Blvd	Buffalo	Erie		713797	NM Electric (T/D) Station	N	N	Y
Station 132	4099 Genesee Street	Cheektowaga	Erie		713088	NM Electric (T/D) Station	N	N	Y
Station 133 - Dupont	1 Sheridan Drive	Town of Tonawanda	Erie		713089	NM Electric (T/D) Station	N	N	Y
Station 138 - Oakwood Ave	5228 Oakwood Avenue	Pendleton	Niagara	14120	713138	NM Electric (T/D) Station	N	N	Y
Station 139 - Martin Rd	353 Martin Road	Lackawanna	Erie	14218	713127	NM Electric (T/D) Station	N	N	Y
Station 140	898 Maple Road	Amherst	Erie		713103	NM Electric (T/D) Station	N	N	Y
Station 142	222 Lehigh Avenue	Lackawanna	Erie		713083	NM Electric (T/D) Station	N	N	Y
Station 146	2777 Walden Avenue.	Cheektowag		14225	713092	NM Electric (T/D) Station	N	N	Y
Station 149 - Snyder Tank	3733 Lake Shore Road	Hamburg	Erie	14219	713149	NM Electric (T/D) Station	N	N	Y
Station 154	43 George Urban Boulevard	Cheektowaga	Erie	14225	713785	NM Electric (T/D) Station	N	N	Y
Station 155 - Worthington	45 Roberts Avenue	Buffalo	Erie	14206	713786	NM Electric (T/D) Station	N	N	Y
Station 157	203 Eggert Road	Cheektowaga	Erie	14215	713800	NM Electric (T/D) Station	N	N	Y
Station 160 - Summer St	190 Summer Street	Buffalo	Erie	14209	713830	NM Electric (T/D) Station	N	N	Y
Station 161 - Short St	25 Short Street	Buffalo	Erie		713014	NM Electric (T/D) Station	N	N	Y
Station 162	144 Kensington Avenue	Buffalo	Erie	14214	713829	NM Electric (T/D) Station	N	N	Y
Station 170 - Newfane	6228 Charlottesville Road	Newfane	Niagara	14108	713538	NM Electric (T/D) Station	N	N	Y
Station 171 - Burt	2130 Lockport-Olcott Road Route 78	Burt	Niagara	14108	713642	NM Electric (T/D) Station	N	N	Y



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## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Station 201	144 7th Street	Buffalo	Erie	14201	713816	NM Electric (T/D) Station	N	N	Y
Station 202	137 7th Street	Buffalo	Erie	14201	713802	NM Electric (T/D) Station	N	N	Y
Station 203	108 7th Street	Buffalo	Erie	14201	713824	NM Electric (T/D) Station	N	N	Y
Station 205	185 Lakefront Boulevard	Buffalo	Erie	14202	713832	NM Electric (T/D) Station	N	N	Y
Station 206 - Tonawanda Creek	901 Tonawanda Creek Road	Amherst	Erie		713838	NM Electric (T/D) Station	N	N	Y
Station 207 - Slade Road	1880 Ridge Road	West Seneca	Erie	14224	713845	NM Electric (T/D) Station	N	N	Y
Station 208	2304 Kenmore Avenue	Buffalo	Erie	14207	713849	NM Electric (T/D) Station	N	N	Y
Station 209 - Long Rd	2497 Long Road	Grand Island	Erie	14072	713846	NM Electric (T/D) Station	N	N	Y
Station 210 - Military Road	1520 Military Road	Niagara Falls	Niagara	14304	713847	NM Electric (T/D) Station	N	N	Y
Station 211 - Ayer Rd	671 Ayer Road	Amherst	Erie		713853	NM Electric (T/D) Station	N	N	Y
Station 212	1951 Hamburg Turnpike	Lackawanna	Erie		713855	NM Electric (T/D) Station	N	N	Y
Station 213	1875 Dale Road	Cheektowag	Erie		713498	NM Electric (T/D) Station	N	N	Y
Station 214 - Youngs St	875 Young Street	Town of Tonawanda	Erie	14150	713058	NM Electric (T/D) Station	N	N	Y
Station 215 - Buffalo Avenue	1701 Buffalo Avenue	Niagara Falls	Niagara	14303	713856	NM Electric (T/D) Station	N	N	Y
Station 216 - Lockport Road	3270 Lockport Road	Niagara Falls	Niagara	14305	713857	NM Electric (T/D) Station	N	N	Y
Station 217 - Walmore Rd	6665 Walmore Road	Wheatfield	Niagara	14304	713510	NM Electric (T/D) Station	N	N	Y
Station 219 - Park Club Ln	179 Park Club Lane	Amherst	Erie	14221		NM Electric (T/D) Station	N	N	Y
Station 224 - Sweethome Rd	2400 Sweethome Road	Amherst	Erie	14228	713792	NM Electric (T/D) Station	N	N	Y
Steamburg Station 17	10261 Railroad Avenue	Coldspring	Cattaraugus		713717	NM Electric (T/D) Station	N	N	Y
Stiles Station 58	7134 State Fair Boulevard	VanBuren	Onondaga	13209	813058	NM Electric (T/D) Station	N	N	Y
Stittville Station 670	7208 Fox Road	Marcy	Oneida	13403		NM Electric (T/D) Station	N	N	Y
Stoner Station 358	201 County Highway 103	Johnstown	Fulton	12095		NM Electric (T/D) Station	N	N	Y
Stow Station 52	3318 Hadley Bay Road	N. Harmony	Chautaugua	14785	713409	NM Electric (T/D) Station	N	N	Y
Stuyvesant Station 977	27 Hudson Avenue	Stuyvesant	Columbia	12173	913139	NM Electric (T/D) Station	N	N	Y
Summit Station 347	1160 State Route 7	Richmondville	Schoharie	12149		NM Electric (T/D) Station	N		Y
Sunday Creek Station 876	8689 Moshier Road	Town of Watson	Lewis	13367		NM Electric (T/D) Station	N	N	Y
Swaggertown Station 364	633 Swaggertown Road	Glennville	Schenectady	12302	913364	NM Electric (T/D) Station	N	N	Y
Sweden Station	4559 Redman Road	Sweden	Monroe	14420		NM Electric (T/D) Station	N	Y	N
Sycaway Station 372	259 Hillcrest Avenue	Brunswick	Rensselaer	12180	913372	NM Electric (T/D) Station	N	N	Y
SYLVAN BEACH	Rt. 13	Verona				NM Electric (T/D) Station	N	N	Y
Taylorville Station 770	10262 Taylorville Road	Town of Croghan	Lewis	13327	813770	NM Electric (T/D) Station	N	Y	N
Teall Avenue Station 72	800 Factory Avenue	Salina	Onondaga	13208	813072	NM Electric (T/D) Station	N	Y	Y
TEK HUGHES	5th Ave. (between 24th & 25th St.)	Watervliet				NM Electric (T/D) Station	N	N	Y
Telegraph Road Station	Telegraph Road	Shelby	Niagara	14067	713539	NM Electric (T/D) Station	N	Y	N
Temple Station 243	423 Oneida Street	Syracuse	Onondaga	13202	813243	NM Electric (T/D) Station	N	N	Y
Terminal House B	996 Busti Avenue	Buffalo	Erie	14213	713009	NM Electric (T/D) Station	N	Y	N
Terminal Station 651	10 Harbor Point Road	Utica	Oneida	13502		NM Electric (T/D) Station	N	Y	N
Terminal Station C	3500 River Road	Buffalo	Erie		713013	NM Electric (T/D) Station	N	Y	N
Terminal Station D	953 Bailey Avenue	Buffalo	Erie		713016	NM Electric (T/D) Station	N	Y	N
Third Street Station 216	710 West Third Street	Fulton	Oswego	13069	813216	NM Electric (T/D) Station	N	N	Y
Thousand Islands Station 814	40864 Route 12	Town of Clayton	Jefferson	13624		NM Electric (T/D) Station	N	N	Y
Tibbits Avenue Station 292	1495 Tibbits Avenue	Troy	Rensselaer	12180	913292	NM Electric (T/D) Station	N	N	Y
Ticonderoga Station 163	83 Baldwin Road	Ticonderoga	Essex	12883		NM Electric (T/D) Station	N	Y	N
Tilden Station 73	4199 Dave Tilden Road	Onondaga	Onondaga	13078	813073	NM Electric (T/D) Station	N	Y	N
Trenton Station 627	8800 Trenton Falls Road	Barneveld	Oneida	13304	813340	NM Electric (T/D) Station	N	Y	N
Trinity Riser Site 404	Binghamton Street	Albany	Albany	12202		NM Electric (T/D) Station	N	Y	N
Trinity Station 164	71 Trinity Place	Albany	Albany	12202	913164	NM Electric (T/D) Station	N	N	Y
Truxton Station 74	Route 91	Truxton			813074	NM Electric (T/D) Station	N	N	Y
Tuller Hill Station 246	Clute Road	Virgil			813246	NM Electric (T/D) Station	N	N	Y
Tully Center Station 278	404 Route 11	Tully	Onondaga	13159	813278	NM Electric (T/D) Station	N	N	Y
Tupper Lake Station 830	201 McLaughlin Avenue	Village of Tupper La	Franklin	12986		NM Electric (T/D) Station	N	Y	N
Turin Station 653	8863 Turin Road	Lee Center	Oneida	13363		NM Electric (T/D) Station	N	N	Y
Union Falls Station 844	12 Casey Road	Town of Black Brook	Clinton	12989	813844	NM Electric (T/D) Station	N	Y	Y
Union Street Station 376	1031 Turnpike Road	Cambridge	Washington	12816		NM Electric (T/D) Station	N	N	Y
Unionville Station 276	481 Unionville Feura Bush Road	Unionville	Albany	12067	913276	NM Electric (T/D) Station	N	N	Y
Vail Mills Station 392	937 County Highway 106	Amsterdam	Fulton	12010		NM Electric (T/D) Station	N	N	Y
Valkin Station 427	221 Maple Lane	Kinderhook	Columbia	12184	913427	NM Electric (T/D) Station	N	N	Y



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## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Valley Station 44	5938 Sugartown Road	Great Valley	Cattaraugus		713836	NM Electric (T/D) Station	N	N	Y
Valley Station 594	402 Don Reile Road	Herkimer	Herkimer	13350		NM Electric (T/D) Station	N	Y	Y
Vandalia Station 104	4926 State Route 417	Allegany	Cattaraugus			NM Electric (T/D) Station	N	N	Y
Varick Station 207	411 West First Street	City of Oswego	Oswego	13069		NM Electric (T/D) Station	N	Y	N
Volney Station 285	173 MacDougall Road	Town of Volney	Oswego	13069	813285	NM Electric (T/D) Station	Y	Y	N
Voorhees Station 83	6 Lehigh Avenue	Camden	Oneida	13316		NM Electric (T/D) Station	N	N	Y
Voorheesville Station 178	120 Maple Avenue	Voorheesville	Albany	12186	913178	NM Electric (T/D) Station	N	N	Y
Waick Road Station	1073 Erie Avenue, Route 425	North Tonawanda	Niagara	14120	713833	NM Electric (T/D) Station	N	Y	N
Walesville Station 331	5425 Judd Road	Whitesboro	Oneida	13492		NM Electric (T/D) Station	N	N	Y
Warrensburg Station 321	28 Summit Street	Warrensburg	Warren	12885		NM Electric (T/D) Station	N	N	Y
Waterford Station 258	9 Burton Avenue	Waterford	Saratoga	12188	913258	NM Electric (T/D) Station	N	N	Y
Waterfront Health Care Station	200 7th Street	Buffalo	Erie	14202		NM Electric (T/D) Station	N	Y	N
Waterfront School Station 204	4th Street	Buffalo	Erie	14202	713825	NM Electric (T/D) Station	N	N	Y
Waterport Station 73	1804 Park Avenue	Carlton	Orleans	14571	713721	NM Electric (T/D) Station	N	N	Y
Watkins Road Station 528	390 Watkins Road	Frankfort	Herkimer	13340		NM Electric (T/D) Station	N	Y	N
Watt Street Station 380	1950 Watt Street	Rotterdam	Schenectady	12304	913380	NM Electric (T/D) Station	N	N	Y
Weaver Street Station	734 Broadway	Schenectady	Schenectady	12303	913245	NM Electric (T/D) Station	N	N	Y
Weibel Avenue Station 415	77 Weibel Avenue	Saratoga Springs	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Wells Station 208	Route 30	Wells	Hamilton	12190		NM Electric (T/D) Station	N		Y
West Adams Station 875	9526 Route 77	Town of Adams	Jefferson	13605		NM Electric (T/D) Station	N	N	Y
West Albion Station 79	3600 Gaines Basin Road	Gaines	Orleans	14411	713841	NM Electric (T/D) Station	N	N	Y
West Cleveland Station 326	741 State Route 49	Cleveland	Oswego	13044	813326	NM Electric (T/D) Station	N	N	Y
West Hamlin Station 82	3627 Roosevelt Highway Route 18	Hamlin	Monroe	14464	713828	NM Electric (T/D) Station	N	N	Y
West Herkimer Station 676	313 1/2 Third Avenue	Herkimer	Herkimer	13350		NM Electric (T/D) Station	N	N	Y
West Monroe Station 274	46 Depot Road	West Monroe	Oswego	13167	813274	NM Electric (T/D) Station	N	N	Y
West Olean Station 33	2200 West Sullivan Street	Olean	Cattaraugus		713763	NM Electric (T/D) Station	N	N	Y
West Oswego Station 209	245 George Washington Boulevard	Oswego	Oswego	13126	813209	NM Electric (T/D) Station	N	N	Y
West Perrysburg Station 181	11853 West Perrysburg Road	Perrysburg	Chautaugua	14129	713699	NM Electric (T/D) Station	N	N	Y
West Portland Station 151	8129 Pratt Road	Westfield	Chautaugua	14787	713556	NM Electric (T/D) Station	N	N	Y
West Salamanca Station 16	4159 North State Road	Salamanca	Cattaraugus		713628	NM Electric (T/D) Station	N	Y	N
West Valley Station 25	5375 Felton Hill Road	Ashford	Cattaraugus		713722	NM Electric (T/D) Station	N	N	Y
Westmoreland Station 649	4848 Route 233	Westmoreland	Oneida	13490		NM Electric (T/D) Station	N	N	Y
Westvale Station 133	3300 West Genesee Street	Geddes	Onondaga	13219	813133	NM Electric (T/D) Station	N	N	Y
Westville Station 885	28 County Route 21	Town of Westville	Franklin	12926		NM Electric (T/D) Station	N	N	Y
Wethersfield Station 23	4216 Poplar Tree Road	Wethersfield	Wyoming	14569	713410	NM Electric (T/D) Station	N	N	Y
Whitaker Station 296	2039 County Route 176	Volney	Oswego	13069	813296	NM Electric (T/D) Station	N	N	Y
White Lake Station 399	12837 Route 28	Forestport	Oneida	13338		NM Electric (T/D) Station	N	N	Y
Whitehall Station 187	23 Buckley Road	Whitehall	Washington	12887		NM Electric (T/D) Station	N	Y	N
Whitesboro Station 632	196 Whitesboro Street	Yorkville	Oneida	13495		NM Electric (T/D) Station	N	N	Y
Whitesville Station 101	1602 County Route 22	Independence	Allegany		713854	NM Electric (T/D) Station	N	N	Y
Whitman Station 671	6390 Old County Road	Clockville	Madison	13042		NM Electric (T/D) Station	N	Y	N
Wilton Station 329	1 Woodard Rd.	Wilton	Saratoga	12866		NM Electric (T/D) Station	N	N	Y
Wine Creek Station 283	307 East Seneca Street	City of Oswego	Oswego	13126	813283	NM Electric (T/D) Station	N	N	Y
Wolf Road Station 344	153 Wolf Road	Colonie	Albany	12205	913344	NM Electric (T/D) Station	N	N	Y
Woodard Station 233	7437 Henry Clay Boulevard	Clay	Onondaga	13088	813233	NM Electric (T/D) Station	N	Y	N
Woodlawn Station 188	1 Lishakill Road	Colonie	Albany	12304	913188	NM Electric (T/D) Station	N	N	Y
Worcester Station 189	1483 County Highway 39	Worcester	Osego	12197		NM Electric (T/D) Station	N		Y
Yahnundasis Station 646	8317 Woods Highway	New Hartford	Oneida	13413		NM Electric (T/D) Station	N	Y	N
York Center Station 53	2395 York Road East	York	Livingston	14592	713789	NM Electric (T/D) Station	N	N	Y
Youngmann Terminal Station	1205 Millersport Highway	Amherst	Erie	14226	713794	NM Electric (T/D) Station	N	Y	N
Adams Switch Structure	1701 Buffalo Avenue	Niagara Falls	Niagara	14303	713301	NM Switching Station	N	Y	N
Air Preheater Switch Structure	2440 State Route 19	Wellsville	Allegany			NM Switching Station	N	Y	N
Alabama Switch Structure	5651 Griswold Street	Royalton	Niagara	14067	713569	NM Switching Station	N	Y	N
Arcade Switch Structure	12100 Electric Lane	Yorkshire	Cattaraugus			NM Switching Station	N	Y	N
Ashville Station	4796 Route 474	North Harmony	Chautaugua	14710	713561	NM Switching Station	N	Y	N
Bailey Hill Switch Structure	Sherman-Clymer Rd pole 77	Sherman	Chautaugua	14781		NM Switching Station	N	Y	N
Bailey Station 313	124 Bailey Drive	Onondaga	Onondaga	13120	813313	NM Switching Station	Y	Y	N



**ATTACHMENT 6**

**Substation List**

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Bennett Switch Station 440	284 River Street	Warrensburg	Warren	12885		NM Switching Station	N	Y	N
Big Indian Switch Structure	12760 Versailles-Silver Creek Road	Irving	Cattaraugus	14081		NM Switching Station	N	Y	N
Borden Switch Structure	Felton Hill Road	Ashford	Cattaraugus			NM Switching Station	N	Y	N
Broadway Switch Structure	55 Dick Road	Depew	Erie	14225		NM Switching Station	N	Y	N
Brocton Switch Structure	Pulman Road	Brockton	Chautaugua	14716		NM Switching Station	N	Y	N
Buffalo Crushed Stone	Off Route 16	Machias	Cattaraugus			NM Switching Station	N	Y	N
Buffalo River Switch Structure	874 Fuhrmann Boulevard	Lackawana	Erie	14220	713064	NM Switching Station	N	Y	N
Campus Station - SUNYAB	Service Center Road	Amherst	Erie		713795	NM Switching Station	N	Y	N
Carboy Switch Station 436	Route 8	Chester	Warren	12817		NM Switching Station	N	Y	N
CERES SW STR (L)						NM Switching Station	N	Y	N
Childs Switch Structure	600 Ohio Street	Buffalo	Erie	14203	713084	NM Switching Station	N	Y	N
Cuba Switch Structure	Woodruff Street	Cuba	Allegany			NM Switching Station	N	Y	N
Cummings Diesel Switch Structure	4565 Baker Street	Ashville	Chautaugua	14710		NM Switching Station	N	Y	N
Dake Hill Switch Structure	8370 Dake Hill Road	Otto	Cattaraugus		713605	NM Switching Station	N	Y	N
Dick Road Switch Structure	750 Dick Road	Cheektowaga	Erie			NM Switching Station	N	Y	N
Dupont Switch Structure - Niagara Falls	Buffalo Avenue	Niagara Falls	Niagara	14303		NM Switching Station	N	Y	N
Dupont Switch Structure-Tonawanda	2650 Kenmore Avenue	Town of Tonawanda	Erie	14207	713080	NM Switching Station	N	Y	N
Eden Switch Structure	9700 South State Road	Eden	Erie	14057	713568	NM Switching Station	N	Y	N
Elton Switch Structure	Pigeon Hill Road	Elton	Cattaraugus			NM Switching Station	N	Y	N
Emeryville Switch Station 962	1729 County Route 22	Town of Fowler	St. Lawrence	13642		NM Switching Station	N	Y	N
Finley Road Switch Structure	6620 Finley Road	Westfield	Chautaugua	14787		NM Switching Station	N	Y	N
Fuhrmann Switch Structure	874 Fuhrmann Boulevard	Lackawana	Erie	14220		NM Switching Station	N	Y	N
Galleria Mall Station	160 Galleria Drive	Cheektowaga	Erie	14225	713840	NM Switching Station	N	Y	N
Geres Lock Switching Station 30	425 Horan Road	Camillus	Onondaga	13209	813030	NM Switching Station	N	Y	N
Goodspeed Switch Station 435	Route 8	Chester	Warren			NM Switching Station	N	N	Y
Grossman Switch Structure	Grossman Avenue	Olean	Cattaraugus			NM Switching Station	N	Y	N
Haskell Road Switch Structure	1599 Haskell Road	Portville	Cattaraugus			NM Switching Station	N	Y	N
Hastings Switch Station 439	Library Avenue Extension.	Warrensburg	Warren	12885		NM Switching Station	N	Y	N
Homer Hill Switch Structure	1715 Lundys Lane	Olean	Cattaraugus		713611	NM Switching Station	N	Y	N
Indian Hill Switch Structure	Upper Mountain Road	Lewiston	Niagara	14092		NM Switching Station	N	Y	N
Interstate Switch Structure	Route 417	Portville	Cattaraugus			NM Switching Station	N	Y	N
Ischua Switch Structure	3224 Holland Road	Franklinville	Cattaraugus		713835	NM Switching Station	N	Y	N
Knights Creek Switch Structure	3328 County Road 9	Scio	Allegany			NM Switching Station	N	Y	N
Ledyard Switch Structure	3151 Walden Avenue	Depew	Erie	14043		NM Switching Station	N	Y	N
Little Valley Switch Structure	Rail Road Street	Little Valley	Cattaraugus			NM Switching Station	N	Y	N
Ludwig Switch Structure	579 Ludwig Avenue	Cheektowaga	Erie	14227	713614	NM Switching Station	N	Y	N
Lyme Tap Switching Structure	28882 Route 12	Town of Brownville	Jefferson	13615		NM Switching Station	N	Y	N
Maple Avenue Switch Structure	Maple Avenue	Oakfield	Genesee	14125		NM Switching Station	N	Y	N
Mill Street Switch Structure	Spring Street	Avon	Livingston	14414		NM Switching Station	N	Y	N
Moons Switch Structure	3644 Moon Road	Stockton	Chautaugua	14784	713581	NM Switching Station	N	Y	N
Mountain Switch Structure	709 Upper Mountain Road	Lewiston	Niagara	14092		NM Switching Station	N	Y	N
New Albion Switch Structure	Off Lovers Lane Road	New Albion	Cattaraugus			NM Switching Station	N	Y	N
New Road Switch Structure	3515 New Road	Sheridan	Chautaugua	14048		NM Switching Station	N	Y	N
Nile Switch Structure	4465 Route 275	Friendship	Allegany			NM Switching Station	N	Y	N
Niles Hill Switch Structure	Niles Hill Road	Scio	Allegany			NM Switching Station	N	Y	N
North Ogdensburg Station 878	9 Cemetery Drive	Town of Lisbon	St. Lawrence	13669		NM Switching Station	N	Y	N
Ohio Switch Structure	874 Fuhrmann Boulevard	Buffalo	Erie	14220	713818	NM Switching Station	N	Y	N
Olean-19th Street Switch Structure	2023 West Henley Street	Olean	Cattaraugus			NM Switching Station	N	Y	N
Park Club Switch Structure (25 Cycle)	179 Park Club Lane	Amherst	Erie	14221		NM Switching Station	N	Y	N
Perkins Corners Switch Structure	Perkins Road	Independence	Allegany			NM Switching Station	N	Y	N
Phillips Road Switch Structure	2150 Transit Road	Newfane	Niagara	14108	713618	NM Switching Station	N	Y	N
Pine Hill Switch Structure	5650 Transit Road	Cheektowaga	Erie			NM Switching Station	N	Y	N
Portland Switch Structure	8130 Pratt Road	Westfield	Chautaugua	14787		NM Switching Station	N	Y	N
Price Corners Switch Structure	2960 Coldspring Road	Randolph	Cattaraugus			NM Switching Station	N	Y	N
Pyrites Switch Structure 999	121 County Route 21 Extension	Town of Canton	St. Lawrence	13617		NM Switching Station	N	Y	N
Ravlin Hill Switch Structure	Ravlin Hill Road	Clymer	Chautaugua	14724		NM Switching Station	N	Y	N
Retsof Switch Structure	Route 63	York	Livingston	14592		NM Switching Station	N	Y	N



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Rochester Pump Plant Station	285 Weidner Road	Chili	Monroe	14428		NM Switching Station	N	Y	N
Sanborn Switch Structure	2171 Saunders Settlement Road	Sanborn	Niagara			NM Switching Station	N	Y	N
Sheldon Switch Structure	9800 Chestnut Ridge Road	Shelby	Niagara	14105	713620	NM Switching Station	N	Y	N
Silver Creek Switch Structure	52 Howard Street	Silvercreek	Chautaugua	14136	713621	NM Switching Station	N	Y	N
Sour Springs Switch Structure	5305 Sour Springs Road	Shelby	Orleans	14103	713623	NM Switching Station	N	Y	N
Station 073	644 Military Road	Tonawanda	Erie	14150	713203	NM Switching Station	N	Y	N
Steamburg Switch Structure	Railroad Avenue	Coldspring	Cattaraugus			NM Switching Station	N	Y	N
Sweden Switch Structure	4559 Redman Road	Sweden	Monroe	14420	713624	NM Switching Station	N	Y	N
Terminal Station D Switch Structure	175 Standard Parkway	Cheektowagae		14227	713625	NM Switching Station	N	Y	N
Tifft Switch Structure	215 Tifft Street	Buffalo	Erie			NM Switching Station	N	Y	N
Urban Switch Structure	43 George Urban Boulevard	Cheektowaga	Erie		713627	NM Switching Station	N	Y	N
Walck Road Switch Structure	673 Walck Road	North Tonawanda	Niagara			NM Switching Station	N	Y	N
West Portland Station	8129 Pratt Road	Westfield	Chautaugua	14787	713556	NM Switching Station	N	Y	N
Westfield Switch Structure			Chautaugua			NM Switching Station	N	Y	N
Wickwire Switch Structure	3814 River Road	Tonawanda	Erie		713068	NM Switching Station	N	Y	N
Willowbrook Switch Structure	1009 Brigham Road	Dunkirk	Chautaugua	14048	713770	NM Switching Station	N	Y	N
Worthington Switch Structure	45 Roberts Avenue	Buffalo	Erie			NM Switching Station	N	Y	N
Zimmerman Switch Structure	281 Zimmerman Road	North Tonawanda	Niagara			NM Switching Station	N	Y	N
Adirondack Knitting Station	14 Park Drive	Amsterdam	Montgomery	12010		Transformer Station	N	N	Y
AGWAY PELLET						Transformer Station	N	N	Y
All State Stamping - TS 2222	538 Erie Boulevard West		Onondaga	13204		Transformer Station	N	N	Y
ALLENS FALLS						Transformer Station	N	Y	N
Alpha Switching Structure 155					813155	Transformer Station	N	Y	N
American Tissue Station					913383	Transformer Station	N	N	Y
Arcom Microwave - TS 2469	185 Ainsley Drive	Syracuse	Onondaga	13210		Transformer Station	N	N	Y
Buckbee Mears Station 300	Kellogg Road	Cortland	Cortland	13045	813300	Transformer Station	N	N	Y
Buckeye Pumping - TS5710						Transformer Station	N	N	Y
B-Ville Sch. - Durgee Jr. High - TS 2474		Baldwinsville	Onondaga			Transformer Station	N	N	Y
B-Ville Sch. - McNamara Sch. - TS 2f O'Brien Road		Van Buren	Onondaga			Transformer Station	N	N	Y
B-Ville Sch. - Palmer Eelem. - TS 25c Hicks Road		Lysander	Onondaga			Transformer Station	N	N	Y
B-Ville Sch. - Van Buren Elem. - TS 2387			Onondaga			Transformer Station	N	N	Y
B-Ville Sch.L - Eldan & Baker High - 1 Oneida Street			Onondaga			Transformer Station	N	N	Y
Callahan Industries		Clockville	Madison	13042		Transformer Station	N	N	Y
Carrier - Carlyle Station 268	New Venture Gear Drive	East Syracuse	Onondaga	13057	813268	Transformer Station	N	N	Y
Case Supply Station 142	109 Wyoming Street	Syracuse	Onondaga	13204	813142	Transformer Station	N	N	Y
Cobleskill Stone						Transformer Station	N	N	Y
CONTINENTAL INSURANCE						Transformer Station	N	N	Y
Cortland Line Station 277			Cortland		813277	Transformer Station	N	N	Y
Crouse Hinds Station 239	Morgan Road		Onondaga		813239	Transformer Station	N	N	Y
Deferiet Station 724	400 Anderson Ave.	Deferiet	Jefferson	13634	813724	Transformer Station	N	Y	N
Dolomite Station 09	8250 Gulf Road	Leroy	Genesee	14482	713768	Transformer Station	N	N	
East Oswegatchie Station 982	4922 State Route 58	Town of Gouverneur	St. Lawrence	13642		Transformer Station	N	Y	Y
Eddys Lane Pump		Troy	Rensselaer	12180		Transformer Station	N	Y	N
EFFLEY						Transformer Station	N	Y	N
Empire Recycle		Utica	Oneida	13501		Transformer Station	N	N	Y
FLAT ROCK					813735	Transformer Station	N	Y	N
Friedrich Corporation		Herkimer	Herkimer	13350		Transformer Station	N	N	Y
Fuller Realty Station	1473 Washington Avenue	Albany	Albany	12205	913298	Transformer Station	N	N	Y
Fulton Co-Gen	South Seventh Street	City of Fulton	Oswego	13069		Transformer Station	N	Y	N
Gardenway Station	CSC Way	Rensselaer	Rensselaer	12144	913274	Transformer Station	N	N	Y
Gaylord Brothers - TS 2639	7272 Morgan Road	Clay	Onondaga			Transformer Station	N	N	Y
Gilford Mills		Herkimer	Herkimer	13350		Transformer Station	N	N	Y
Glens Falls Hospital Station 414	43 Mohican Street	Glens Falls	Warren	12801		Transformer Station	N	N	Y
GORE MOUNTAIN SUB						Transformer Station	N	N	Y
Hanson #1 - General Crush - TS 450c Camillus Road		Skaneateles	Onondaga			Transformer Station	N	N	Y
Hanson #2 - General Crush						Transformer Station	N	N	Y
Hanson Aggregate - Boonville		Boonville	Lewis	13309		Transformer Station	N	N	Y



# ATTACHMENT 6

## Substation List

Location ID	Street Address	City Town Village	County	Zip	PR Number	Station Type	Bulk	Transm	Distr
Hanson Aggregate - Middleville		Middleville	Lewis	13406		Transformer Station	N	N	Y
Hanson Station 738	25133 Route 3	Watertown	Jefferson	13601		Transformer Station	N	N	Y
Hedley Park Place Station	511 River Street	Troy	Rensselaer	12180	913348	Transformer Station	N	N	Y
Herrings Station 743	36152 NYS RTE. 3	Herrings	Jefferson	13619	813743	Transformer Station	N	Y	N
High Falls Station 794	10116 High Falls Road	Croghan	Lewis	13327	813794	Transformer Station	N	Y	N
Higley Station 473	98 Pine Road	Town of Colton	St. Lawrence	13625	813924	Transformer Station	N	Y	Y
Indeck Station	Mitchell Street	City of Oswego	Oswego	13126		Transformer Station	N	Y	N
Iroquois Rock Station	5251 Sweden Walker Road	Sweden	Monroe	14420		Transformer Station	N	N	Y
Johnson Brothers Lumber Company	2550 Ballina Road	Cazenovia		13035		Transformer Station	N	Y	N
Kilian Manufacturing Corporation - TS	1728 Burnet Avenue	Syracuse	Onondaga	13206		Transformer Station	N	Y	N
Ludlum Station 50	88 Howard Street	Dunkirk	Chautaugua	14048	713562	Transformer Station	N	N	Y
Mcintosh Box & Pallet Corporation - T	Route 49	Bernards Bay	Oswego			Transformer Station	N	N	Y
Mele Manufacturing Company		Utica	Oneida	13502		Transformer Station	N	N	Y
Midstate Construction Company Stati	1811 Lemoyne Avenue	Salina	Onondaga	13208	813148	Transformer Station	N	N	Y
Midstate Correctional Facility		Whitesboro	Oneida	13492		Transformer Station	N	N	Y
Monarch Machine Tool Station 264	Route 13	Cortland	Cortland		813264	Transformer Station	N	N	Y
Munsville Quarry		Munsville	Madison	13409		Transformer Station	N	N	Y
Nine Mile #1						Transformer Station	Y	Y	N
Oberdorfer 242	Thompson Road			13206		Transformer Station	N	Y	N
Oswego Switch Yard	261 George Washington Boulevard	Oswego	Oswego	13126	813248	Transformer Station	Y	Y	N
POTSDAM						Transformer Station	N	Y	N
Rollway Bearing Company Station 23	7600 Morgan Road	Liverpool	Onondaga	13090	813234	Transformer Station	N	N	Y
Saquoit Pumping Station		Yorkville	Oneida	13495		Transformer Station	N	N	Y
Saratoga Spa Pumping Station 384						Transformer Station	N	N	Y
Sithe Independence Station	Ferguson Beach Road	Scriba	Oswego	13126	813974	Transformer Station	Y	Y	N
SKIDMORE						Transformer Station	N	N	Y
Soft Maple Station 768	9676 Adsit Trail	Croghan	Lewis	13327	813768	Transformer Station	N	Y	N
Southland Station 84	8745 Main Street	Barker	Niagara	14012	713813	Transformer Station	N	N	Y
Spencer Haley	Elton Road	Freedom	Cattaraugus			Transformer Station	N	N	Y
Station 045	1662 Elmwood Avenue	Buffalo	Erie	14207	713045	Transformer Station	N	N	Y
Stauffer Chemical - TS 4501	Jordan Road	Skaneateles				Transformer Station	N	N	Y
SUNY East Campus Station	2 CSC Way	Rensselaer	Rensselaer	12144	913351	Transformer Station	N	N	Y
Sutton Investment - ES 186	701 Nichols Avenue	Syracuse	Onondaga		813186	Transformer Station	N	N	Y
Tupper Lake Muni		Tupper				Transformer Station	N	N	Y
Turning Stone Station 640	5218 Patrick Road	Oneida	Oneida	13421		Transformer Station	N	N	Y
University Station 81	Adams Street	Brockport	Monroe	14420	713798	Transformer Station	N	N	Y
Veterans Hospital	113 Holland Avenue	Albany	Albany	12208	913437	Transformer Station	N	N	Y
West End Brewery Station 114		Utica	Oneida	13502		Transformer Station	N	N	Y
Willow Specialties Station 24	1 Trojan Circle	Batavia	Genesee	14020		Transformer Station	N	N	Y



Transmission Inspections

**Circuit Status Report**

Region	Circuit Num	From	To	KV	Miles	Circ Span	Circ ID	Foot Patrol Sch	Foot Patrol Comp	Location
48	106	BECK	HARPER	69	15.8	552	S1110	2005		BECK
48	76	BECK	PACKARD	230	4.5	609	T1070	2005		BECK
48	81	GARDENVILLE	SENECA TERM	115	2.6	429	T1290	2005		GARDENVILLE
48	82	GARDENVILLE	SENECA TERM	115	2.6	392	T1300	2005		GARDENVILLE
48	82	TAP	STATION 155	115	0.1	528	A010D	2005		GARDENVILLE
48	197	GIBSON	FERRO ELECTRONICS (N	115	1.6	800	A0475	2005		GIBSON
48	197	TAP	GLOBE METALS	115	0.1	88	A005F	2005		GIBSON
48	197	TAP	UCAR CARBON	115	0.3	99	A0061	2005		GIBSON
48	198	GIBSON	FERRO ELECTRONICS (N	115	1.6	800	A0477	2005		GIBSON
48	198	TAP	GLOBE METALS	115	0.1	88	A0062	2005		GIBSON
48	198	TAP	UCAR CARBON	115	0.3	122	A0064	2005		GIBSON
48	38	HUNTLEY	GETZVILLE 60	115	11.8	800	A0798	2005		HUNTLEY
48	38	TAP	STATION 129	115	0.1	200	A00EE	2005		HUNTLEY
48	38	GETZVILLE 60	GARDENVILLE	115	11.5	800	A0796	2005		HUNTLEY
48	38	TAP	AMHERST TERM STA	115	0.1	132	A00EC	2005		HUNTLEY
48	38	TAP	STATION 140	115	0	800	A0805	2005		HUNTLEY
48	38	TAP	STATION 54	115	0.1	200	A00EF	2005		HUNTLEY
48	38	TAP	STATION 61	115	0.1	106	A00F0	2005		HUNTLEY
48	38	TAP	URBAN STATION 154	115	0.1	176	A00F1	2005		HUNTLEY
48	38	TAP	WALDEN STATION	115	5	200	A00F2	2005		HUNTLEY
48	38	TAP	DALE RD STATION 213	115	0.1	132	A00ED	2005		HUNTLEY
48	39	HUNTLEY	GETZVILLE 60	115	11.8	800	A0809	2005		HUNTLEY
48	39	TAP	FMC	115	0.1	200	A00F5	2005		HUNTLEY
48	39	TAP	STATION 129	115	0.1	200	A00F6	2005		HUNTLEY
48	39	GETZVILLE 60	GARDENVILLE	115	11.5	800	A0808	2005		HUNTLEY
48	39	TAP	AMHERST TERM STA	115	0.1	200	A00F3	2005		HUNTLEY
48	39	TAP	STATION 140	115	0	800	A0811	2005		HUNTLEY
48	39	TAP	STATION 54	115	0.1	528	A00F7	2005		HUNTLEY
48	39	TAP	STATION 61	115	0.1	528	A00F8	2005		HUNTLEY
48	39	TAP	URBAN STATION 154	115	0.1	176	A00F9	2005		HUNTLEY
48	39	TAP	DALE RD STATION 213	115	0.1	106	A00F4	2005		HUNTLEY
48	46	HUNTLEY	PRAXAIR	115	3	800	A0844	2005		HUNTLEY



Transmission Inspections

**Circuit Status Report**

Region	Circuit Num	From	To	KV	Miles	Circ Span	Circ ID	Foot Patrol Sch	Foot Patrol Comp	Location
48	46	TAP	FMC	115	0.3	396	A59R5	2005		HUNTLEY
48	46	TAP	DUNLOP	115	0.4	500	A3B3A	2005		HUNTLEY
48	46	TAP	DUPONT	115	1.4	528	A48ZU	2005		HUNTLEY
48	46	TAP	CHEVY	115	0.4	528	A4APD	2005		HUNTLEY
48	46	TAP	KENMORE TERM STA	115	0.1	132	A00FC	2005		HUNTLEY
48	46	TAP	ENCOGEN	115	0.1	176	A00FB	2005		HUNTLEY
48	46	TAP	BUFFALO SEWER	115	0.9	226	AACEK	2005		HUNTLEY
48	46	TAP	AMERICAN BRASS	115	0.1	37	A59PU	2005		HUNTLEY
48	46	TAP	CNP STA 18	115	0.3	800	A0845	2005		HUNTLEY
48	47	HUNTLEY	PRAXAIR	115	3.2	800	A0846	2005		HUNTLEY
48	47	TAP	DUNLOP	115	0.4	176	A3B7R	2005		HUNTLEY
48	47	TAP	DUPONT	115	1.4	500	A48QU	2005		HUNTLEY
48	47	TAP	CHEVY	115	0.4	528	A4ARP	2005		HUNTLEY
48	47	TAP	KENMORE TERM STA	115	0.1	132	A0100	2005		HUNTLEY
48	47	TAP	ENCOGEN	115	0.1	200	A00FF	2005		HUNTLEY
48	47	TAP	BUFFALO SEWER	115	0.9	207	AACGD	2005		HUNTLEY
48	47	TAP	AMERICAN BRASS	115	0.1	19	A59QK	2005		HUNTLEY
48	79	HUNTLEY	GARDENVILLE	230	20	708	T1400	2005		HUNTLEY
48	79	TAP	AMHERST STA SUNY	230	0.1	88	A9535	2005		HUNTLEY
48	80	HUNTLEY	GARDENVILLE	230	20	738	T1410	2005		HUNTLEY
48	80	TAP	AMHERST STA SUNY	230	0.1	41	A2258	2005		HUNTLEY
48	192	NIAGARA	PACKARD	115	3.3	218	T1740	2005		NIAGARA
48	193	NIAGARA	PACKARD	115	3.7	500	T1750	2005		NIAGARA
48	194	NIAGARA	PACKARD	115	3.7	500	T1760	2005		NIAGARA
48	195	NIAGARA	PACKARD	115	3	193	T1770	2005		NIAGARA
48	197	NIAGARA	GIBSON	115	4	330	T1670	2005		NIAGARA
48	197	TAP	LOCKPORT RD. 216	115	0	800	A0476	2005		NIAGARA
48	198	NIAGARA	GIBSON	115	4	325	T1680	2005		NIAGARA
48	198	TAP	LOCKPORT RD. 216	115	0	800	A0478	2005		NIAGARA
48	61	NIAGARA	PACKARD	230	3.5	700	T1710	2005		NIAGARA
48	62	NIAGARA	PACKARD	230	3.5	616	T1720	2005		NIAGARA
48	411	N. CAMBRIA	LOCKPORT STA	12	7	350	A0841	2005		SUBBERA



Transmission Inspections

**Circuit Status Report**

Region	Circuit Num	From	To	KV	Miles	Circ Span	Circ ID	Foot Patrol Sch	Foot Patrol Comp	Location
48	411	TAP	E. CAMBRIA 100	12	1	200	A02B4	2005		SUBBERA
48	701	WALDEN STATION	AMHERST STATION 67	34.5	13.3	340	S1030	2005		WALDEN
48	701	TAP	STATION 132	34.5	0.1	176	A00DF	2005		WALDEN
48	701	TAP (DICK SWS)	LTV SIERRA	34.5	0.1	53	A00DD	2005		WALDEN
48	701	TAP (DICK SWS)	M&T	34.5	0.7	200	A00DE	2005		WALDEN
48	701	TAP	GALLERIA	34.5	0.5	200	A00DC	2005		WALDEN
48	702	WALDEN	LEDYARD	34.5	5.7	200	A02AA	2005		WALDEN
48	702	TAP	BROADWAY WAREHSE	34.5	0.1	66	A00E0	2005		WALDEN
48	702	TAP	STATION 121	34.5	0.1	300	A0924	2005		WALDEN
48	702	TAP	ERIE CO. WATER-UNION	34.5	0.2	117	A00E1	2005		WALDEN
48	702	TAP	STATION 66	34.5	0.5	24	A00E5	2005		WALDEN
48	702	TAP	FN BURT	34.5	0.1	200	A00E2	2005		WALDEN
48	702	TAP	STATION 146	34.5	0.1	200	A00E4	2005		WALDEN
48	702	TAP (LEDYARD SWS)	ERIE CO. WATER-VANDE	34.5	0.2	300	A0925	2005		WALDEN
48	703	WALDEN STATION	GALLERIA	34.5	3	225	S3330	2005		WALDEN
50	111	BROCKPORT	UNIVERSITY	115	0.2	800	A0341	2005		BROCKPORT
50	111	TAP	SWEDEN SWS	115	3.4	800	A0344	2005		BROCKPORT
50	111	TAP	W. HAMLIN	115	7.4	500	A0184	2005		BROCKPORT
50	213	CALEDONIA	GOLAH	34.5	7.4	225	S2500	2005		CALEDONIA
50	213	TAP	ATLANTIC PIPE LINE C	34.5	4.4	300	A0564	2005		CALEDONIA
50	213	TAP	WASTE MANAGEMENT INC	34.5	0.8	300	A0568	2005		CALEDONIA
50	213	TAP	CANAWAGUS	34.5	0.3	300	A0565	2005		CALEDONIA
50	213	TAP	COLE SAND & GRAVEL	34.5	0	300	A0566	2005		CALEDONIA
50	213	TAP	INDUSTRY	34.5	1.1	300	A0567	2005		CALEDONIA
50	116	GOLAH	N LAKEVILLE	115	13.9	500	T1320	2005		GOLAH
50	116	TAP	E GOLAH	115	2.3	500	A0189	2005		GOLAH
50	116	TAP	KRAFT FOODS	115	0.5	800	A0351	2005		GOLAH
50	216	GOLAH	RUSH	34.5	2.7	300	A0569	2005		GOLAH
50	216	RUSH	N. LAKEVILLE	34.5	15.3	300	A0570	2005		GOLAH
50	216	TAP	LIMA	34.5	0.1	300	A0571	2005		GOLAH
50	111	LOCKPORT	MORTIMER	115	56	500	T1530	2005		LOCKPORT
50	111	TAP	ALABAMA SWS	115	0	0	A0342	2005		LOCKPORT



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50	111	TAP	SOUR SPRINGS SWS	115	0	800	A0343	2005		LOCKPORT
50	113	LOCKPORT	MORTIMER	115	55.9	500	T1540	2005		LOCKPORT
50	113	TAP	SOUR SPRINGS SWS	115	0	800	A0348	2005		LOCKPORT
50	114	LOCKPORT	MORTIMER	115	56.1	500	T1550	2005		LOCKPORT
50	114	TAP	TELEGRAPH RD	115	4.1	500	A0188	2005		LOCKPORT
50	114	TAP	SOUR SPRINGS SWS	115	0.1	800	A0350	2005		LOCKPORT
50	227	N. AKRON	BASOM	34.5	7	300	A0614	2005		N AKRON
50	227	BASOM	OAKFIELD	34.5	13.1	300	A0613	2005		N AKRON
50	227	TAP	LANCASTER	34.5	1.2	225	A02C7	2005		N AKRON
50	203	N LEROY	CALEDONIA	34.5	7.6	225	S2990	2005		N LEROY
50	203	TAP	DOLOMITE	34.5	0.1	300	A0531	2005		N LEROY
50	4	PANNELL RD	GENEVA	115	25.1	500	T1860	2005		PANNELL
50	4	TAP	FARMINGTON	115	0	0	A0820	2005		PANNELL
50	13	QUAKER RD	SLEIGHT RD	115	14.1	500	T1870	2005		QUAKER
50	113	SHELBY	SOUR SPRINGS SWS	115	2	800	A0347	2005		SOUR SPRINGS
51	160	DUNKIRK	BERRY RD.	115	4.4	800	A0436	2005		DUNKIRK
51	160	BERRY RD.	BAKER ST.	115	40.2	800	A0435	2005		DUNKIRK
51	160	TAP (FINDLEY SWS)	WESTFIELD VILLAGE	115	4.2	800	A0438	2005		DUNKIRK
51	160	TAP	COLUMBIA GAS	115	0.1	800	A0437	2005		DUNKIRK
51	160	TAP	CUMMINS	115	0.5	500	A0199	2005		DUNKIRK
51	160	BAKER ST.	FALCONER	115	9.8	800	A0434	2005		DUNKIRK
51	161	DUNKIRK	FALCONER	115	35	516	T1090	2005		DUNKIRK
51	161	TAP	WILLOWBROOK SWS	115	0.1	800	A0443	2005		DUNKIRK
51	161	TAP	SPECIAL METALS	115	0	800	A0442	2005		DUNKIRK
51	161	TAP	LUDLUM	115	0	800	A0440	2005		DUNKIRK
51	161	TAP	ROBERTS RD.	115	0.9	800	A0441	2005		DUNKIRK
51	161	TAP	EAST DUNKIRK	115	0	800	A0439	2005		DUNKIRK
51	162	DUNKIRK	FALCONER	115	35	503	T1100	2005		DUNKIRK
51	162	TAP	WILLOWBROOK SWS	115	0.1	800	A0448	2005		DUNKIRK
51	162	TAP	LUDLUM	115	0	800	A0446	2005		DUNKIRK
51	162	TAP	BENNETT RD	115	0.1	800	A0444	2005		DUNKIRK
51	162	TAP	ROBERTS RD.	115	0.9	800	A0447	2005		DUNKIRK



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51	162	TAP	EAST DUNKIRK	115	0	800	A0445	2005		DUNKIRK
51	151	GARDENVILLE	MACHIAS	115	13.4	800	A0410	2005		GARDENVILLE
51	151	TAP	COBBLE HILL	115	0	800	A0412	2005		GARDENVILLE
51	151	TAP (TW 247)	SPRINGVILLE	115	1	500	AACPT	2005		GARDENVILLE
51	151	MACHIAS	HOMER HILL	115	32.4	800	A0411	2005		GARDENVILLE
51	152	GARDENVILLE	MACHIAS	115	13.4	800	A0413	2005		GARDENVILLE
51	152	TAP	COBBLE HILL	115	0	800	A0415	2005		GARDENVILLE
51	152	TAP (TW 247)	SPRINGVILLE	115	1	500	AACYJ	2005		GARDENVILLE
51	152	MACHIAS	HOMER HILL	115	32.4	800	A0414	2005		GARDENVILLE
51	37	HOMER CITY	STOLLE	345	37.3	515	A0194	2005		HOMER CITY
54	3	TAP	LABRADOR	115	0	800	A0936	2005		CORTLAND
54	32	PEBBLE HILL	TILDEN	34.5	13.1	176	S3960	2005		PEBBLE HILL
54	32	TAP	JAMESVILLE RECLOSURE	34.5	0.8	11	A5822	2005		PEBBLE HILL
54	10	SOUTH OSWEGO	CURTIS	115	12.2	375	T2580	2005		S OSWEGO
54	9	SOUTH OSWEGO	GERES LOCK	115	30	321	T2600	2005		S OSWEGO
54	20	SCRIBA	VOLNEY	345	8.8	654	T2540	2005		SCRIBA
54	21	SCRIBA	VOLNEY	345	8.9	662	T2550	2005		SCRIBA
54	509	SKANEATELES VILLA NILES		34.5	7.6	300	A0870	2005		SKANEATELES
54	3	CLYDE (RG&E)	STATE ST.-AUBURN	115	14.8	800	A0712	2005		SLEIGHT
54	2	TEALL	ONEIDA	115	15	293	T2670	2005		TEALL
54	4	TEALL	DEWITT	115	8.5	463	T2650	2005		TEALL
54	4	TAP	FLY ROAD	345	0.9	528	A01BE	2005		TEALL
54	5	TAP	BRIDGEPORT	115	1.7	499	A01BC	2005		TEALL
54	32	TAP	FABIUS	34.5	4	270	A024C	2005		TULLY
54	32	TAP	POMPEY	34.5	1.7	359	A024D	2005		TULLY
54	202	VARICK	BRISTOL HILL	34.5	10.7	255	A7114	2005		VARICK
54	202	TAP	SENECA HILL	34.5	0.6	244	A026B	2005		VARICK
54	202	TAP	MINETTO HYDRO	34.5	0.6	300	A0269	2005		VARICK
54	202	TAP	ARMSTRONG	34.5	0.6	300	A0268	2005		VARICK
54	202	TAP	OSWEGO RESOURCE RECO	34.5	0.2	300	A026A	2005		VARICK
54	21	VARICK	HIGH DAM	34.5	0.5	200	A2721	2005		VARICK
54	19	VOLNEY	MARCY	345	18.9	800	T2730	2005		VOLNEY



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54	6	VOLNEY	CLAY	345	19	660	T2720	2005		VOLNEY
54	24	WOODARD	FREE	34.5	9.5	225	S4120	2005		WOODARD
54	24	TAP	NMPC EMS BUILDING	34.5	0.2	300	A0646	2005		WOODARD
54	24	TAP	US CONTAINER	34.5	0.2	300	A0650	2005		WOODARD
54	24	TAP	BUCKLEY ROAD	34.5	0.3	300	A0208	2005		WOODARD
54	24	TAP	ONONDAGA WATER	34.5	0.1	300	A020B	2005		WOODARD
54	24	TAP	SAND ROAD	34.5	0.1	300	A020D	2005		WOODARD
54	24	TAP	SAND ROAD NO.2	34.5	0.1	300	A0649	2005		WOODARD
54	24	TAP	US POST OFFICE GENER	34.5	1.5	300	A0651	2005		WOODARD
54	24	TAP	ONCO LEY CREEK TREAT	34.5	0.4	300	A0647	2005		WOODARD
54	26	WOODARD	CROUSE HINDS	34.5	2	300	A0225	2005		WOODARD
54	26	TAP	LIPE ROLLWAY	34.5	1.1	300	A021D	2005		WOODARD
54	26	TAP	7TH NORTH ST.	34.5	0.1	300	A021B	2005		WOODARD
54	27	WOODARD	GALEVILLE	34.5	0	300	A0692	2005		WOODARD
54	27	GALEVILLE	ASH (SW X27-9)	34.5	0	300	A0685	2005		WOODARD
54	27	TAP	ROTH STEEL MILL	34.5	0.9	300	A0689	2005		WOODARD
54	27	TAP	SOLVAY (X27-14)	34.5	0	300	A0690	2005		WOODARD
54	32	WOODARD	BORDEN CO.	34.5	11.4	231	A0778	2005		WOODARD
54	32	BORDEN CO.	TEALL	34.5	1.6	184	A0774	2005		WOODARD
56	1	BOONVILLE	PORTER	115	52.8	500	T4020	2005		BOONVILLE
56	1	TAP	STITTVILLE	115	0.3	500	A026E	2005		BOONVILLE
56	2	BOONVILLE	PORTER	115	26.8	538	T4030	2005		BOONVILLE
56	2	TAP	BOONVILLE MUNICIPAL	115	0	800	A0491	2005		BOONVILLE
56	2	TAP	STITTVILLE	115	0.3	500	A026F	2005		BOONVILLE
56	3	BOONVILLE	TURIN RD	115	16.8	498	T4060	2005		BOONVILLE
56	3	TAP	AVA	115	0.3	800	A0719	2005		BOONVILLE
56	4	BOONVILLE	GRIFFISS AIR FORCE B	115	23.6	800	A0812	2005		BOONVILLE
56	4	TAP	MADISON	115	0	500	A0272	2005		BOONVILLE
56	4	GRIFFISS AIR FORCE ROME		115	2	800	A0816	2005		BOONVILLE
56	4	TAP	REVERE COPPER & BRAS	115	0	800	A0823	2005		BOONVILLE
56	18	MARCY	NEW SCOTLAND	345	26.1	1482	T5360	2005		MARCY
56	22	OLD FORGE RECLOS	EAGLE BAY RECLOSER	46	0	300	A0583	2005		OLD FORGE



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56	22	TAP	EAGLE BAY	46	0.1	300	A0587	2005		OLD FORGE
56	22	EAGLE BAY RECLOS	RAQUETTE LAKE (NYSEG	46	0	300	A0582	2005		OLD FORGE
56	22	TAP	RAQUETTE LAKE	46	0.1	300	A0596	2005		OLD FORGE
56	26	PLEASANT	CONKLIN	46	0	300	A0673	2005		PLEASANT
56	26	CONKLIN	SCHUYLER	46	0	300	A0669	2005		PLEASANT
56	26	TAP	FRIEDRICH	46	0.5	300	A029E	2005		PLEASANT
56	26	TAP	CHICAGO PNEUM	46	0.5	300	A029D	2005		PLEASANT
56	24	TRENTON	MIDDLEVILLE	46	14.7	208	S5160	2005		TRENTON
56	24	TAP	POLAND	46	0.5	264	A0295	2005		TRENTON
56	24	TAP	NEWPORT HYDRO	46	0.1	300	A0645	2005		TRENTON
56	24	TAP	HANSON ROCK	46	0.1	300	A0294	2005		TRENTON
56	5	TURIN	ROME	115	7.2	239	A0278	2005		TURIN
56	5	TAP	MADISON	115	0.5	500	A0277	2005		TURIN
57	13	ALCOA	BRADY	115	19.6	800	A0361	2005		ALCOA
57	13	BRADY	N. OGDENSBURG	115	15.4	800	A0362	2005		ALCOA
57	5	BATTLE HILL	BALMAT	115	5.9	494	T3020	2005		BATTLE HILL
57	5	TAP	ZINCO	115	0.4	800	A0089	2005		BATTLE HILL
57	5	TAP	GOUVERNEUR TALC CO.	115	0.3	800	A0088	2005		BATTLE HILL
57	6	BLACK RIVER	LIGHTHOUSE HILL	115	22.4	535	T3040	2005		BLACK RIVER
57	22	BROWNS FALLS	NEWTON FALLS	34.5	3.9	225	S4280	2005		BROWNS FALLS
57	22	TAP	STAR LAKE	34.5	3.2	200	A00B1	2005		BROWNS FALLS
57	5	COFFEEN	E. WATERTOWN	115	8.3	800	A0847	2005		COFFEEN
57	5	E. WATERTOWN	LIGHTHOUSE HILL	115	31.9	800	A0849	2005		COFFEEN
57	21	COLONY	BROWNS FALLS	34.5	9.1	194	S4370	2005		COLONY
57	21	TAP	FINE	34.5	0.1	200	A00A9	2005		COLONY
57	22	COLONY	SOUTH EDWARDS	34.5	5	225	S4380	2005		COLONY
57	1	E OSWEGATCHIE	N GOUVERNEUR	115	1.5	344	A0076	2005		E OSWEGATCHIE
57	3	LAKE COLBY	LAKE PLACID	115	10.4	325	T3210	2005		LAKE COLBY
57	3	TAP	RAY BROOK	115	0.2	352	A007D	2005		LAKE COLBY
57	3	TAP	LAKE PLACID #3	115	0.1	800	A007E	2005		LAKE COLBY
57	5	MALONE	LAKE COLBY	115	43.8	559	T3230	2005		MALONE
57	6	MCINTYRE	BATTLE HILL	115	37	500	T3240	2005		MCINTYRE



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57	6	TAP	MCADOO	115	0.1	200	A008C	2005		MCINTYRE
57	8	TAP	OGDENSBURG	115	2	406	A0181	2005		MCINTYRE
57	8	TAP	MCADOO SUB	115	0.1	200	A0095	2005		MCINTYRE
57	9	NORTH OGDENSBUR	MCINTYRE	115	5.5	500	T3400	2005		MCINTYRE
57	8	NORTH GOUVERNEU	BATTLE HILL	115	4.8	320	T3290	2005		NORTH GOUVERNEUR
57	1	OEF	NORTH OGDENSBURG	115	0.9	500	T3410	2005		OEF
57	2	OGDENSBURG	MCINTYRE	115	2.5	455	T3300	2005		OGDENSBURG
57	5	TAYLORVILLE	LOWVILLE	115	13.2	800	A0866	2005		TAYLORVILLE
57	5	LOWVILLE	BOONVILLE	115	21.3	800	A0853	2005		TAYLORVILLE
57	6	TAYLORVILLE	BREMEN	115	5.2	800	A0894	2005		TAYLORVILLE
57	6	BREMEN	BOONVILLE	115	29.8	800	A0874	2005		TAYLORVILLE
57	6	TAP	LYONS FALLS PAPER	115	1.8	452	A008D	2005		TAYLORVILLE
57	6	TAP	MOOSE RIVER HYDRO	115	0.2	800	A0887	2005		TAYLORVILLE
57	6	TAP	LYONSDALE HYDRO	115	4.2	800	A0885	2005		TAYLORVILLE
57	6	TAP	LYONSDALE COGEN	115	0	800	A0884	2005		TAYLORVILLE
60	13	BETHLEHEM	RENSSELAER	34.5	5.7	235	S6120	2005		BETHLEHEM
60	13	TAP	QUAIL HOLLOW	34.5	0	300	A0366	2005		BETHLEHEM
60	13	TAP	ALBANY	34.5	0.8	300	A0363	2005		BETHLEHEM
60	13	TAP	CARGILL FLOUR MILLIN	34.5	0	300	A0364	2005		BETHLEHEM
60	18	BETHLEHEM	ALBANY	115	2.7	348	T5070	2005		BETHLEHEM
60	7	DEFREESTVILLE	GREENBUSH	34.5	3.5	231	S6300	2005		DEFREESTVILLE
60	7	TAP	ALBANY GREENBUSH INT	34.5	0	300	A0913	2005		DEFREESTVILLE
60	11	FRONT ST	ROSA RD	115	4	570	T5130	2005		FRONT ST
60	13	GREENBUSH	SCHODACK	115	3	480	A0130	2005		GREENBUSH
60	5	GREENBUSH	CASTLETON	34.5	5.7	195	S6480	2005		GREENBUSH
60	5	TAP	FORT ORANGE PAPER	34.5	0.3	300	A0863	2005		GREENBUSH
60	6	GREENBUSH	NASSAU	34.5	9.3	225	S6490	2005		GREENBUSH
60	6	TAP	EAST SCHODACK	34.5	0	300	A0879	2005		GREENBUSH
60	5	KARNER	PATROON	34.5	3.6	225	S6600	2005		KARNER
60	5	TAP	ANSWERS	34.5	0.2	300	A0857	2005		KARNER
60	5	TAP	ALBANY LANDFILL COGE	34.5	0	300	A0855	2005		KARNER
60	7	KRUMKILL	ALBANY	115	6.5	505	T5300	2005		KRUMKILL



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60	9	KRUMKILL	DELMAR	34.5	4.4	211	S6610	2005		KRUMKILL
60	9	TAP	ELSMERE	34.5	0.1	300	A0126	2005		KRUMKILL
60	6	MCKNOWNVILLE	PATROON	115	2.5	500	T5380	2005		MCKNOWNVILLE
60	8	MCKNOWNVILLE	KRUMKILL	115	2.3	500	T5370	2005		MCKNOWNVILLE
60	1	MECHANICVILLE	SCHOOL ST	34.5	11.3	302	S6840	2005		MECHANICVILLE
60	1	TAP	MAXIMUM SECURITY PRO	34.5	0.3	300	A0312	2005		MECHANICVILLE
60	1	TAP	GE SILICONE	34.5	0.4	300	A0307	2005		MECHANICVILLE
60	1	TAP	AMERICAN TISSUE-WATE	34.5	0.4	300	A0303	2005		MECHANICVILLE
60	1	TAP	WATERFORD	34.5	0.7	300	A0322	2005		MECHANICVILLE
60	1	TAP	MOHAWK PAPER	34.5	0.3	300	A0315	2005		MECHANICVILLE
60	1	TAP	MOHAWK HYDRO	34.5	0.3	300	A0314	2005		MECHANICVILLE
60	1	TAP	AHDC WATERFORD HYDRO	34.5	0	300	A0300	2005		MECHANICVILLE
60	9	NASSAU	HUDSON	34.5	22.1	245	A0125	2005		NASSAU
60	9	TAP	STUYVESANT	34.5	0.3	300	A1025	2005		NASSAU
60	7	NEW SCOTLAND	LONG LANE	115	4.1	500	T5470	2005		NEW SCOTLAND
60	7	TAP	OWENS-CORNING	115	0.8	500	A011F	2005		NEW SCOTLAND
60	7	TAP	MG INDUSTRIES	115	0	800	A0920	2005		NEW SCOTLAND
60	7	TAP	BOC GAS	115	0.3	800	A0914	2005		NEW SCOTLAND
60	7	TAP	GE PLASTICS	115	0.1	800	A0919	2005		NEW SCOTLAND
60	8	NEW SCOTLAND	ALBANY	115	8.1	500	T5980	2005		NEW SCOTLAND
60	8	TAP	AIR PRODUCTS	115	0.5	800	A0930	2005		NEW SCOTLAND
60	93	NEW SCOTLAND	LEEDS	345	16	940	T5480	2005		NEW SCOTLAND
60	94	NEW SCOTLAND	LEEDS	345	16	940	T5490	2005		NEW SCOTLAND
60	7	NORTH CATSKILL	MILAN	115	22.3	672	T5520	2005		NORTH CATSKILL
60	17	NORTON	MENANDS	34.5	5.1	401	S7010	2005		NORTON
60	3	PATROON	KRUMKILL	34.5	4.9	225	S7070	2005		PATROON
60	3	TAP	FULLER REALTY	34.5	0.2	300	A0118	2005		PATROON
60	3	TAP	OHAW-SHALOM	34.5	0.1	300	A0119	2005		PATROON
60	17	REYNOLDS	FEURA BUSH	115	15.4	500	T6000	2005		REYNOLDS
60	1	ROSA RD	KNOLLS	34.5	2.3	300	A0219	2005		ROSA RD
60	2	ROSA RD	BEVIS HILL	34.5	0.3	225	S7250	2005		ROSA RD
60	13	ROTTERDAM	NEW SCOTLAND	115	18.1	540	T5680	2005		ROTTERDAM



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60	14	ROTTERDAM	G E BLDG 265	115	2.5	500	T5660	2005		ROTTERDAM
60	15	ROTTERDAM	G E BLDG 265	115	2.6	500	T5670	2005		ROTTERDAM
60	16	ROTTERDAM	FRONT ST	115	3.6	500	T5650	2005		ROTTERDAM
60	9	SNYDERS LAKE	HOAG	34.5	7.8	225	S7460	2005		SNYDERS LAKE
60	9	TAP	WEST SAND LAKE	34.5	0	300	A1026	2005		SNYDERS LAKE
60	9	TAP	CROOKED LAKE	34.5	0	300	A1013	2005		SNYDERS LAKE
60	5	TRINITY	ALBANY	115	4.1	500	T5840	2005		TRINITY
60	9	TRINITY	ALBANY	115	4.1	500	T5850	2005		TRINITY
60	3	VISHERS	WOODLAWN	34.5	5.9	225	S7570	2005		VISHERS
60	3	TAP	NISKAYUNA PUMP	34.5	0.5	300	A0733	2005		VISHERS
60	5	KNOLLS	VISHERS	34.5	1.9	300	A0852	2005		VISHERS
60	1	LYNN ST	WOODLAWN	34.5	3.9	225	S6700	2005		WOODLAWN
60	1	TAP	CHRISLER AVE	34.5	1	300	A0111	2005		WOODLAWN
60	14	WOODLAWN	KARNER	34.5	3.9	225	S7630	2005		WOODLAWN
60	14	TAP	RIFLE RANGE	34.5	0.1	500	A0133	2005		WOODLAWN
60	13	WYNANTSKILL	REYNOLDS	115	5.3	1217	T5930	2005		WYNANTSKILL
62	10	BATTENKILL	NORTH TROY	115	23.4	500	T5060	2005		BATTENKILL
62	10	TAP	MULBERRY (NYSEG)	115	0	800	A0328	2005		BATTENKILL
62	9	CHARLTON	BALLSTON	34.5	9	225	S6210	2005		CHARLTON
62	9	TAP	WEST MILTON	34.5	4.3	229	A0164	2005		CHARLTON
62	5	COBLESKILL	SUMMIT	69	6.7	264	S6250	2005		COBLESKILL
62	5	TAP	GRAND ST.	69	0	500	A0864	2005		COBLESKILL
62	5	TAP	COB. SUNY COLLEGE	69	0.8	500	A0860	2005		COBLESKILL
62	5	TAP	RICHMONDVILLE	69	0	500	A0865	2005		COBLESKILL
62	6	COBLESKILL	SCHOHARIE	69	10.1	500	S6240	2005		COBLESKILL
62	14	EDIC	NEW SCOTLAND	345	38.8	800	T4070	2005		EDIC
62	10	GLENS FALLS	BAY ST	34.5	3.3	225	S6430	2005		GLENS FALLS
62	12	GLENS FALLS	MOHICAN	34.5	4.7	164	S6450	2005		GLENS FALLS
62	12	TAP	EPIC VENTURES	34.5	0.1	300	A016C	2005		GLENS FALLS
62	12	TAP	GE JOHN ST.	34.5	0.3	300	A016D	2005		GLENS FALLS
62	12	TAP	SANDY HILL	34.5	1.2	300	A016E	2005		GLENS FALLS
62	3	HENRY ST	GLENS FALLS	34.5	2.2	219	S6520	2005		HENRY ST



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## Transmission Inspections

**Circuit Status Report**

Region	Circuit		From	To	KV	Miles	Circ Span	Circ ID	Foot	Foot	Location
	Num								Patrol Sch	Patrol Comp	
62	3	TAP		GLENS FALLS HOSPITAL	34.5	0.2	300	A0727	2005		HENRY ST
62	3	TAP		S. GLENS FALLS	34.5	0.1	300	A0735	2005		HENRY ST
62	3	TAP		ENCORE PAPER	34.5	0.1	300	A0725	2005		HENRY ST
62	3	TAP		GLENS FALLS WASTE WA	34.5	0	300	A0728	2005		HENRY ST
62	17	HUDSON FALLS		MCCREA ST	34.5	4.5	225	S6560	2005		HUDSON FALLS
62	17	TAP		FARNAN RD.	34.5	0.1	300	A0179	2005		HUDSON FALLS
62	17	TAP		DECORA	34.5	0.2	300	A0177	2005		HUDSON FALLS
62	6	INGHAMS		ST JOHNSVILLE	115	7.7	813	T5260	2005		INGHAMS
62	18	MARCY		NEW SCOTLAND	345	38.8	1800	T5360	2005		MARCY
62	18	INDECK		SPIER	115	0.2	17	T5950	2005		SPIER
62	9	SPIER		WEST	115	26.3	500	T5770	2005		SPIER
62	9	TAP		INTERNATIONAL PAPER	115	0.5	500	A0161	2005		SPIER
62	9	TAP		STEWART'S BRIDGE	115	0.1	800	A0163	2005		SPIER
62	9	TAP		SCOFIELD RD	115	16	500	A0162	2005		SPIER
62	3	TICONDEROGA		WHITEHALL	115	22.5	500	T5830	2005		TICONDEROGA
62	3	TAP		OTTEN	115	0.1	500	A014B	2005		TICONDEROGA
62	10	WARRENSBURG		SCOFIELD RD	115	10.5	482	T5880	2005		WARRENSBURG
62	5	WARRENSBURG		NORTH CREEK	115	23	386	T5870	2005		WARRENSBURG
62	8	WARRENSBURG		FORT GAGE	34.5	7.5	100	S7590	2005		WARRENSBURG
62	8	TAP		BOLTON	34.5	7.5	300	A015E	2005		WARRENSBURG
62	8	TAP		BIRCH AVE	34.5	0.1	264	A015D	2005		WARRENSBURG
62	7	WHITEHALL		BLISSVILLE	115	6	495	T5890	2005		WHITEHALL



**ATTACHMENT 7****Distribution Inspections****Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
48	2961	POTOMAC	37	0.1	2005	
48	2962	POTOMAC	50	0.4	2005	
48	2963	POTOMAC	41	1	2005	
48	2964	POTOMAC	60	0.3	2005	
48	2965	POTOMAC	93	2.7	2005	
48	2966	POTOMAC	77	1.4	2005	
48	2967	POTOMAC	63	1.7	2005	
48	2968	POTOMAC	67	1.6	2005	
48	2969	POTOMAC	52	0.2	2005	
48	2972	POTOMAC	68	1.3	2005	
48	2973	POTOMAC	58	0.5	2005	
48	3461	BEST/JEFFERSON	71	1.7	2005	
48	3462	BEST/JEFFERSON	81	3.1	2005	
48	3463	BEST/JEFFERSON	61	3	2005	
48	3465	BEST/JEFFERSON	64	0.4	2005	
48	3466	BEST/JEFFERSON	79	3.1	2005	
48	3467	BEST/JEFFERSON	83	2.4	2005	
48	3468	BEST/JEFFERSON	75	1.4	2005	
48	3469	BEST/JEFFERSON	57	1.4	2005	
48	3471	BEST/JEFFERSON	117	0.4	2005	
48	3472	BEST/JEFFERSON	84	2.2	2005	
48	3861	SPRING ST	74	1.3	2005	
48	3862	SPRING ST	67	0.5	2005	
48	3863	SPRING ST	60	2	2005	
48	3864	SPRING ST	56	1.2	2005	
48	3866	SPRING ST	52	0.1	2005	
48	3867	SPRING ST	70	1	2005	
48	3868	SPRING ST	60	0.4	2005	
48	3869	SPRING ST	62	1.4	2005	
48	3871	SPRING ST	64	0.7	2005	
48	3872	SPRING ST	67	0.5	2005	
48	4861	BRECKENRIDGE	88	0.2	2005	
48	4862	BRECKENRIDGE	89	1	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
48	4863	BRECKENRIDGE	62	0.7	2005	
48	4864	BRECKENRIDGE	58	2.3	2005	
48	4865	BRECKENRIDGE	81	0.2	2005	
48	4866	BRECKENRIDGE	72	2.4	2005	
48	4868	BRECKENRIDGE	54	0.3	2005	
48	4869	BRECKENRIDGE	69	1	2005	
48	6362	HIGHLAND	92	2.5	2005	
48	6363	HIGHLAND	90	3.8	2005	
48	6364	HIGHLAND	94	4.2	2005	
48	6365	HIGHLAND	93	4.5	2005	
48	6366	HIGHLAND	96	3.9	2005	
48	6454	WHITEHAVEN	200	10.3	2005	
48	6661	UNION RD	108	1.5	2005	
48	7161	S. NEWFANE	155	24.4	2005	
48	7651	SHAWNEE RD	152	21.7	2005	
48	7961	RIDGE/NO TONA	89	6.4	2005	
48	7962	RIDGE/NO TONA	100	4.7	2005	
48	7963	RIDGE/NO TONA	125	0.9	2005	
48	7964	RIDGE/NO TONA	91	4.6	2005	
48	7966	RIDGE/NO TONA	101	3.1	2005	
48	7968	RIDGE/NO TONA	76	5.1	2005	
48	8062	EIGHTH ST	66	2.6	2005	
48	8066	EIGHTH ST	200	0.1	2005	
48	8067	EIGHTH ST	200	1.5	2005	
48	8274	ELEVENTH ST	74	2.3	2005	
48	8362	WELCH AVENUE	77	6	2005	
48	8363	WELCH AVENUE	72	3.8	2005	
48	8367	WELCH AVENUE	78	1.9	2005	
48	8368	WELCH AVENUE	70	2.7	2005	
48	8764	LEWISTON	88	4	2005	
48	9362	WILSON	200	0.2	2005	
48	9666	MILPINE	136	0.8	2005	
48	9668	MILPINE	157	3.1	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
48	10557	SWANN ROAD	90	29.4	2005	
48	12161	CLINTON	112	1.9	2005	
48	12462	ALMEDA	108	3.9	2005	
48	12463	ALMEDA	52	0.1	2005	
48	12464	ALMEDA	46	0.5	2005	
48	12465	ALMEDA	116	1.1	2005	
48	12466	ALMEDA	99	3.3	2005	
48	12467	ALMEDA	200	3.5	2005	
48	12468	ALMEDA	117	0.2	2005	
48	12471	ALMEDA	145	1.9	2005	
48	12473	ALMEDA	172	6.5	2005	
48	12475	ALMEDA	200	4.7	2005	
48	12476	ALMEDA	81	1.2	2005	
48	12477	ALMEDA	181	5.2	2005	
48	12962	BROMPTON RD	99	4.8	2005	
48	12963	BROMPTON RD	113	4.4	2005	
48	12964	BROMPTON RD	99	5.1	2005	
48	12973	BROMPTON RD	126	6.5	2005	
48	12974	BROMPTON RD	94	3.7	2005	
48	12975	BROMPTON RD	110	4.7	2005	
48	12976	BROMPTON RD	107	3.9	2005	
48	13961	MARTIN RD	80	7.4	2005	
48	13962	MARTIN RD	95	4	2005	
48	13971	MARTIN RD	88	6.5	2005	
48	13972	MARTIN RD	88	1.7	2005	
48	14651	AM PRECISION	123	2.2	2005	
48	15466	GEO URBAN	72	4.8	2005	
48	15467	GEO URBAN	66	2.7	2005	
48	15468	GEO URBAN	82	4.5	2005	
48	16161	SHORT ST	108	0.9	2005	
48	16162	SHORT ST	63	2.7	2005	
48	16163	SHORT ST	88	0.1	2005	
48	16164	SHORT ST	60	2	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
48	16165	SHORT ST	140	1.2	2005	
48	16166	SHORT ST	88	1.4	2005	
48	16168	SHORT ST	75	2.6	2005	
48	17163	BURT	200	18.7	2005	
48	20951	LONG RD	200	14.5	2005	
48	20953	LONG RD	115	8.3	2005	
48	21051	MILITARY RD	98	5.6	2005	
48	21052	MILITARY RD	91	3.4	2005	
48	21053	MILITARY RD	101	18	2005	
48	21151	AYER RD	200	7	2005	
48	21152	AYER RD.	200	8.9	2005	
48	21153	AYER RD	200	3.8	2005	
48	21154	AYER RD	200	4.1	2005	
48	21155	AYER RD	145	11.8	2005	
48	21156	AYER RD	200	6.3	2005	
48	21157	AYER RD	200	11.1	2005	
48	21554	BUFFALO RD	60	1	2005	
48	21555	BUFFALO RD	12	0.3	2005	
48	21653	LOCKPORT RD	116	4.6	2005	
50	455	NORTH LEROY	141	37.2	2005	
50	662	E NEWSTEAD	78	1.1	2005	
50	663	E NEWSTEAD	168	64.4	2005	
50	1661	DARIEN	193	23.8	2005	
50	1662	DARIEN	175	37.2	2005	
50	1863	BYRON	189	52.3	2005	
50	2161	LINDEN	191	38.6	2005	
50	2951	SHEPPARD RD	140	30.3	2005	
50	3851	HEMLOCK STA	179	58.9	2005	
50	4161	GROVELAND	127	10.6	2005	
50	5151	EAST GOLAH	146	37.5	2005	
50	5152	EAST GOLAH	150	45.9	2005	
50	5351	YORK CENTER	145	37.2	2005	
50	5551	GENESEO	200	12.2	2005	



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Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
50	7251	BUTTS ROAD	39	3.6	2005	
50	7362	WATERPORT	200	38.1	2005	
50	7458	BROCKPORT	166	57.6	2005	
50	7861	BARKER	144	36.4	2005	
50	8061	ALBION	76	5.6	2005	
50	8062	ALBION	81	2.2	2005	
50	9063	GASPORT	99	18.4	2005	
50	9261	EAGLE HARBOR	200	19.2	2005	
50	9263	EAGLE HARBOR	159	61.8	2005	
50	9863	ROYALTON	169	40.6	2005	
51	962	ANDOVER	265	54.5	2005	
51	1162	DELEVAN	200	31.4	2005	
51	1561	CATTARAUGUS	200	6.1	2005	
51	1562	CATTARAUGUS	236	67.3	2005	
51	2254	DUGAN RD	143	56.8	2005	
51	2762	FARMERSVILLE	200	74.9	2005	
51	2861	EAST OTTO	255	56.7	2005	
51	4457	VALLEY	200	85.9	2005	
51	5651	FRENCH CREEK	200	15.5	2005	
51	5761	CHAUTAUQUA	42	3	2005	
51	6161	CASSADAGA	200	57.5	2005	
51	6353	E. DUNKIRK	75	2.2	2005	
51	6354	E. DUNKIRK	200	3.4	2005	
51	6355	E. DUNKIRK	200	14.9	2005	
51	6961	FREWSBURG	200	60.1	2005	
51	6962	FREWSBURG	200	30.3	2005	
51	6963	FREWSBURG	200	2.4	2005	
51	8161	SHALETON	200	15.3	2005	
51	8162	SHALETON	200	13.5	2005	
51	8163	SHALETON	200	4.2	2005	
51	9154	CLOVERBANK	200	12.4	2005	
51	9352	DELAMETER	200	75	2005	
51	9952	BENNETT ROAD	200	2.2	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
51	9957	BENNETT ROAD	200	18.2	2005	
51	15055	BAKER STREET	82	20.7	2005	
54	829	BRIGHTON	62	4.1	2005	
54	5164	PHOENIX	115	16.6	2005	
54	5165	PHOENIX	167	42.9	2005	
54	5166	PHOENIX	120	13.3	2005	
54	6144	LTHOUSE HILL	202	142.5	2005	
54	6652	SANDY CREEK	125	78	2005	
54	7473	TRUXTON	225	62.1	2005	
54	13564	FAIRDALE	179	29.9	2005	
54	13565	FAIRDALE	202	28.6	2005	
54	20908	WEST OSWEGO	37	1.5	2005	
54	20909	WEST OSWEGO	86	8	2005	
54	21671	WEST THIRD	141	24.3	2005	
54	21672	WEST THIRD	125	22.5	2005	
54	21673	WEST THIRD	93	6.3	2005	
54	22869	MCGRAW	198	65.7	2005	
54	24651	TULLAR HILL	213	16.1	2005	
54	24752	GILBERTS MLS	54	26.7	2005	
54	24753	GILBERT MILLS	198	38.2	2005	
54	25455	PALOMA	130	21.3	2005	
54	25456	PALOMA	126	80.2	2005	
54	26552	DUGID	149	28.4	2005	
54	27052	FISHER	224	67	2005	
54	27853	TULLY CENTER	171	70.1	2005	
54	28352	WINE CREEK	93	7.4	2005	
54	28353	WINE CREEK	86	10.3	2005	
54	28354	WINE CREEK	133	62.5	2005	
54	29951	LAKE ROAD	165	9.8	2005	
56	38363	OLD FORGE	84	2.8	2005	
56	38364	OLD FORGE	133	19	2005	
56	50153	ONEIDA	200	52.7	2005	
56	50154	ONEIDA	200	8.6	2005	



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**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
56	50157	ONEIDA	200	9.6	2005	
56	59471	VALLEY	78	3.8	2005	
56	59472	VALLEY	109	13.3	2005	
56	59473	VALLEY	93	2	2005	
56	59477	VALLEY	176	0.1	2005	
56	61651	CAVANAUGH RD	147	12.7	2005	
56	61652	CAVANAUGH RD	173	17.6	2005	
56	62258	POLAND	222	122.7	2005	
56	62371	ROCK CITY	164	1.9	2005	
56	62372	ROCK CITY	185	11.8	2005	
56	62373	ROCK CITY	115	4.2	2005	
56	65473	MADISON	150	11.8	2005	
56	66351	SCHUYLER	97	14.8	2005	
56	66355	SCHUYLER	117	9.6	2005	
56	66581	LEVITT	84	3.7	2005	
56	66582	LEVITT	98	4.2	2005	
56	66583	LEVITT	96	1.4	2005	
56	66584	LEVITT	150	0.2	2005	
56	66585	LEVITT	109	1.2	2005	
56	66586	LEVITT	97	8.6	2005	
56	66851	CHADWICKS	200	84.7	2005	
56	66854	CHADWICKS	140	19.5	2005	
56	67856	SALISBURY	164	47	2005	
56	67857	SALISBURY	207	83.8	2005	
56	68451	DEBALSO	102	14.1	2005	
56	68453	DEBALSO	122	3.6	2005	
56	76254	ROME	200	2.2	2005	
56	76255	ROME	200	14.7	2005	
56	76256	ROME	104	7.9	2005	
56	76257	ROME	144	18.2	2005	
56	76258	ROME	200	29.1	2005	
57	77353	LOWVILLE	200	24.6	2005	
57	77354	LOWVILLE	208	169.6	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
57	80161	ANTWERP	193	38.1	2005	
57	81458	THOUSAND ISL	167	127.6	2005	
57	81756	E WATERTOWN	135	51.5	2005	
57	83951	RAYBROOK	122	25.9	2005	
57	83952	RAYBROOK	188	3.5	2005	
57	87551	WEST ADAMS	180	109.2	2005	
57	89642	FT COVINGTON	200	46.2	2005	
57	89761	BOMBAY	217	45.5	2005	
57	89865	ELM STREET	174	45.6	2005	
57	89866	ELM STREET	88	4.2	2005	
57	89867	ELM STREET	96	13.7	2005	
57	92451	HIGLEY	192	82.2	2005	
57	92452	HIGLEY	165	73.1	2005	
57	92758	LAKE COLBY	86	34.3	2005	
57	93862	OGDENSBURG	65	4.5	2005	
57	95361	BRIER HILL	200	30.8	2005	
57	95461	STATE STREET	138	4.8	2005	
57	95462	STATE STREET	200	0.1	2005	
57	95463	STATE STREET	109	6	2005	
57	95464	STATE STREET	186	39.6	2005	
57	95554	LITTLE RIVER	188	58.8	2005	
57	95755	BRADY (S)	118	67.3	2005	
57	97652	LAWRENCE AVE	75	21.5	2005	
57	97967	DAVID	200	5.1	2005	
57	98352	N GOUVERNEUR	160	144.7	2005	
60	3551	STUYVESANT	200	23.4	2005	
60	3552	STUYVESANT	200	29.3	2005	
60	10152	MENANDS	200	0.5	2005	
60	10156	MENANDS	200	6.5	2005	
60	10157	MENANDS	132	18.8	2005	
60	10158	MENANDS	200	9	2005	
60	12860	PARTRIDGE ST	200	3.7	2005	
60	12861	PARTRIDGE ST	200	1.6	2005	



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## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
60	12863	PARTRIDGE ST	200	2.2	2005	
60	12867	PARTRIDGE ST	200	1.6	2005	
60	13755	ROSA ROAD	35	6.8	2005	
60	13850	ROTTERDAM	200	13.2	2005	
60	14951	SELKIRK	200	60.8	2005	
60	22143	HOAGS CORNRS	200	17.8	2005	
60	22144	HOAGS CORNRS	200	24	2005	
60	22145	HOAGS CORNRS	200	11.8	2005	
60	22851	RUSSELL RD	200	0.1	2005	
60	23826	KRUMKILL RD	200	4.9	2005	
60	23827	KRUMKILL RD	200	7.7	2005	
60	25571	SCOTIA	96	6.1	2005	
60	26054	GENESEE ST	200	2.6	2005	
60	26059	GENESEE ST	200	2.3	2005	
60	26060	GENESEE ST	200	2.1	2005	
60	26452	BRUNSWICK	149	83.8	2005	
60	26554	BURDECK	200	23.7	2005	
60	28185	SHORE ROAD	200	17.9	2005	
60	28187	SHORE ROAD	108	6	2005	
60	28251	LATHAM	200	7.4	2005	
60	28252	LATHAM	200	2.9	2005	
60	28854	RIVERSIDE	200	0.8	2005	
60	28855	RIVERSIDE	200	3.4	2005	
60	28858	RIVERSIDE	200	6.4	2005	
60	28859	RIVERSIDE	200	1.4	2005	
60	30353	BLUE STORES	200	89.1	2005	
60	30567	NEWTONVILLE	200	1.7	2005	
60	30568	NEWTONVILLE	200	3.5	2005	
60	30581	NEWTONVILLE	200	3.3	2005	
60	30583	NEWTONVILLE	200	3.5	2005	
60	30584	NEWTONVILLE	200	8.4	2005	
60	32755	MCKNOWNVILLE	200	0.5	2005	
60	33351	BOYTONVILLE	200	110.3	2005	



**ATTACHMENT 7**

## Distribution Inspections

**Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
60	33452	REYNOLDS RD	108	7.6	2005	
60	33454	REYNOLDS RD	59	10.2	2005	
60	33905	SEMINOLE	200	4.3	2005	
60	34451	WOLF ROAD	200	10.3	2005	
60	34453	WOLF ROAD	200	12	2005	
60	34454	WOLF ROAD	200	6.4	2005	
60	34455	WOLF ROAD	200	0.8	2005	
60	34456	WOLF ROAD	200	3.8	2005	
60	34457	WOLF ROAD	88	0.8	2005	
60	36052	FRONT STREET	200	15.1	2005	
60	36054	FRONT STREET	200	6.3	2005	
60	36055	FRONT STREET	200	7.5	2005	
60	36451	SWAGGERTOWN	200	19	2005	
60	36553	CURRY ROAD	200	13.4	2005	
60	36557	CURRY ROAD	200	12	2005	
60	37154	PINEBUSH	200	9.1	2005	
60	37155	PINEBUSH	200	3.1	2005	
60	37156	PINEBUSH	200	1.2	2005	
60	37158	PINEBUSH	200	3.2	2005	
60	37252	SYCAWAY	82	15.9	2005	
60	37253	SYCAWAY	77	38	2005	
60	37652	UNION ST	200	2	2005	
60	37654	UNION ST	200	7.6	2005	
60	40253	OATHOUT	200	5.2	2005	
60	42054	EVERETT ROAD	133	17.4	2005	
60	45251	SAND CREEK	200	10.5	2005	
60	45252	SAND CREEK	200	5.6	2005	
60	45253	SAND CREEK	200	5.1	2005	
60	45851	RIFLE RANGE	200	5.8	2005	
60	45951	FORTS FERRY	200	14.3	2005	
60	46357	RANDALL RD	200	13.8	2005	
62	2051	INGHAMS	206	94.8	2005	
62	3124	CANAJOHARIE	165	50.6	2005	



**ATTACHMENT 7****Distribution Inspections****Feeder Status Report**

Region	Feeder Num	Feeder Name	Span	Miles	Foot Patrol Sch	Foot Patrol Comp
62	3911	SCHUYLERVILL	212	47.6	2005	
62	3912	SCHUYLERVILL	163	35.4	2005	
62	4251	CHESTERTOWN	179	42.7	2005	
62	7251	GLOVERSVILLE	104	26.2	2005	
62	7508	GLENS FALLS	110	3	2005	
62	20881	WELLS	200	23.1	2005	
62	21413	COBLESKILL	29	3.7	2005	
62	21414	COBLESKILL	165	20.9	2005	
62	28451	BOLTON	146	51.1	2005	
62	28453	BOLTON	129	3	2005	
62	32151	WARRENSBURG	107	38	2005	
62	32152	WARRENSBURG	201	99.4	2005	
62	32654	AMSTERDAM	181	78.3	2005	
62	32952	WILTON	186	68.8	2005	
62	36351	SHARON	211	52.8	2005	
62	36653	CLINTON	128	105	2005	
62	36952	BROOK ROAD	167	17.7	2005	
62	37652	UNION STREET	142	73.5	2005	
62	38551	PORT HENRY	167	84.4	2005	
62	38552	PORT HENRY	128	50.3	2005	
62	39051	MIDDLEBURGH	243	119.4	2005	
62	39052	MIDDLEBURGH	235	150.9	2005	
62	40415	ROCK CITY FL	142	20.1	2005	
62	41213	OTTEN	199	45.3	2005	
62	44356	MALTA	135	38.4	2005	
62	44357	MALTA	171	2.4	2005	
62	44358	MALTA	183	10.7	2005	



# Street Lighting Inspection List

Attachment 8

Page 1 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
1	48	BUFFALO DOT	8
1	48	BUFFALO SEWER AUTHORITY	15
1	48	CITY BUFFALO	17,717
1	48	CITY BUFFALO FIRE DEPT	3
1	48	CITY OF BUFFALO PARKS	188
48 Total			17,931
Year 1 Total			17,931
2	48	CITY OF NIAGARA FALLS	896
2	48	CITY OF NIAGARA FALLS (PARKS)	60
2	48	CITY OF NORTH TONAWANDA	680
2	48	CITY OF TONAWANDA	328
2	48	NEWFANE	14
2	48	TOWN OF CAMBRIA	6
2	48	TOWN OF GRAND ISLAND	474
2	48	TOWN OF LEWISTON - GENERAL	60
2	48	TOWN OF NIAGARA	44
2	48	TOWN OF PENDLETON	1
2	48	TOWN OF PORTER - GENERAL	6
2	48	TOWN OF TONAWANDA	5,028
2	48	TOWN OF WHEATFIELD	161
2	48	VILLAGE OF KENMORE	1,260
2	48	VILLAGE OF LEWISTON	4
2	48	VILLAGE OF WILSON	10
2	48	VILLAGE OF YOUNGSTOWN	8
48 Total			9,040
2	50	ALBION,VILLAGE OF	5
2		ALEXANDER,VILLAGE OF	1
2		ATTICA,VILLAGE OF	17
2		AVON,TOWN OF	13
2		AVON,VILLAGE OF	97
2		BATAVIA,TOWN OF	4
2		BROCKPORT,VILLAGE OF	65
2		CALEDONIA, VILLAGE OF	32
2		CALEDONIA,TOWN OF	1
2		CITY OF BATAVIA	144
2		CLARKSON,TOWN OF	92
2		GAINES,TOWN OF	2
2		HAMLIN,TOWN OF	3
2		HONEOYE FALLS,VILLAGE OF	29
2		LEROY,VILLAGE OF	51
2		LIMA,VILLAGE OF	36
2		LIVONIA,TOWN OF	18
2		LIVONIA,VILLAGE OF	16
2		MEDINA,VILLAGE OF	21
2		MIDDLEPORT,VILLAGE OF	15
2		MONROE COUNTY	69
2		NYS DEPT OF TRANSPORTATION	14
2		PEMBROKE,TOWN OF	2
2		ROYALTON,TOWN OF	2
2		RUSH,TOWN OF	3
2		SCOTTSVILLE,VILLAGE OF	41
2		SWEDEN,TOWN OF	84
2		WHEATLAND,TOWN OF	11
2		YORK,TOWN OF	4
50 Total			892
Year 2 Total			9,932



# Street Lighting Inspection List

Attachment 8

Page 2 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
3	48	CITY OF LACKAWANNA	684
3	48	COUNTY OF ERIE	109
3	48	ERIE CO. DEPT. OF PARKS	52
3	48	NIAGARA FRONTIER TRANSP AUTH	2
3	48	TOWN OF AMHERST	6,468
3	48	TOWN OF CHEEKTOWAGA	1,224
3	48	TOWN OF HAMBURG	85
3	48	TOWN OF WEST SENECA	7
3	48	VILLAGE OF BLASDELL	1
3	48	VILLAGE OF WILLIAMSVILLE	159
48 Total			8,791
3	51	ALLEGANY, TOWN OF	11
3	51	ALLEGANY, VILLAGE OF	17
3	51	ANGOLA, VILLAGE OF	11
3	51	CARROLL, TOWN OF	2
3	51	CARROLLTON, TOWN OF	2
3	51	CATTARAUGUS, VILLAGE OF	17
3	51	CHAUTAUQUA UTILITY DISTRICT	43
3	51	CITY OF DUNKIRK	145
3	51	COLLINS, TOWN OF	2
3	51	CUBA, VILLAGE OF	62
3	51	EDEN, TOWN OF	22
3	51	ELLCOTT, TOWN OF	21
3	51	ELLCOTTVILLE, TOWN OF	4
3	51	ELLCOTTVILLE, VILLAGE OF	11
3	51	EVANS, TOWN OF	175
3	51	FRANKLINVILLE, VILLAGE OF	21
3	51	FREDONIA, VILLAGE OF	81
3	51	HAMBURG, TOWN OF	517
3	51	LAKEWOOD, VILLAGE OF	5
3	51	LIMESTONE, VILLAGE OF	2
3	51	NORTH COLLINS, VILLAGE OF	4
3	51	OLEAN HOUSING AUTH	6
3	51	OLEAN, CITY OF	372
3	51	SCIO, TOWN OF	12
3	51	SENECA NATION HSE AUT	7
3	51	WELLSVILLE, VILLAGE OF	9
3	51	51 Total	1,581
Year 3 Total			10,372



# Street Lighting Inspection List

Attachment 8

Page 3 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
4	51	CITY OF CORTLAND	255
4	51	CITY OF FULTON	200
4	51	CITY OF OSWEGO	848
4	51	CITY OF SYRACUSE	3,540
4	51	CNY REGIONAL MARKET	8
4	51	COUNTY OF ONONDAGA DOT	9
4	51	COUNTY OF ONONDAGA FACILITIES	5
4	51	COUNTY OF ONONDAGA PARKS	12
4	51	COUNTY OF OSWEGO	8
4	51	METRO DEVELOPMENT ASSOCIATION	61
4	51	MUSEUM OF SCIENCE & TECH.	4
4	51	NEW YORK STATE	118
4	51	TOWN OF CAMILLUS	221
4	51	TOWN OF CICERO	398
4	51	TOWN OF CLAY	1,828
4	51	TOWN OF CORTLANDVILLE	49
4	51	TOWN OF DEWITT	246
4	51	TOWN OF GEDDES	69
4	51	TOWN OF GRANBY	2
4	51	TOWN OF GRANBY-WILOBOB	2
4	51	TOWN OF HANNIBAL	18
4	51	TOWN OF HASTINGS	1
4	51	TOWN OF LAFAYETTE	1
4	51	TOWN OF LYSANDER	318
4	51	TOWN OF MANLIUS	110
4	51	TOWN OF MINETTO	18
4	51	TOWN OF ONONDAGA	301
4	51	TOWN OF OSWEGO	3
4	51	TOWN OF REDFIELD	4
4	51	TOWN OF SALINA	333
4	51	TOWN OF SCRIBA	73
4	51	TOWN OF SULLIVAN	2
4	51	TOWN OF VAN BUREN	174
4	51	TOWN OF VIRGIL	9
4	51	TOWN OF VOLNEY	6
4	51	VILLAGE OF ALTMAR	2
4	51	VILLAGE OF BALDWINVILLE	68
4	51	VILLAGE OF CAZENOVIA	71
4	51	VILLAGE OF CENTRAL SQUARE	32
4	51	VILLAGE OF CHITTENANGO	66
4	51	VILLAGE OF EAST SYRACUSE	25
4	51	VILLAGE OF FAYETTEVILLE	2
4	51	VILLAGE OF HANNIBAL	5
4	51	VILLAGE OF HOMER	76
4	51	VILLAGE OF LIVERPOOL	8
4	51	VILLAGE OF MANLIUS	100
4	51	VILLAGE OF MEXICO	2
4	51	VILLAGE OF MINOA	1
4	51	VILLAGE OF NORTH SYRACUSE	42
4	51	VILLAGE OF PHOENIX	9
4	51	VILLAGE OF PULASKI	30
4	51	VILLAGE OF SANDY CREEK	4
54 Total			9,797



# Street Lighting Inspection List

Attachment 8

Page 4 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
4	56	CAMDEN, VILLAGE OF	53
4	56	CANASTOTA, VILLAGE OF	42
4	56	CLINTON, VILLAGE OF	5
4	56	FLOYD, TOWN OF	7
4	56	FRANKFORT, TOWN OF	22
4	56	HERKIMER, TOWN OF	30
4	56	HERKIMER, VILLAGE OF	73
4	56	KIRKLAND, TOWN OF	3
4	56	LEE, TOWN OF	21
4	56	LENOX, TOWN OF	8
4	56	LITTLE FALLS, CITY OF	144
4	56	MARCY, TOWN OF	1
4	56	NEW HARTFORD, TOWN OF	105
4	56	NEW HARTFORD, VILLAGE OF	37
4	56	NEW YORK MILLS, VILLAGE OF	36
4	56	ONEIDA INDIAN NATION	24
4	56	ONEIDA, CITY OF	74
4	56	ORISKANY, VILLAGE OF	3
4	56	ROME, CITY OF-DPW	528
4	56	SYLVAN BEACH, VILLAGE OF	6
4	56	TOWN OF LONG LAKE	13
4	56	TOWN OF WHITESTOWN	40
4	56	UTICA, CITY OF	1,390
4	56	VILLAGE OF WHITESBORO	10
4	56	YORKVILLE, VILLAGE OF	23
56 Total			2,698
4	57	BOMBAY, T (2) (HOGANSBURG)	3
4	57	CANTON, TOWN OF (1) (MORLEY)	2
4	57	CANTON, VILLAGE OF	2
4	57	CITY OF WATERTOWN	10
4	57	FELTS MILLS	1
4	57	HERMON, VILLAGE OF	4
4	57	HOPKINTON, T (2) (NICHOLVILLE)	2
4	57	LAWRENCE, T OF (NICHOLVILLE)	2
4	57	MADRID, TOWN OF	5
4	57	MALONE, VILLAGE OF	10
4	57	NORFOLK (1) (HAMLET/NORFOLK)	9
4	57	NORFOLK, T (3) (RAYMONDVILLE)	2
4	57	NORWOOD, VILLAGE OF	18
4	57	OGDENSBURG, CITY OF	103
4	57	POTSDAM, VILLAGE OF	124
4	57	SARANAC LAKE, VILLAGE OF	99
4	57	TOWN OF LERAY	15
4	57	TOWN OF ORLEANS	4
4	57	VILLAGE OF ADAMS	17
4	57	VILLAGE OF ALEX BAY	10
4	57	VILLAGE OF BLACK RIVER	14
4	57	VILLAGE OF BROWNVILLE	7
4	57	VILLAGE OF CARTHAGE	35
4	57	VILLAGE OF CASTORLAND	1
4	57	VILLAGE OF CHAUMONT	4
4	57	VILLAGE OF CROGHAN	2
4	57	VILLAGE OF DEFERIET	5
4	57	VILLAGE OF DEXTER	3
4	57	VILLAGE OF HARRISVILLE	27
4	57	VILLAGE OF LOWVILLE	25
4	57	VILLAGE OF LYONS FALLS	4
4	57	VILLAGE OF WEST CARTHAGE	2
4	57	WADDINGTON, TOWN OF	1
4	57	WADDINGTON, VILLAGE OF	9
57 Total			581
Year 4 Total			13,076



# Street Lighting Inspection List

Attachment 8

Page 5 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
5	60	ALBANY COUNTY AIRPORT	146
5	60	ALBANY HOUSING CORNING HOMES	49
5	60	ALBANY,CITY OF	3,971
5	60	ALBANY,COUNTY OF	65
5	60	ALTAMONT,VILLAGE OF	28
5	60	BETHLEHEM,TOWN OF	90
5	60	BRUNSWICK,TOWN OF	2
5	60	CAPITAL DIST TRANS AUTHORITY	26
5	60	CITY OF ALBANY	86
5	60	CLERMONT,TOWN OF	4
5	60	CLIFTON PARK,TOWN OF	92
5	60	COHOES,CITY OF	379
5	60	COLONIE,TOWN OF	616
5	60	COLONIE,VILLAGE OF	396
5	60	DUANESBURG,TOWN OF	2
5	60	EAST GREENBUSH,TOWN OF	97
5	60	GREENPORT,TOWN OF	54
5	60	GUILDERLAND,TOWN OF	39
5	60	HOOSICK FALLS,VILLAGE OF	69
5	60	HUDSON,CITY OF	346
5	60	KINDERHOOK,VILLAGE OF	35
5	60	MENANDS,VILLAGE OF	99
5	60	NASSAU,VILLAGE OF	1
5	60	NISKAYUNA,TOWN OF	64
5	60	NORTH GREENBUSH,TOWN OF	1
5	60	NYS DEPT OF TRANSPORTATION	186
5	60	NYS DEPT PKS REC & HIST PRES	1
5	60	NYS OFFICE OF GENERAL SERVICES	35
5	60	NYS THRUWAY AUTHORITY	9
5	60	RENSSELAER,CITY OF	137
5	60	RENSSELAER,COUNTY OF	67
5	60	ROTTERDAM,TOWN OF	83
5	60	SCHAGHTICOKE,TOWN OF	8
5	60	SCHAGHTICOKE,VILLAGE OF	6
5	60	SCHENECTADY,CITY OF	787
5	60	SCHENECTADY,COUNTY OF	134
5	60	SCOTIA,VILLAGE OF	33
5	60	TROY HOUSING AUTHORITY	23
5	60	TROY,CITY OF	1,248
5	60	VALATIE,VILLAGE OF	10
5	60	VALLEY FALLS,VILLAGE OF	8
5	60	VOORHEESVILLE,VILLAGE OF	102
5	60	WATERFORD,TOWN OF	26
5	60	WATERFORD,VILLAGE OF	25
5	60	WATERVLIET,CITY OF	57
60 Total			9,742



# Street Lighting Inspection List

Attachment 8

Page 6 of 6

Sequence No. (Year)	Region No.	Customer Name	Street Light Quantity
5	62	CITY OF AMSTERDAM	425
5	62	CITY OF GLENS FALLS	353
5	62	CITY OF GLOVERSVILLE	106
5	62	CITY OF JOHNSTOWN	128
5	62	CITY OF SARATOGA SPRINGS - IN	172
5	62	CITY OF SARATOGA SPRINGS - OUT	62
5	62	CO OF SARATOGA BRIDGE & HWY	18
5	62	TOWN MOREAU-SHERWOOD FOREST	9
5	62	TOWN OF AMSTERDAM	2
5	62	TOWN OF ARIETTA	3
5	62	TOWN OF BOLTON	4
5	62	TOWN OF CHESTER	2
5	62	TOWN OF GREENWICH	15
5	62	TOWN OF HADLEY	18
5	62	TOWN OF INDIAN LAKE	6
5	62	TOWN OF JOHNSBURG	8
5	62	TOWN OF JOHNSTOWN	8
5	62	TOWN OF LAKE GEORGE	35
5	62	TOWN OF LAKE LUZERNE - BR	2
5	62	TOWN OF MALTA-RUM CHERRY RD	4
5	62	TOWN OF MOREAU - A	19
5	62	TOWN OF MOREAU-MEADOW RIDGE	3
5	62	TOWN OF MOREAU-TANGLEWOOD	5
5	62	TOWN OF MOREAU-WOODSCAPE LGTS	15
5	62	TOWN OF NORTHAMPTON-SAC PK	3
5	62	TOWN OF NORTHUMBERLAND	2
5	62	TOWN OF QUEENSBURY - A	25
5	62	TOWN OF QUEENSBURY - B	26
5	62	TOWN OF QUEENSBURY (GENERAL)	127
5	62	TOWN OF SCHROON LAKE	3
5	62	TOWN OF TICONDEROGA	36
5	62	TOWN OF WARRENSBURG	29
5	62	TOWN OF WESTPORT	10
5	62	VILLAGE OF BALLSTON SPA	33
5	62	VILLAGE OF CANAJOHARIE	41
5	62	VILLAGE OF COBLESKILL	29
5	62	VILLAGE OF CORINTH	15
5	62	VILLAGE OF FORT EDWARD	36
5	62	VILLAGE OF FT. PLAIN	20
5	62	VILLAGE OF FULTONVILLE	8
5	62	VILLAGE OF HAGAMAN	4
5	62	VILLAGE OF HUDSON FALLS	27
5	62	VILLAGE OF LAKE GEORGE	47
5	62	VILLAGE OF MAYFIELD	2
5	62	VILLAGE OF NORTHVILLE	1
5	62	VILLAGE OF PORT HENRY	9
5	62	VILLAGE OF SCHUYLERVILLE	9
5	62	VILLAGE OF SOUTH GLENS FALLS	6
5	62	VILLAGE OF SPECULATOR	1
5	62	VILLAGE OF ST JOHNSVILLE	28
5	62	VILLAGE OF VICTORY MILLS	1
5	62	WARREN COUNTY AIRPORT	9
62 Total			2,009
Year 5 Total			11,751
Grand Total			63,062



# UNDERGROUND INSPECTION LIST

ATTACHMENT 9

Sheet 1 of 4

## NY REGION CONVENTIONAL UG

REGIONS	WEST			CENTRAL			EAST		TOTAL
	FRONTIER 48	GENESEE 50	SOUTHWEST 51	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	CAPITAL 60	NORTH EAST 62	
Handholes	9344	364	310	495	214	106	1071	402	12306
Manholes	5715	87	73	2847	1621	217	4258	637	15455
Junction	0	15	20	22	27	91	79	71	325
UG Transformer	1203	2140	931	3311	1928	2100	3718	3259	18590
UG Ratios	8	2	5	7	7	3	58	14	104
Switch Gears	240	59	33	186	72	52	393	142	1177
Vaults	648	21	25	295	146	42	486	111	1774
<b>GRAND TOTALS</b>	<b>17158</b>	<b>4688</b>	<b>1397</b>	<b>4163</b>	<b>4015</b>	<b>2611</b>	<b>10063</b>	<b>4636</b>	<b>49731</b>



# WEST

## ATTACHMENT 9

Sheet 2 of 4

Buffalo  
Niagara Falls

Buffalo  
Niagara Falls

Buffalo  
Niagara Falls

Buffalo  
Niagara Falls Batavia

Buffalo  
Niagara Falls Batavia Fredonia

WEST REGIONS	YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5			TOTAL
	FRONTIER	GENESEE	SOUTHWEST	FRONTIER	GENESEE	SOUTHWEST	FRONTIER	GENESEE	SOUTHWEST	FRONTIER	GENESEE	SOUTHWEST	FRONTIER	GENESEE	SOUTHWEST	
Handholes	1869	0	0	1869	0	0	1869	0	0	1869	180	0	1868	180	310	10014
Manholes	1143	0	0	1143	0	0	1143	0	0	1143	42	0	1143	42	65	5864
Junction	0	0	0	0	0	0	0	0	0	0	7	0	0	7	20	34
UG Transformer	241	0	0	241	0	0	241	0	0	241	1070	0	239	1070	930	4273
UG Ratios	2	0	0	2	0	0	2	0	0	2	0	0	0	0	5	13
Switch Gears	48	0	0	48	0	0	48	0	0	48	30	0	48	30	25	325
Vaults	130	0	0	130	0	0	130	0	0	130	10	0	128	10	25	693
GRAND TOTALS	3433	0	0	3433	0	0	3433	0	0	3433	1339	0	3426	1339	1380	21216



# CENTRAL

## ATTACHMENT 9

Sheet 3 of 4

Syracuse    Utica    Watertown    Syracuse  
Oswego    Utica    Watertown    Syracuse  
Fulton    Cortland    Oneida    Watertown    Syracuse    Rome    Watertown    Syracuse    Herkimer  
Little Falls    Watertown  
Old Forge

CENTRAL REGIONS	YEAR 1			YEAR 2			YEAR 3			YEAR 4			YEAR 5			TOTAL
	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	CENTRAL 54	MOHAWK VALLEY 56	NORTHERN 57	
Handholes	99	43	22	99	43	21	99	43	21	99	43	21	99	42	21	815
Manholes	570	325	44	570	324	44	569	324	43	569	324	43	569	324	43	4685
Junction	5	6	18	5	6	18	4	5	18	4	5	18	4	5	18	140
UG Transformer	663	386	420	662	386	420	662	386	420	662	386	420	662	384	420	7339
UG Ratios	2	2	1	2	2	1	1	1	1	1	1	0	1	1	0	17
Switch Gears	38	15	11	37	15	11	37	14	10	37	14	10	37	14	10	310
Vaults	59	30	9	59	29	9	59	29	8	59	29	8	59	29	8	483
GRAND TOTALS	1436	807	526	1434	805	524	1431	802	521	1431	802	520	1431	799	520	13789



# EAST

## ATTACHMENT 9

Sheet 4 of 4

	Troy/ Hudson		Albany		Schenec'y Cobleskill/ Gloversville		Albany		Saratoga/ Glens Falls		
	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5		
EAST REGIONS	CAPITAL 60	NORTH EAST 62	CAPITAL 60	NORTH EAST 62	CAPITAL 60	NORTH EAST 62	CAPITAL 60	NORTH EAST 62	CAPITAL 60	NORTH EAST 62	TOTAL
Handholes	291	0	250	0	270	100	260	0	0	302	1473
Manholes	850	0	1280	0	850	95	1278	0	0	542	4895
Junction	23	0	20	0	16	15	20	0	0	56	150
UG Transformer	1118	0	930	0	740	850	930	0	0	2409	6977
UG Ratios	15	0	14	0	15	8	14	0	0	6	72
Switch Gears	93	0	110	0	80	40	110	0	0	102	535
Vaults	80	0	163	0	80	33	163	0	0	78	597
GRAND TOTALS	2470	0	2767	0	2051	1141	2775	0	0	3495	14699



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
03 SEVENTH ST.	301	(No OH Premises)	0	0	1.56	0	0	0	0	0	1	0	0	0	43	0	0	43
BURNET AVE	901	(No OH Premises)	0	0	0.21	0	0	0	0	0	3	3	0	0	6	0	0	10
BURNET AVE	902	(No OH Premises)	0	0	0.42	0	0	0	0	0	1	1	0	0	10	0	0	11
BURNET AVE	995	(No OH Premises)	0	0	0.2	0	0	0	0	0	3	3	0	0	6	0	0	10
21 MAIN	2162	(No OH Premises)	0	0	0.8	0	0	0	0	0	4	3	0	1	12	0	0	17
21 MAIN	2168	(No OH Premises)	0	0	0.63	0	0	0	0	0	4	2	0	0	12	0	0	15
21 MAIN	2172	(No OH Premises)	0	0	0.21	0	0	0	0	0	1	1	0	0	5	1	0	7
23 KENMORE	2363	(No OH Premises)	0	0.07	0.34	0	0	0	0	0	3	2	0	0	9	0	0	12
23 KENMORE	2366	(No OH Premises)	0	0.34	1.05	0	0	0	0	0	7	37	0	16	26	0	0	81
24 KENMORE	2468	(No OH Premises)	0	0	0.15	0	0	0	0	0	2	1	0	0	3	0	0	5
24 KENMORE	2469	(No OH Premises)	0	0	0.15	0	0	0	0	0	1	0	0	0	4	0	0	4
24 KENMORE	2471	(No OH Premises)	0	0	0.59	0	0	0	0	0	0	1	0	0	10	0	0	10
25 STATION 25	2561	(No OH Premises)	0	0	1.07	0	0	0	0	0	1	1	0	0	24	0	0	25
25 STATION 25	2562	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
25 STATION 25	2567	(No OH Premises)	0	0	0.51	0	0	0	0	0	0	0	0	0	13	0	1	14
25 STATION 25	2571	(No OH Premises)	0	0	1.03	0	0	0	0	0	2	1	2	0	24	0	0	28
26 STATION 26	2674	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
27 JEWETT AVE	2773	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
FAYETTE STREET	2861	(No OH Premises)	0	0	0.03	0	0	0	0	0	1	0	0	0	0	0	0	0
29 POTOMAC	2971	(No OH Premises)	0	0	0.89	0	0	0	0	0	2	1	0	0	19	0	0	21
31 STATION 31	3168	(No OH Premises)	0	0	0.38	0	0	0	0	0	0	1	0	0	7	1	0	9
32 BAILEY	3266	(No OH Premises)	0	0	0.03	0	0	0	0	0	0	0	0	0	1	0	0	1
34 BEST ST.	3464	(No OH Premises)	0	0	0.49	0	0	0	0	0	0	0	0	0	10	0	0	10
37 HUDSON AVE	3772	(No OH Premises)	0	0	0.37	0	0	0	0	0	1	1	0	0	11	0	0	12
38 SPRING	3865	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
38 SPRING	3873	(No OH Premises)	0	0	0.3	0	0	0	0	0	1	1	0	0	8	0	0	9
41 STATION 41	4164	(No OH Premises)	0	0	0.23	0	0	0	0	0	0	0	0	0	6	1	1	8
41 STATION 41	4169	(No OH Premises)	0	0.07	1.29	0	0	0	0	1	0	0	0	0	35	0	2	37
42 OHIO	4264	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	2	0	0	2
44 SOUTH PARK	4463	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
44 SOUTH PARK	4469	(No OH Premises)	0	0	0.02	0	0	0	0	0	0	0	0	0	1	0	0	1
47 STATION 47	4766	(No OH Premises)	0	0.31	0	0	0	0	0	0	0	0	0	0	10	1	0	11
49 BEST	4963	(No OH Premises)	0	0.02	0.13	0	0	0	0	0	0	0	0	0	4	0	1	5
49 BEST	4964	(No OH Premises)	0	0.11	0.09	0	0	0	0	0	0	0	0	0	5	0	0	5
49 BEST	4966	(No OH Premises)	0	0.01	0.59	0	0	1	0	1	1	1	0	0	12	0	1	14
49 BEST	4969	(No OH Premises)	0	0.69	0.02	0	44	0	0	8	0	0	0	0	2	0	1	3
51 ELK ST	5167	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
52 HERTEL	5265	(No OH Premises)	0	0	0.08	0	0	0	0	0	0	0	0	0	3	0	0	3
52 HERTEL	5273	(No OH Premises)	0	0	0.07	0	0	0	0	0	0	0	0	0	2	0	0	2
59 PERRY	5962	(No OH Premises)	0	0	0.82	0	0	2	0	1	2	1	0	0	13	0	0	15
68 ELMWOOD	6872	(No OH Premises)	0	0	0.5	0	0	0	0	0	0	2	0	0	13	0	0	15
74 MILITARY	7464	(No OH Premises)	0	0	0.08	0	0	0	0	0	1	0	0	0	1	0	0	1
GLENS FALLS	7503	(No OH Premises)	0	0	0.02	0	0	0	0	0	1	0	0	0	0	0	0	0
GLENS FALLS	7504	(No OH Premises)	0	0	0.05	0	0	0	0	0	1	0	0	0	2	0	0	2
80 EIGHTH STREET	8062	(No OH Premises)	0	0	0.04	0	0	0	0	0	1	1	0	0	2	0	0	3
80 EIGHTH STREET	8063	(No OH Premises)	0	0	0.02	0	0	0	0	0	0	0	0	0	1	0	0	1
80 EIGHTH STREET	8067	(No OH Premises)	0	0	0.04	0	0	0	0	0	1	0	0	0	1	0	0	1
83 WELCH AVE	8365	(No OH Premises)	0	0	0.15	0	0	0	0	0	1	0	0	0	4	0	0	4
83 WELCH AVE	8366	(No OH Premises)	0	0	0.02	0	0	0	0	0	0	0	0	0	2	0	0	2
83 WELCH AVE	8367	(No OH Premises)	0	0	0.06	0	0	0	0	0	1	1	0	0	2	0	0	3
85 STEPHENSON AVE	8561	(No OH Premises)	0	0	0.09	0	0	0	0	0	1	0	1	0	3	0	0	4
LANSINGBURGH	9314	(No OH Premises)	0	0	0.03	0	0	0	0	0	1	0	0	0	1	0	0	1
LIBERTY	9402	(No OH Premises)	0	0	1.1	0	0	0	0	0	3	1	0	0	20	0	0	22
LIBERTY	9413	(No OH Premises)	0	0	1.1	0	0	0	0	0	3	1	0	0	20	0	0	22
LIBERTY	9425	(No OH Premises)	0	0	1.86	34.48	0	4932	0	4	15	48	0	19	228	35	1	335
LIBERTY	9427	(No OH Premises)	0	0	1.15	45.98	0	6572	0	5	14	49	0	19	225	35	0	332
LIBERTY	9431	(No OH Premises)	0	0	0.76	34.48	0	4929	0	3	14	47	0	19	224	35	0	329
LIBERTY	9442	(No OH Premises)	0	0	1.64	68.96	0	9858	0	6	14	49	0	19	224	35	0	331
LIBERTY	9444	(No OH Premises)	0	0	1.42	80.45	0	11501	0	7	14	48	0	19	227	35	0	333
97 SUMMIT PARK	9752	(No OH Premises)	0	0	1.41	0	0	0	0	5	1	0	0	4	0	0	5	9
MENANDS	10103	(No OH Premises)	0	0	0.32	0	0	0	0	0	1	0	0	0	7	0	0	7
MENANDS	10136	(No OH Premises)	0	0	3.45	0	0	0	0	0	8	38	0	1	103	0	0	144
MENANDS	10139	(No OH Premises)	0	0	2.17	0	0	0	0	0	3	15	1	0	54	0	0	71
VANDALIA	10452	(No OH Premises)	0	0	0.01	0	0	0	0	0	1	0	0	0	0	0	0	0
MCBRIDE	12367	(No OH Premises)	0	0	0.16	0	0	0	0	0	1	1	0	0	3	0	0	4
BUCKLEY	14069	(No OH Premises)	0	0	0.01	0	0	0	0	0	1	0	0	0	1	0	0	1
MIDLER (ES 145)	14564	(No OH Premises)	0	0	0.03	0	0	0	0	0	1	0	0	0	1	0	0	1
161 SHORT STREET	16169	(No OH Premises)	0	0	0.01	0	0	0	0	0	0	0	0	0	1	0	0	1
162 STATION 162	16261	(No OH Premises)	0	0	0.34	0	0	0	0	0	1	1	0	0	2	1	3	7
162 STATION 162	16262	(No OH Premises)	0	0	0.1	0	0	0	0	2	0	0	0	0	1	0	3	4
162 STATION 162	16263	(No OH Premises)	0	0	0.35	0	0	4	0	3	1	0	0	0	2	1	3	6
TRINITY	16406	(No OH Premises)	0	0.07	2.02	65.55	0	6070	0	7	22	206	3	40	877	110	3	1245
TRINITY	16407	(No OH Premises)	0	0	2.05	0	0	0	0	0	2	17	0	0	33	0	2	53
TRINITY	16410	(No OH Premises)	0	0	2.8	262.09	0	24265	0	13	22	222	3	39	893	116	3	1282
TRINITY	16412	(No OH Premises)	0	0	2.78	0	0	0	0	0	6	15	0	0	59	0	4	80
TRINITY	16457	(No OH Premises)	0	0	2.41	0	0	1	0	1	2	19	0	0	39	0	4	63
TRINITY	16459	(No OH Premises)	0	0	2.94	0	0	0	0	4	20	0	0	2	121	4	1	149
SPRINGFIELD RD. E.S.	16767	(No OH Premises)	0	0	0.23	0	0	0	0	0	0	0	0	0	3	0	1	4
SPRINGFIELD RD. E.S.	16769	(No OH Premises)	0	0	0.22	0	0	0	0	0	0	0	0	0	3	0	1	4
205 ERIE DRIVE	20552	(No OH Premises)	0	0.99	0	0.01	0	8	0	0	7	1	4	0	3	0	8	18



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
213 DALE RD	21352	(No OH Premises)	0	0	0.02	0	0	0	0	0	0	0	0	0	2	0	0	2
215 BUFF AVE STA	21550	(No OH Premises)	0	0	3.71	0	0	12	0	7	0	6	0	2	53	3	9	73
215 BUFF AVE STA	21557	(No OH Premises)	0	0	1.84	0	0	0	0	0	0	0	0	0	33	0	2	35
Walmore	21753	(No OH Premises)	0	0	0.01	0	0	0	0	0	1	0	1	0	0	0	0	1
ASH STREET	22306	(No OH Premises)	0	0	0.33	0	0	1	0	2	0	0	0	0	11	0	0	11
ASH STREET	22325	(No OH Premises)	0	0.9	1.19	0	0	28	0	7	1	1	0	0	22	0	8	31
ASH STREET	22329	(No OH Premises)	0	1	1.18	0	0	32	0	8	1	1	0	0	26	0	8	35
ASH STREET	22340	(No OH Premises)	0	0	1.92	0	0	3	0	10	1	25	0	0	84	16	0	125
ASH STREET	22341	(No OH Premises)	0	0	2.05	0.02	0	8	0	12	1	9	0	0	79	16	0	104
ASH STREET	22342	(No OH Premises)	0	0	2.95	0.02	0	31	0	15	1	11	0	0	118	19	0	148
ASH STREET	22343	(No OH Premises)	0	0	2.44	0.37	0	10	0	10	1	91	0	0	103	20	0	214
ASH STREET	22344	(No OH Premises)	0	0	2.47	1.12	0	11	0	10	2	56	0	0	64	12	0	133
ASH STREET	22345	(No OH Premises)	0	0	3.3	6.87	0	714	0	16	3	75	0	0	130	34	0	240
ASH STREET	22346	(No OH Premises)	0	0	3.27	0.09	0	7	0	12	0	46	0	0	143	16	0	205
ASH STREET	22347	(No OH Premises)	0	0	2.52	0	0	1	0	8	1	37	0	0	54	11	0	102
ASH STREET	22348	(No OH Premises)	0	0	2.64	33	0	1819	0	13	9	143	0	39	410	88	1	683
ASH STREET	22349	(No OH Premises)	0	0	3.76	35.77	0	2143	0	14	10	123	0	39	460	102	1	728
ASH STREET	22353	(No OH Premises)	0	0	3.47	0.64	0	88	0	4	0	0	0	0	67	1	8	76
ASH STREET	22354	(No OH Premises)	0	0	0.47	0	0	0	0	1	1	1	0	0	10	0	2	13
ASH STREET	22355	(No OH Premises)	0	0.21	2.27	0.14	0	25	0	7	11	7	0	0	27	0	12	49
ASH STREET	22359	(No OH Premises)	0	0	0.47	0	0	0	0	0	1	1	0	0	12	0	2	15
ASH STREET	22360	(No OH Premises)	0	0	0.14	0	0	0	0	0	3	2	0	0	4	0	0	7
224 SWEET HOME	22456	(No OH Premises)	0	0	0.19	0	0	0	0	0	1	0	1	0	2	0	0	3
KNAPP RD	22651	(No OH Premises)	0	0	0.19	0	0	0	0	0	1	0	2	0	7	0	0	9
KNAPP RD	22652	(No OH Premises)	0	0	0.14	0	0	0	0	0	1	0	4	0	6	0	0	10
KNAPP RD	22653	(No OH Premises)	0	0	0.15	0	0	0	0	0	1	0	0	0	6	0	0	6
WATT ST	23066	(No OH Premises)	0	0	0.06	0	0	0	0	0	1	0	0	0	2	0	0	2
TEMPLE ST.	24342	(No OH Premises)	0	0	0.49	0	0	0	0	0	0	0	0	0	19	0	1	20
TEMPLE ST.	24349	(No OH Premises)	0	0	1.59	0.05	0	6	0	8	0	5	0	0	54	10	0	69
TEMPLE ST.	24350	(No OH Premises)	0	0	1.56	16.25	0	911	0	9	8	106	0	39	396	86	1	630
TEMPLE ST.	24353	(No OH Premises)	0	0	1.98	16.6	0	902	0	12	8	109	0	39	406	96	1	653
TEMPLE ST.	24354	(No OH Premises)	0	0.22	2.1	16.25	0	911	0	7	8	113	0	39	410	87	1	652
TEMPLE ST.	24355	(No OH Premises)	0	0.01	1.6	0	0	4	0	1	0	2	0	3	29	1	4	39
TEMPLE ST.	24356	(No OH Premises)	0	0	0.97	0	0	0	0	0	0	0	0	0	35	3	0	38
TEMPLE ST.	24357	(No OH Premises)	0	0.22	2.51	1.89	0	72	0	13	0	65	0	2	72	251	0	159
TEMPLE ST.	24358	(No OH Premises)	0	0.22	3.35	16.25	0	909	0	12	8	106	0	39	408	92	1	648
TEMPLE ST.	24359	(No OH Premises)	0	0	1.7	0	0	3	0	1	2	2	0	1	32	0	6	42
SEVENTH AVE	24481	(No OH Premises)	0	0	0.05	0	0	0	0	0	0	0	0	0	2	0	0	2
SEVENTH AVE	24482	(No OH Premises)	0	0	1.12	0.4	0	4	0	2	3	4	0	0	33	4	0	42
WATERFORD	25815	(No OH Premises)	0	0	0.04	0	0	0	0	0	1	1	0	0	1	0	0	2
WATERFORD	25876	(No OH Premises)	0	0	0.03	0	0	0	0	0	1	0	0	0	1	0	0	1
WATERFORD	25877	(No OH Premises)	0	0	0.02	0	0	0	0	0	1	0	1	0	1	0	0	2
GENESEE ST.	26053	(No OH Premises)	0	0	0.91	0	0	0	0	0	3	15	0	0	31	0	0	47
MC CREA ST.	27225	(No OH Premises)	0	0	0.02	0	0	0	0	0	1	0	0	0	0	0	0	0
RIVERSIDE	28801	(No OH Premises)	0	0	3.27	131.05	0	12175	0	14	20	216	4	39	893	113	4	1274
RIVERSIDE	28803	(No OH Premises)	0	0	0.08	0	0	0	0	0	0	0	0	0	2	0	0	2
RIVERSIDE	28807	(No OH Premises)	0	0	4.1	229.33	0	21238	0	13	20	221	4	40	891	113	3	1277
RIVERSIDE	28808	(No OH Premises)	0	0	4.5	65.54	0	6066	0	6	22	208	4	39	915	113	3	1288
RIVERSIDE	28810	(No OH Premises)	0	0	4.05	32.77	0	3034	0	5	22	212	4	39	910	114	3	1288
RIVERSIDE	28814	(No OH Premises)	0	0	2.04	65.53	0	6069	0	4	20	205	3	39	883	110	4	1249
RIVERSIDE	28835	(No OH Premises)	0	0	2.18	0	0	0	0	0	1	12	1	1	86	1	0	101
RIVERSIDE	28838	(No OH Premises)	0	0	2.25	0.01	0	0	0	1	4	23	0	1	71	2	0	98
RIVERSIDE	28855	(No OH Premises)	0	1.38	7.12	0.51	0	16	0	14	5	26	0	33	109	4	14	187
RIVERSIDE	28859	(No OH Premises)	0	0	1.46	0	0	0	0	0	3	7	1	0	53	0	0	62
LYSANDER	29756	(No OH Premises)	0	1.44	0	0	0	0	0	2	0	0	0	0	2	0	7	9
LYSANDER	29757	(No OH Premises)	0	0.68	0	0	0	0	0	3	0	0	0	0	2	0	6	8
NEWTONVILLE	30570	(No OH Premises)	0	0	0.24	0	0	0	0	0	1	0	0	0	3	0	0	3
COLVIN AVE	31309	(No OH Premises)	0	0	1.3	0	0	1	0	1	1	2	0	0	18	0	0	20
DELAWARE AVE	33037	(No OH Premises)	0	0	1.38	0	0	0	0	0	9	3	0	0	18	0	0	23
WOLF RD.	34455	(No OH Premises)	0	0	2.18	0	0	79	0	7	0	12	0	7	28	1	6	54
ONEIDA	50152	(No OH Premises)	0	0	0.03	0	0	0	0	0	1	0	1	0	1	0	0	2
TERMINA	65144	(No OH Premises)	0	0.09	2	0	0	26	0	7	0	1	0	0	95	7	0	103
TERMINA	65145	(No OH Premises)	0	0.09	2.24	0	0	11	0	6	1	3	0	0	118	6	0	127
TERMINA	65146	(No OH Premises)	0	0.07	1.91	0	0	41	0	5	1	0	0	0	115	3	0	118
TERMINA	65147	(No OH Premises)	0	0.07	2.1	0	0	16	0	7	1	2	0	0	133	7	0	142
MILL ST.	74860	(No OH Premises)	0	0	0.93	0	0	4	0	2	0	1	0	0	24	1	1	27
MILL ST.	74871	(No OH Premises)	0	0	0.91	0	0	0	0	0	0	1	0	0	36	0	0	37
MILL ST.	74872	(No OH Premises)	0	0	0.97	0	0	0	0	0	0	2	0	0	36	0	0	38
MILL ST.	74873	(No OH Premises)	0	0	1.17	0	0	0	0	0	0	3	0	0	43	0	0	46
MILL ST.	74874	(No OH Premises)	0	0	1.23	0	0	0	0	1	0	3	0	0	35	1	1	40
OGDENSBURG	93862	(No OH Premises)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OGDENSBURG	93863	(No OH Premises)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LITTLE RIVER	95564	(No OH Premises)	0	0	0.01	0	0	0	0	0	1	0	0	0	0	0	0	0
ELM ST. STA. 230KV	10E	(No OH Premises)	0	0	0.27	0	0	0	0	0	0	0	0	0	9	0	0	9
160 SUMMER ST.	16E	(No OH Premises)	0	0	0.7	0	0	0	0	1	0	0	0	0	14	1	0	15
ELM ST. STA. 230KV	16E	(No OH Premises)	0	0	0.16	0	0	0	0	0	0	0	0	0	6	0	0	6
160 SUMMER ST.	17E	(No OH Premises)	0	0	0.38	0	0	0	0	0	0	0	0	0	9	0	0	9
ELM ST. STA. 230KV	17E	(No OH Premises)	0	0	0.16	0	0	0	0	0	0	0	0	0	6	0	0	6
160 SUMMER ST.	18E	(No OH Premises)	0	0	0.65	3.52	0	28	0	1	1	86	1	39	30	12	0	168
ELM ST. STA. 230KV	18E	(No OH Premises)	0	0	0.16	0	0	0	0	0	0	0	0	0	6	0	0	6



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guy's	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
ELM ST. STA. 230KV	1E	(No OH Premises)	0	0	0.25	0	0	0	0	0	0	0	0	0	0	7	0	0	7	
ELM ST. STA. 230KV	1E	(No OH Premises)	0	0	0.05	0	0	0	0	0	0	0	0	0	0	2	0	0	2	
ELM ST. STA. 230KV	23E	(No OH Premises)	0	0	0.52	0	0	0	0	0	0	0	0	0	0	14	0	0	14	
ELM ST. STA. 230KV	27E	(No OH Premises)	0	0	0.17	0	0	0	0	0	0	0	0	0	0	6	0	0	6	
ELM ST. STA. 230KV	2E	(No OH Premises)	0	0	0.26	0	0	0	0	0	0	0	0	0	0	7	0	0	7	
ELM ST. STA. 230KV	2E	(No OH Premises)	0	0	1.53	0.08	0	7	0	1	0	0	0	0	0	67	9	0	76	
ELM ST. STA. 230KV	35E	(No OH Premises)	0	0	2.41	0	0	0	0	0	1	0	1	0	0	126	14	0	141	
ELM ST. STA. 230KV	3E	(No OH Premises)	0	0	0.06	0	0	0	0	0	0	0	0	0	0	3	0	0	3	
ELM ST. STA. 230KV	4E	(No OH Premises)	0	0	0.44	0.77	0	0	15	0	1	0	33	0	11	16	0	0	60	
ELM ST. STA. 230KV	5E	(No OH Premises)	0	0	1.55	4.75	0	0	62	0	4	2	141	1	57	162	28	0	390	
ELM ST. STA. 230KV	6E	(No OH Premises)	0	0	2.85	1.25	0	0	50	0	6	2	31	0	11	162	20	0	225	
ELM ST. STA. 230KV	7E	(No OH Premises)	0	0	2.07	3.53	0	0	32	0	4	1	86	1	39	181	25	0	332	
80 EIGHTH STREET	8065A	(No OH Premises)	0	0	0.12	0	0	0	0	0	0	1	0	0	0	4	0	0	4	
ELM ST. STA. 230KV	8E	(No OH Premises)	0	0	2.03	0.34	0	0	33	0	3	0	17	0	3	170	17	0	207	
ELM ST. STA. 230KV	9E	(No OH Premises)	0	0.09	4.08	7.04	0	0	56	0	2	1	86	1	39	181	22	1	330	
RIVERSIDE	28812	0	0	0	4.78	229.41	1	0	21234	3	10	20	218	4	41	888	112	3	1271	
GLENS FALLS	7507	0	0	0	1.79	0.58	3	0	39	1	3	1	28	0	1	50	5	0	84	
FRONT ST	FRONT N-8	0	0	0.01	1.25	0.01	33	0	0	4	0	0	7	0	1	88	10	1	107	
HENRY STREET	31638	0	0	0	0.97	0.11	44	0	106	1	2	8	5	0	0	25	3	0	35	
FRONT ST	FRONT N-3	0	0	0	2.21	0.09	84	0	8	4	1	3	13	0	2	91	12	1	120	
FRONT ST	FRONT N-2	0	0	0.56	2.28	0.64	212	0	0	5	1	0	36	0	2	145	17	3	203	
LIBERTY	9432	0	0	0	1.45	80.45	1643	0	9858	1	6	14	48	0	19	230	35	0	336	
RIVERSIDE	28815	0	0	0	4.98	294.86	3033	0	24271	0	1	12	19	219	3	39	897	116	4	1283
RIVERSIDE	28860	0	0	0.44	3.08	32.76	3033	0	0	1	0	23	208	3	39	920	109	3	1288	
RIVERSIDE	28802	0	0	0.44	3.78	131.04	6066	0	6066	3	3	21	207	3	39	896	112	3	1265	
RIVERSIDE	28805	0	0	0	4.69	294.85	6066	0	21232	4	9	20	204	4	39	881	113	3	1249	
RIVERSIDE	28811	0	0	0	4.55	327.61	6066	0	24274	2	10	19	217	3	40	885	110	3	1263	
68 ELMWOOD	6873	1	0.84	0	1.99	5.67	1181	0	1	37	1	115	174	1	54	35	0	0	293	
37 HUDSON AVE	3773	2	0.95	0	2.06	2.68	1063	0	6	37	3	137	24	2	6	34	2	0	102	
29 POTOMAC	2961	2	0.11	0	1.01	0.68	123	0	0	4	0	15	10	0	7	17	0	0	38	
LIBERTY	9456	2	2.34	0	0.39	15.56	2542	0	8	58	1	203	161	6	19	229	35	0	501	
37 HUDSON AVE	3764	2	0.29	1.77	0.66	0.79	308	147	0	7	24	33	10	3	5	19	0	2	47	
29 POTOMAC	2962	2	0.38	0	0.53	1.69	396	0	0	15	0	44	30	1	6	11	0	0	59	
33 STATION 33	3369	2	0.67	0	1.24	3.29	666	0	0	27	0	76	52	4	20	17	0	0	112	
29 POTOMAC	2969	2	0.21	0	1.59	0.27	208	0	3	8	4	20	1	0	3	28	2	0	39	
29 POTOMAC	2964	2	0.29	0	0.53	1.35	284	0	0	9	0	27	34	0	9	11	1	0	62	
33 STATION 33	3361	2	0.09	0	0.56	0.17	88	0	0	2	0	11	4	0	0	9	0	0	16	
29 POTOMAC	2967	2	1.5	0	2.01	4.77	1450	0	0	62	0	146	77	2	24	23	0	0	163	
37 HUDSON AVE	3767	2	0.12	0.19	1.26	1.25	108	0	1	3	1	15	26	1	11	30	1	0	73	
41 STATION 41	4161	2	0.17	0.07	2.82	8.63	151	0	8	14	4	27	515	3	121	126	3	3	778	
49 BEST	4968	2	0.47	0.11	0.98	2.4	414	0	0	27	0	54	59	5	19	31	0	1	129	
37 HUDSON AVE	3762	2	1.02	0	1.1	3.17	864	0	1	32	1	138	52	17	7	18	0	0	129	
33 STATION 33	3362	2	0.89	0	2.27	5.29	745	0	0	40	0	97	109	0	45	28	1	0	207	
68 ELMWOOD	6871	2	0.96	0	1.08	2.6	774	0	0	37	1	94	42	2	17	21	1	0	107	
48 GELSTON	4863	2	0.75	0	1.34	3.35	598	0	0	29	0	72	64	1	46	19	0	0	148	
26 STATION 26	2669	2	1.69	0	2.01	3.16	1244	0	0	44	0	116	26	3	10	43	0	0	111	
26 STATION 26	2661	2	1	0	1.75	1.68	723	0	0	34	0	78	12	0	2	34	0	0	68	
34 BEST ST.	3471	2	0.14	0.39	1.9	0.21	99	52	8	4	16	14	1	1	0	33	2	3	44	
33 STATION 33	3368	3	1.23	0	2.3	2.66	863	0	1	38	1	108	38	5	9	30	2	0	111	
33 STATION 33	3367	3	0.41	0	0.86	1.43	287	0	1	14	1	38	28	0	10	15	1	0	66	
LIBERTY	9457	3	1.4	0	0.24	2.87	980	0	36	42	2	122	80	0	0	7	0	0	118	
29 POTOMAC	2963	3	1.32	0	3.53	3.32	924	0	2	48	2	133	40	3	12	47	0	0	135	
37 HUDSON AVE	3766	3	0.7	0	0.99	1.25	483	0	0	26	0	68	5	10	0	23	0	0	55	
27 JEWETT AVE	2761	3	0.08	0	1.29	1.27	54	0	1	3	1	13	41	2	19	24	1	0	90	
68 ELMWOOD	6881	3	1.66	0	3.42	6.22	1110	0	1	59	1	166	142	10	50	38	1	0	283	
31 STATION 31	3164	3	1.39	0	1.42	2.74	909	0	0	33	0	90	15	0	15	24	0	0	77	
160 SUMMER ST.	16065	3	0.54	0	1.3	1.02	345	0	6	27	3	58	10	3	2	20	2	0	52	
33 STATION 33	3363	3	1.18	0	0.78	3.81	750	0	0	25	0	100	97	1	27	15	0	0	165	
27 JEWETT AVE	2762	3	1.27	0	2.53	3.48	782	0	64	46	2	142	52	8	21	33	1	0	151	
TRINITY	16442	3	4.59	0	1.44	10.33	2795	0	174	125	7	335	294	15	23	49	4	4	473	
36 SUMNER PL	3673	3	1.34	0	0.87	2.82	790	0	0	30	0	119	96	2	0	21	0	0	149	
TRINITY	16451	3	0.74	0	0.06	1.24	435	0	1	21	1	61	43	1	0	2	1	0	62	
45 STATION 45	4561	3	1.46	0	1.27	2.71	844	0	0	42	0	120	67	4	4	24	1	0	130	
29 POTOMAC	2968	3	1.62	0	3	7.37	918	0	14	48	3	132	267	8	63	45	1	0	417	
26 STATION 26	2665	3	1.39	0	0.73	4.39	787	0	0	36	0	103	57	4	15	14	0	0	116	
31 STATION 31	3163	3	1.34	0	1.38	4.13	755	0	1	33	1	113	98	0	27	18	0	0	171	
GLENS FALLS	7505	3	0.11	0	1.98	0.24	61	0	2	3	2	12	16	0	0	49	3	0	71	
TRINITY	16446	3	0.83	0	0.5	2.39	456	0	1	26	1	77	73	0	4	14	2	2	114	
68 ELMWOOD	6864	3	1.49	0	1.71	2.94	814	0	1	39	3	115	25	3	3	30	1	0	91	
39 WILLIAM	3972	3	1.44	0	1.11	3.17														



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
37 HUDSON AVE	3771	3	0.72	0	1.69	1.47	375	0	76	37	4	79	23	5	0	33	0	2	83
34 BEST ST.	3469	4	1.47	0	2.83	2.81	737	0	0	46	0	135	25	7	3	38	0	0	107
26 STATION 26	2667	4	1.32	0	0.85	3.62	657	0	144	37	1	119	43	5	17	13	0	0	108
30 SPILLMAN	3069	4	0.4	0	0.9	0.79	198	0	0	11	0	37	7	0	0	17	0	1	34
35 WALDEN	3564	4	1.15	0	0.79	1.83	552	0	0	24	0	80	74	0	4	21	0	0	119
160 SUMMER ST.	16062	4	0.42	0	0.82	0.58	201	0	1	16	2	40	7	1	1	16	3	0	38
33 STATION 33	3365	4	2.07	0	1.27	4.18	990	0	2	53	1	149	70	3	18	26	1	1	156
26 STATION 26	2666	4	1.86	0	2.28	3.27	887	0	1	45	1	151	38	4	23	32	2	0	137
TRINITY	16454	4	5.54	0.55	4.02	10.04	2626	0	226	120	14	425	349	5	6	84	5	8	563
68 ELMWOOD	6868	4	0.25	0	0.97	0.43	118	0	41	13	4	29	4	2	0	16	0	0	29
EMMET	25602	4	2.74	0	0.76	4.4	1286	0	184	64	4	237	134	0	0	20	3	0	216
83 WELCH AVE	8368	4	2.7	0	0.09	5.15	1264	0	0	54	0	222	173	3	0	1	0	0	233
23 KENMORE	2372	4	1.85	0.56	1.67	2.89	884	0	0	42	0	128	60	6	32	36	0	0	166
25 STATION 25	2569	4	0.85	0	0.51	1.14	393	0	0	16	0	53	43	0	0	14	0	0	70
30 SPILLMAN	3063	4	1.89	0	2.02	5.78	917	0	1	44	1	146	92	2	39	35	2	1	208
49 BEST	4961	4	0.65	0.11	1.12	0.21	23	0	128	3	6	8	0	0	1	24	0	6	33
37 HUDSON AVE	3761	4	1.73	0	1.53	5.5	791	0	174	51	3	159	137	7	50	36	2	1	273
68 ELMWOOD	6863	4	1.22	0	1.75	2.31	552	0	228	51	5	114	13	3	0	37	2	1	85
160 SUMMER ST.	16061	4	0.84	0	1.54	2.24	380	0	8	32	3	77	20	0	10	32	1	0	82
27 JEWETT AVE	2764	4	1.06	0	0.52	2.08	479	0	0	24	0	93	61	0	2	13	0	0	99
30 SPILLMAN	3067	4	0.33	0	0.61	0.47	149	0	1	6	1	24	1	0	0	14	1	1	23
35 WALDEN	3573	4	0.65	0	0.7	1.39	292	0	0	11	0	50	58	0	5	23	0	0	99
36 SUMNER PL	3665	4	2.95	0	1.19	6.58	1325	0	0	73	0	239	206	2	11	28	0	0	307
30 SPILLMAN	3064	4	0.93	0	1.11	2.77	417	0	2	35	3	92	46	16	26	17	2	1	131
PARTRIDGE ST.	12869	4	1.87	0	0.67	2.99	836	0	2	54	1	141	105	3	2	15	0	0	160
30 SPILLMAN	3066	4	0.28	0	1.93	1.42	125	0	37	7	4	37	33	3	15	36	3	1	100
25 STATION 25	2564	4	1.72	0	1.47	4.19	764	0	0	48	3	142	119	2	16	25	1	0	199
36 SUMNER PL	3666	4	1.58	0	1.21	2.62	698	0	0	38	0	125	88	1	4	26	0	0	150
PARTRIDGE ST.	12868	4	2.17	0	0.53	3.71	953	0	0	45	0	167	123	2	0	13	0	0	180
35 WALDEN	3565	4	1.05	0	0.53	2.08	461	0	0	28	0	82	70	0	3	15	0	0	109
52 HERTEL	5269	4	0.77	0	1.25	1.22	338	0	2	18	2	56	9	1	1	18	1	1	45
PARTRIDGE ST.	12862	4	2.69	0	0.31	4.32	1174	0	0	54	1	213	163	2	1	10	0	0	229
EMMET	25609	4	1.71	0	0.03	2.68	741	0	0	33	0	152	98	3	0	1	0	0	140
26 STATION 26	2676	4	1.65	0	2.19	3.4	714	0	0	37	0	127	63	11	16	37	4	0	163
35 WALDEN	3563	4	1.53	0	0.78	3.18	658	0	0	38	0	120	101	5	13	15	0	0	164
33 STATION 33	3368	4	1.01	0	0.21	2.81	433	0	118	23	0	76	67	0	8	7	1	0	102
44 SOUTH PARK	4466	4	1.83	0	1.27	3.04	783	0	52	42	3	138	71	4	0	20	1	0	131
33 STATION 33	3364	4	2.24	0	1.07	6.87	956	0	0	49	0	146	173	3	48	20	0	0	281
30 SPILLMAN	3065	4	0.52	0	1.75	0.94	221	0	1	15	1	38	19	0	1	35	1	0	66
48 GELSTON	4866	4	2.42	0	0.66	4.07	1027	0	45	55	2	184	113	7	4	15	0	0	185
48 GELSTON	4864	4	2.4	0	0.66	5.11	1010	0	0	63	1	203	144	1	17	12	2	0	227
35 WALDEN	3569	4	1.73	0	0.09	3.45	727	0	102	31	1	102	107	4	8	11	2	0	158
31 STATION 31	3173	4	1.65	0	0.94	3.62	693	0	1	39	1	117	83	1	28	17	1	0	159
44 SOUTH PARK	4465	4	2.56	0	2.38	5.64	1075	0	0	63	0	225	116	7	14	26	0	0	219
27 JEWETT AVE	2766	4	2.85	0	0.72	5.29	1195	0	1	56	1	206	167	4	1	13	0	0	237
39 WILLIAM	3969	4	1.46	0	1	2.58	612	0	0	45	0	110	88	3	0	25	0	0	144
43 SENECA ST	4362	4	2.01	0	1.1	3.46	836	0	0	46	1	142	86	9	0	24	0	0	155
46 STATION 46	4669	4	0.39	0	0.68	1.62	162	0	0	10	0	45	49	1	0	12	0	0	73
49 BEST	4965	4	0.21	0.11	0.51	0.91	87	0	5	9	4	32	27	1	5	9	1	0	51
32 BAILEY	3261	4	2.5	0	0.72	4.32	1066	0	1	56	1	176	165	2	4	12	1	0	228
36 SUMNER PL	3671	4	2.16	0	1.78	3.35	885	0	0	43	0	141	101	3	0	38	0	0	177
48 GELSTON	4862	4	0.95	0	0.6	1.48	387	0	0	20	1	71	48	0	0	12	1	0	79
NEWARK ST	30056	4	3.61	0	0.77	6.04	1469	0	169	78	10	266	185	3	6	5	1	4	271
43 SENECA ST	4361	4	2.55	0	0.61	4.59	1037	0	1	51	1	171	106	6	19	13	1	0	188
CORLISS PARK	33816	4	2.44	0	0.19	5.13	989	0	1	56	1	213	80	8	3	4	0	0	148
32 BAILEY	3269	4	1.96	0	1.44	3.38	794	0	0	45	0	132	112	5	3	33	0	0	186
35 WALDEN	3566	4	2.25	0	1.13	4.39	907	0	0	51	0	162	152	0	6	33	0	1	233
37 HUDSON AVE	3765	4	0.02	0.3	2.37	3.75	8	32	16	2	13	15	152	2	40	46	0	4	248
43 SENECA ST	4369	4	0.32	0	0.16	0.54	128	0	0	7	0	22	7	2	0	5	0	0	20
44 SOUTH PARK	4461	4	2.27	0	0.82	4.54	888	0	1	52	2	173	117	8	2	15	2	0	187
49 BEST	4967	4	0.21	0.11	0.61	0.39	83	0	0	13	0	26	7	3	0	15	1	0	33
23 KENMORE	2362	4	1.05	0.15	1.9	2.65	413	0	4	32	4	84	82	0	23	35	2	0	163
32 BAILEY	3271	5	1.25	0	0.68	2.3	486	0	0	26	0	81	78	5	6	15	0	0	124
35 WALDEN	3572	5	0.25	0	0.14	0.4	87	0	0	4	0	14	15	1	1	4	0	0	25
32 BAILEY	3272	5	3.21	0	0.73	4.43	1244	0	1	61	1	176	150	4	2	14	1	0	215
24 KENMORE	2464	5	1.75	0	0.5	3.44	677	0	0	47	0	104	31	3	4	9	0	0	73
26 STATION 26	2662	5	2.16	0	2.26	3.55	834	0	2	48	2	157	19	7	11	37	2	1	116
43 SENECA ST	4365	5	2.18	0	1.37	3.46	839	0	0	57	0	156	76	2	0	29	0	0	146
EMMET	25603	5	1.91	0	0.26	2.71	734	0	52	40	1	150	93	4	0	7	0	0	142
52 HERTEL	5264	5	1.62	0	1.24	2.54	622	0	1	41	1	99	45	6	7	23	1	0	107
160 SUMMER ST.	16066	5	0.36	0	1.24	2.6	138	0	5	24	5	49	53	5	20	30	0	0	120
161 SHORT STREET	16162	5	2.63	0	1.26	3.79	1003	0	1	70	1	216	135	25	2	22	2	1	241
25 STATION 25	2566	5	2.21	0	0.62	4.33	841	0	0	50	0	157	115	2	7	17	0	0	180
39 WILLIAM	3961	5	1.93	0	1.41	3.28	732	0	0	46	0	149	119	1	3	33	1	0	194
MARKET HILL	32423	5	4.29	0	0.13	8.95	1622	0	2	88	1	396	233	4	13	4	0	0	353
36 SUMNER PL	3664	5	2.54	0	1.39	4.83	954	0	0	57	0	188	153	6	8	35	0	0	249
PARK STREET	14467	5	3.23	0	0.11	5.45	1207	0	0	59	0	299	201	0	0	2	0	0	278
LANSINGBURGH	9312	5	4.15	0	0.11	7.94	1541	0	1	86	1	346	161	4	1	2	1	0	256
46 STATION 46	4668	5	1.18	0	1.27	2.43	438	0	3	31	2	104	66	0	1	22	0	0	115
31 STATION 31	3172	5	2.15	0	2.42	3.15	798	0	0	45	0	164	64	2	1	41	1	0	150



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
26 STATION 26	2671	5	1.69	0	1.65	3.08	626	0	0	42	0	129	16	6	9	23	0	0	86
39 WILLIAM	3962	5	2.05	0	1.21	2.96	757	0	22	41	2	126	100	1	0	26	1	0	160
SEVENTH AVE	24484	5	3.8	0.96	0.04	6.37	1400	15	0	84	13	287	184	3	1	1	0	0	261
32 BAILEY	3264	5	1.6	0	0.76	2.32	587	0	0	36	0	103	72	0	2	14	0	0	114
53 BAILEY	5364	5	3.13	0	0.2	4.11	1146	0	0	48	0	169	140	2	0	4	0	0	188
ASH STREET	22351	5	4.49	0.05	0.7	8.44	1631	8	182	94	5	389	311	7	6	29	1	1	452
PARTRIDGE ST.	12861	5	1.61	0	0.08	2.47	584	0	0	45	1	112	101	0	0	4	0	0	133
FAYETTE STREET	2888	5	3	0	0.95	5.21	1088	0	6	67	1	259	182	6	0	26	0	0	279
43 SENECA ST	4368	5	1.99	0	1.85	5.71	721	0	2	47	1	159	190	8	20	34	0	0	292
26 STATION 26	2672	5	1.23	0	1.77	3.17	445	0	1	35	2	102	38	5	24	31	1	0	125
51 ELK ST	5168	5	0.75	0	0.82	1.32	270	0	0	22	0	70	38	1	0	15	0	0	72
40 WILLIAM STA	4073	5	1.79	0	1.97	2.89	643	0	0	37	0	116	81	1	2	41	0	0	164
CONKLING	65272	5	2.41	0	0.15	2.94	859	0	24	38	3	192	113	1	0	2	0	0	164
PARK STREET	14465	5	0.82	0	0.17	1.25	292	0	1	21	1	62	55	0	0	4	0	0	75
45 STATION 45	4567	5	1.23	0	1.34	4.54	438	0	1	27	1	77	114	2	50	14	1	0	200
36 SUMNER PL	3662	5	1.46	0.6	1.03	4.25	518	155	1	30	7	98	120	3	20	19	1	1	189
24 KENMORE	2472	5	2.26	0	1.65	3.29	801	0	1	51	1	135	38	0	16	24	0	0	112
80 EIGHTH STREET	8068	5	3.8	0	0.51	6.05	1342	0	1	84	1	298	168	5	0	12	3	0	263
34 BEST ST.	3468	5	1.28	0	0.41	2.04	452	0	103	24	2	97	50	2	0	7	0	0	83
208 STATION 208	20871	5	3.38	0	0.01	5.1	1191	0	0	61	0	225	160	9	0	0	0	0	225
44 SOUTH PARK	4472	5	3.62	0	0.6	5.52	1275	0	0	75	0	218	141	3	4	12	0	0	215
39 WILLIAM	3968	5	1.51	0	1.38	3.47	530	0	0	32	0	122	102	1	2	31	0	0	167
TRINITY	16448	5	3.74	0.18	0.5	5.73	1309	0	64	84	2	280	237	2	0	19	3	0	331
PLEASANT	66472	5	5.29	0	0.15	7.51	1840	0	86	84	1	412	240	9	2	2	0	0	356
49 BEST	4971	5	0.21	0.11	1.35	1.13	73	0	7	10	3	16	37	3	12	42	1	3	102
155 ROBERTS	15561	5	3.37	0	1.18	5.69	1163	0	1	70	1	240	162	15	2	18	0	0	257
WEAVER ST	24551	5	9.81	0	0.14	15.7	3379	0	4	183	3	763	438	3	0	4	2	0	638
52 HERTEL	5268	5	2.25	0	0.42	3.35	772	0	6	47	2	157	58	9	3	6	0	0	115
27 JEWETT AVE	2767	5	1.37	0	1.03	4.44	470	0	2	35	2	131	120	14	25	22	1	1	216
DELAWARE AVE	33034	5	3.39	0	0.27	5.45	1157	0	3	73	2	232	155	1	1	2	1	0	218
PARTRIDGE ST.	12860	5	2.02	0	1.1	4.5	685	0	3	32	2	132	103	0	0	56	3	0	195
36 SUMNER PL	3661	5	2.63	0	0.74	3.94	891	0	0	51	0	159	104	2	0	16	0	0	162
31 STATION 31	3171	5	2.74	0	1.87	3.93	912	0	0	64	0	183	109	3	0	20	0	0	178
PARTRIDGE ST.	12866	5	2.9	0	0.6	4.34	975	0	0	54	0	172	134	2	2	17	0	0	198
83 WELCH AVE	8371	5	2.5	0	0.14	5.22	839	0	0	54	0	199	154	7	0	3	0	0	214
45 STATION 45	4562	5	0.88	0	0.43	1.01	295	0	1	14	2	50	41	0	0	10	1	0	65
34 BEST ST.	3472	5	2.2	0	0.28	3.8	731	0	8	41	1	151	88	4	1	6	1	0	138
160 SUMMER ST.	16063	5	0.19	0	1.12	0.1	63	0	22	6	1	16	3	0	1	26	1	0	35
28 STATION 28	2873	5	1.69	0	0.25	2.31	558	0	0	31	0	104	79	2	1	8	0	0	116
TRINITY	15452	5	6.3	1.04	3.19	10.16	2071	33	37	127	25	419	333	12	6	48	5	15	524
RIVERSIDE	28858	5	10.22	5.29	4.64	22.03	3354	589	54	208	82	675	688	14	72	165	3	12	1123
40 WILLIAM STA	4065	5	2.74	0	0.05	4.49	898	0	0	48	0	182	137	4	1	3	0	0	191
37 HUDSON AVE	3768	5	2.14	0	2.97	4.14	697	0	149	47	22	147	70	7	46	33	2	1	196
49 BEST	4973	5	1.99	0.11	2.18	3.05	647	0	6	47	2	150	52	9	0	25	3	0	127
29 POTOMAC	2965	5	2.51	0	0.55	4.47	813	0	0	46	0	162	121	10	11	10	1	0	194
MC CLELLAN	30452	5	9.81	0.05	0.61	14.71	3206	1	45	193	7	703	387	16	0	26	2	0	607
45 STATION 45	4563	5	2.22	0	2.14	3.37	717	0	2	50	2	137	81	12	5	36	1	2	171
DELAWARE AVE 330	33035	5	5.21	0.72	0.11	9.4	1674	53	2	103	12	364	327	2	15	4	0	1	440
45 STATION 45	4566	5	1.98	0	6.19	8.71	636	0	14	47	14	169	302	13	55	47	1	2	462
36 SUMNER PL	3663	5	2.74	0	1.02	4.11	880	0	0	45	1	178	115	3	0	18	0	0	181
35 WALDEN	3567	5	2.39	0	1.56	4.93	766	0	2	52	2	174	189	7	26	24	3	0	293
23 KENMORE	2371	5	2.06	0.19	0.87	4.31	660	1	0	45	1	149	100	6	20	16	0	1	180
29 POTOMAC	2972	6	1.6	0	0.94	2.87	512	0	0	31	0	108	73	11	4	18	0	0	133
CHAUTAUQUA	5761	6	2.96	0	0.08	8.2	946	0	85	65	3	382	159	55	8	7	1	0	326
COLVIN AVE	31386	6	5.78	0	0.44	8.42	1842	0	0	107	0	381	211	3	5	3	0	0	317
GLOVERSVILLE	7252	6	2.07	1.73	0.14	4	658	93	1	36	15	168	112	7	17	33	0	4	215
30 SPILLMAN	3062	6	1.18	0	2.04	1.92	374	0	2	39	2	116	21	4	2	41	1	0	98
25 STATION 25	2565	6	2.49	0	1.34	4.99	787	0	41	65	2	196	126	14	13	29	2	1	234
22 KENMORE	2261	6	3.19	0	1.51	5.76	1008	0	128	66	1	223	139	17	17	27	0	0	256
TIBBETS AVE	29255	6	0.72	0	0.04	1.14	227	0	0	12	0	54	19	0	0	0	0	0	33
25 STATION 25	2572	6	1.06	0	0.21	1.54	333	0	0	26	0	69	82	0	4	6	0	0	89
28 STATION 28	2867	6	4.53	0	0.29	6.09	1423	0	0	69	0	259	99	15	3	6	0	0	188
PARK STREET	14466	6	4.83	0.07	0.19	6.42	1509	52	45	97	3	379	258	3	0	2	0	0	358
SEVENTH AVE	24483	6	1.63	0	1.07	4.45	507	0	103	34	4	130	130	7	8	37	0	0	215
39 WILLIAM	3967	6	2.76	0	0.08	4.7	858	0	2	57	1	196	169	3	0	3	0	0	224
PARTRIDGE ST.	12864	6	2.07	0	0.21	3.36	640	0	3	43	3	153	118	0	0	5	0	0	161
127 DELAWARE ROAD	12766	6	3.68	0.2	0	6.51	1136	0	0	69	0	203	132	12	37	3	0	0	235
27 JEWETT AVE	2765	6	1.48	0	1.82	2.67	455	0	96	41	5	108	42	7	4	34	1	1	116
HUDSON	8754	6	7.79	0	0.51	14.15	2385	0	20	123	8	593	529	12	14	3	1	2	709
SARATOGA	14251	6	3.16	0.35	0.38	5.01	966	55	136	62	14	202	118	25	4	5	0	3	206
68 ELMWOOD	6865	6	1.39	0	1.91	1.73	421	0	264	36	10	96	9	5	6	36	3	1	84
23 KENMORE	2369	6	2.01	0.36	1.12	2.98	608	0	0	39	0	139	38	1	16	22	0	0	112
28 STATION 28	2864	6	2.5	0	0.31	3.9	752	0	0	43	2	174	127	1	0	6	1	0	179
31 STATION 31	3161	6	1.31	0	1.23	1.83	394	0	6	27	2	83	58	5	0	26	0	1	111
53 BAILEY	5366	6	3.44	0	0.55	4.82	1033	0	0	58	0	188	69	8	9	10	0	0	143
EMMET	25608	6	0.48	0	0.36	0.6	143	0	0	12	0	40	25	0	0	7	0	0	42
TERMINA	65141	6	7.42	0.15	1.02	15.87	2206	0	33	146	6	576	475	5	0	106	2	0	732
ARNOLD	65673	6	1.92	0	0.02	2.44	570	0	17	37	1	144	88	2	0	0	0	0	126
BRIGHTON AVE	820	6	5.22	0	0.59	8.31	1547	0	0	97	1	437	372	2	0	20	1	0	504
44 SOUTH PARK	4468	6	2.73	0	3.12	6.84	804	0	0	54	0	192	163	6	23	30	1	0	



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	SL Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
PLEASANT	66468	6	2.98	0	0.24	4.29	877	0	42	54	1	225	168	5	0	5	1	0	235
45 STATION 45	4565	6	1.62	0	0.77	2.84	476	0	6	42	2	108	49	9	6	18	0	0	109
25 STATION 25	2568	6	1.56	0	0.25	1.83	458	0	36	26	3	90	60	2	0	4	0	0	89
25 STATION 25	2563	6	1.8	0	0.62	2.46	524	0	0	33	0	117	95	2	1	14	2	0	143
CHRISLER AVE	25735	6	2.85	0	0.06	4.34	826	0	51	56	1	213	108	2	0	1	0	0	164
28 STATION 28	2865	6	1.65	0	0.6	3.65	478	0	0	30	0	116	153	2	9	12	0	0	205
28 STATION 28	2868	6	3.67	0	1.25	5.63	1058	0	0	74	1	230	192	24	6	17	0	0	297
23 KENMORE	2368	6	2.13	0.16	0.41	4.32	614	0	2	39	1	127	83	0	22	11	0	0	148
53 BAILEY	5361	6	3.53	0	0.02	5.48	1017	0	0	59	0	237	136	2	3	0	0	0	200
GLOVERSVILLE	7201	6	4.82	0	0.05	7.75	1386	0	0	82	0	372	178	7	0	1	0	0	279
AVENUE A	29112	6	1.85	0.07	0.51	3.15	530	1	0	35	1	117	99	0	0	8	1	0	137
35 WALDEN	3562	6	2.88	0	0.22	4.82	823	0	0	57	0	189	148	4	7	7	0	0	213
32 BAILEY	3273	6	2.66	0	1.42	4	780	0	0	49	1	192	138	16	4	28	1	0	354
32 BAILEY	3262	6	3.58	0	1.82	6.2	1020	0	2	65	2	251	226	8	13	43	1	0	449
FRONT ST	36055	6	6.03	0	3.26	8.71	1716	0	87	114	12	485	276	6	16	23	6	1	103
43 SENECA ST	4367	6	1.49	0	1.06	2.09	424	0	6	31	1	94	49	5	0	24	1	0	183
23 KENMORE	2373	6	1.8	0.18	0	6.27	511	0	0	39	0	115	119	0	31	4	0	0	127
68 ELMWOOD	6867	6	0.58	0	1.13	2.68	164	0	1	24	1	51	62	12	21	18	1	0	230
SEVENTH AVE	24480	6	2.05	0	0.89	5.2	578	0	1	57	2	178	142	4	0	34	5	0	174
GENESEE ST.	28054	6	1.79	0.46	0.15	3.71	503	65	2	40	14	143	121	5	3	8	1	0	130
23 KENMORE	2367	6	2.09	0.16	0.81	3.06	587	0	1	37	2	120	60	0	25	14	1	0	163
27 JEWETT AVE	2763	6	1.5	0	1.41	2.98	420	0	1	33	1	136	97	7	5	18	2	0	347
FAYETTE STREET	2869	6	4.81	0	0.09	6.38	1345	0	1	78	1	349	252	4	0	4	0	0	155
35 WALDEN	3561	6	2.29	0	0.23	3.36	638	0	1	37	1	165	103	5	2	4	0	0	237
82 11TH ST	8268	6	3.83	0	0.13	5.8	1066	0	2	71	1	278	147	15	0	4	1	0	293
LIBERTY	9491	6	5.63	0	0.48	8.1	1554	0	4	111	4	353	198	0	0	7	0	0	308
83 WELCH AVE	8369	6	3.97	0	0.13	7.43	1095	0	0	76	0	308	219	6	3	3	0	0	27
MENANDS	10177	6	0.66	0	0.51	0.27	182	0	0	13	0	34	8	0	0	9	1	0	64
22 KENMORE	2264	6	1.55	0	0.54	1.71	427	0	1	31	1	99	19	12	1	7	0	0	176
36 SUMNER PL	3668	6	2.33	0	0.84	3.17	641	0	1	38	1	133	118	9	1	15	0	0	93
53 BAILEY	5365	6	2.16	0.65	0.94	2.16	272	166	30	20	25	68	45	8	13	10	0	0	88
30 SPILLMAN	3068	6	1.16	0	1.52	1.78	318	13	63	24	4	100	19	2	6	35	0	1	288
ASH STREET	22317	6	2.82	0	0.56	4.39	772	0	75	68	6	240	206	9	1	12	0	0	194
208 STATION 208	20862	6	2.46	0.23	0.15	3.56	671	0	0	43	0	152	141	4	3	7	1	0	316
55 ELECTRIC AVE	5562	6	3.99	0	0.3	5.26	1085	0	0	62	0	271	238	2	0	8	0	0	259
CORLISS PARK	33817	6	4.82	0	0.11	9.14	1307	0	3	94	2	383	156	6	0	1	0	0	249
MESSINA	4237	6	4.57	0	0.01	5.89	1238	0	25	83	1	324	166	2	0	0	0	0	110
22 KENMORE	2271	7	1.57	0	0.99	2.52	425	0	19	27	2	96	58	2	8	18	0	0	162
PLEASANT	66473	7	2.75	0	0.15	3.76	744	0	1	43	1	199	104	3	2	2	1	0	140
80 EIGHTH STREET	8061	7	1.82	0	0.17	3.57	491	0	1	45	1	147	92	2	4	4	1	0	86
CHURCH ST	4357	7	1.24	0	0.29	1.8	334	0	0	19	0	93	56	1	0	6	0	0	353
PARK STREET	14468	7	4.24	0	0.07	7.2	1142	0	0	77	0	378	252	2	0	4	0	0	279
ASH STREET	22398	7	2.28	0	1.26	4.68	613	0	7	70	3	192	196	3	2	29	1	0	302
43 SENECA ST	4363	7	3.26	0.33	1.16	6.91	874	29	1	57	8	247	175	14	30	20	0	1	36
38 SPRING	3866	7	0.06	0	1.43	0.15	16	0	12	5	3	6	0	1	0	29	0	4	222
28 STATION 28	2869	7	2.15	0	0.85	4.57	573	0	0	41	0	140	144	4	21	17	0	1	198
36 SUMNER PL	3672	7	2.92	0	0.94	4.06	777	0	1	45	1	170	129	5	3	17	1	0	314
FAYETTE STREET	2873	7	4.74	0	0.5	6.79	1260	0	12	81	2	358	208	0	0	16	0	0	318
40 WILLIAM STA	4075	7	5.01	0	0.13	6.69	1329	0	1	70	1	315	230	1	3	4	1	0	255
FRONT ST	36054	7	4.43	0	0.89	5.84	1173	0	61	89	5	318	148	6	5	15	1	0	127
82 11TH ST	8272	7	1.88	0	0.14	2.76	497	0	0	23	0	142	82	3	0	6	0	0	122
34 BEST ST.	3461	7	1.5	0	0.5	2.17	396	0	51	23	1	124	80	1	0	9	1	0	94
24 KENMORE	2473	7	1.38	0	0.18	2.09	364	0	0	32	0	89	58	7	4	3	0	0	120
44 SOUTH PARK	4467	7	1.78	0	0.37	3.26	463	0	0	26	0	102	69	6	6	13	0	0	300
82 11TH ST	8270	7	4.43	0	0.13	8.08	1164	0	1	71	1	334	209	1	0	5	1	0	154
PARTRIDGE ST.	12865	7	1.53	0	0.38	2.52	402	0	0	32	0	117	102	11	1	11	0	0	213
22 KENMORE	2269	7	3.82	0.04	0.07	7.15	1003	0	0	53	0	236	135	6	11	2	0	0	263
BRIGHTON AVE	877	7	4.21	1.79	0.3	5	1104	397	4	61	37	283	176	3	10	3	0	0	564
129 BROMPTON	12962	7	4.97	0.55	0	37.58	1303	0	0	82	1	256	367	1	123	9	0	0	163
LANSINGBURGH	8313	7	2.69	0	0.45	4.46	704	0	2	51	2	190	89	17	2	7	0	0	154
28 STATION 28	2861	7	2.76	0	0.31	4.5	722	0	1	50	1	166	86	13	7	6	0	0	100
161 SHORT STREET	16166	7	1.36	0	0.8	1.93	354	0	71	38	2	87	52	5	1	18	2	0	112
24 KENMORE	2463	7	2.14	0	0.18	3.41	557	0	0	46	0	122	55	9	13	4	0	0	104
PARTRIDGE ST.	12863	7	0.9	0	0.73	2.33	233	0	6	14	6	56	40	4	0	41	4	1	150
34 BEST ST.	3462	7	2.98	0	0.59	4.99	767	0	0	48	0	211	82	0	0	15	0	0	89
24 KENMORE	2461	7	2.79	0	0.3	2.5	718	0	1	46	1	149	45	2	1	4	0	0	312
83 WELCH AVE	8364	7	3.99	0	0.13	6.34	1026	0	2	73	1	339	218	6	1	2	0	0	578
ASH STREET	22326	7	6.84	0.04	1.01	12.77	1754	49	72	148	10	510	400	12	0	38	0	0	389
BRIGHTON AVE	819	7	4.5	0	0.52	7.85	1153	0	0	78	0	354	267	10	1	22	0	0	78
38 SPRING	3867	7	1.03	0	0.64	2.3	263	0	0	23	0	81	45	1	1	11	0	0	299
22 KENMORE	2272	7	3.2	0.59	1.14	7.39	816	0	0	62	0	201	176	10	47	16	0	0	170
46 STATION 46	4662	7	3.65	0	0.63	5.85	923	0	1	58	1	240	93	2	3	12	0	0	22
DRUMLINS	13263	7	0.82	0	0.05	0.98	207	0	0	12	0	53	8	0	0	1	0	0	108
29 POTOMAC	2966	7	1.05	0	0.66	2.19	265	0	1	25	2	94	65	4	6	8	0	1	606
TEMPLE ST.	24347	7	9.6	0.04	0.48	14.05	2422	5	11	172	6	746	396	2	8	12	0	1	366
BRIGHTON AVE	829	7	4.11	0	0.57	5.67	1033	0	1	66	2	318	268	10	0	8	0	0	201
32 BAILEY	3267	7	4.47	0	1.07	5.83	1123	0	1	68	1	253	108	3	7	20	0	0	179
HENRY STREET	31634	7	3.47	0.01	0.48	6.33	871	0	1	65	1	280	95	5	0	7	0	2	129
82 11TH ST	8271	7	2.05	0	0.08	2.95	513	0	0	44	0	138	79	7	3	4	1	0	15
54 MAIN	5463	7	0.02	0	0.52	0.01	5	0	0	1	0	5	5	0	1	6	0	0	



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
44 SOUTH PARK	44771	7	2.06	0	2.16	3.9	514	0	1	41	5	159	118	17	4	46	2	2	229
SEWALL'S ISLAND	76677	7	6.58	0.05	0.03	9.09	1638	7	1	132	3	477	176	6	1	0	0	0	302
GENESEE ST.	26050	7	0.43	0	0.27	4.05	107	0	1	10	3	30	148	0	0	39	0	2	197
LEVITT	66582	7	4.24	0	0.11	6.26	1054	0	106	77	3	320	185	7	0	1	0	0	273
SEMINOLE	33904	7	4.65	0	1.2	7.15	1155	0	23	91	2	317	237	5	3	22	1	0	347
MILLER ST.	11705	7	5.58	0	0.55	9.09	1385	0	5	96	4	405	214	18	1	18	0	0	352
124 ALAMEDA AVE	12476	7	1.69	0	0.15	1.02	419	0	15	29	3	73	13	0	0	1	0	0	32
47 STATION 47	4768	7	2.64	1.24	0.05	4.98	654	0	0	52	0	177	115	14	22	27	1	0	223
32 BAILEY	3263	7	2.3	0	1.25	4.42	569	0	0	42	0	161	118	3	5	27	2	0	195
AVENUE A	29109	7	3.04	0	0.56	5.55	751	0	30	62	3	243	148	3	1	6	1	0	220
FAYETTE STREET	2862	7	5.09	0	0.32	7.75	1257	0	0	85	0	380	249	2	4	12	0	0	362
59 PERRY	5965	7	1.84	0	1.49	3.63	453	0	0	38	0	151	94	3	16	30	0	2	183
EMMET	25605	7	2.65	0	0.18	3.22	652	0	4	42	2	190	122	3	0	3	2	0	178
46 STATION 46	4672	7	4.61	0	0.49	6.53	1133	0	0	85	0	274	105	8	3	9	0	0	194
TIBBETS AVE	29254	7	3.09	0	0.88	5.39	758	0	9	53	7	220	161	13	12	6	1	4	252
59 PERRY	5964	7	1.18	0	1.12	2.01	288	0	42	23	4	90	66	4	2	23	2	0	120
34 BEST ST.	3467	7	2.08	0	0.33	2.94	505	0	1	41	1	155	105	6	0	7	0	0	157
PLEASANT	66475	7	4.89	0	0.08	5.4	1186	0	3	71	2	317	180	9	3	1	1	0	273
TEAL AVE	7253	7	15.8	0	0.4	24.5	3815	0	40	266	10	1214	650	13	0	10	0	0	977
AVENUE A	29111	7	4.14	0	0.22	6.01	999	0	0	77	0	288	131	1	0	6	0	0	210
34 BEST ST.	3463	7	3.21	0	2.93	5.81	774	0	1	73	1	273	131	20	7	36	1	0	263
40 WILLIAM STA	4074	7	3.13	0	0.55	4.81	752	0	1	60	1	189	122	2	9	6	0	0	186
53 BAILEY	5362	7	2.98	0	0.58	5.34	714	0	0	52	0	187	90	2	11	7	0	0	157
MCBRIDE	12364	7	5.67	0	0.32	9.57	1357	0	1	107	1	492	469	8	5	13	1	0	619
CONKLING	65273	7	5.19	0	0.03	6.58	1242	0	0	73	0	350	230	5	4	1	0	0	328
34 BEST ST.	3465	7	0.46	0	0.47	0.59	110	0	0	7	0	33	21	0	0	12	0	0	41
46 STATION 46	4667	7	3.15	0	0.93	7.08	753	0	2	64	1	194	142	6	19	14	1	0	231
31 STATION 31	3167	7	2.35	0	0.78	4.37	560	0	1	48	1	175	134	2	6	13	1	0	200
40 WILLIAM STA	4071	7	1.95	0	1.95	3.42	461	0	1	41	1	144	102	8	4	39	0	0	189
124 ALAMEDA AVE	12464	7	0.77	0	0.11	0.36	182	0	9	14	3	50	3	5	0	1	0	0	22
78 FASSETT ST.	7861	8	2.84	0	0.13	4.44	666	0	1	50	2	239	94	4	1	0	2	0	161
AVENUE A	29113	8	0.5	0	1.88	0.46	117	0	26	11	4	40	11	0	0	26	1	2	50
38 SPRING	3869	8	1.18	0	3.39	5.21	276	0	90	45	16	122	174	3	34	54	4	6	306
82 11TH ST	8276	8	2.63	0	0.58	4.22	615	0	0	46	0	169	99	23	2	16	2	0	184
215 BUFF AVE STA	21551	8	0.03	0	2.18	0.05	7	0	3	2	1	3	0	0	0	44	2	5	52
23 KENMORE	2361	8	1.45	0.15	1.27	2.14	337	0	0	27	0	96	84	8	0	23	28	0	132
56 WILLOWDALE & BARTON	5668	8	5.03	0.03	0	6.82	1169	3	0	96	2	273	146	9	2	0	1	0	226
122 SOMMER ST	12261	8	3.04	0	0.02	5.09	706	0	0	67	0	257	149	0	0	0	0	0	213
38 SPRING	3863	8	2	0	0.85	4.18	464	0	0	48	0	190	107	7	4	19	0	0	185
126 STATION 126	12661	8	4.17	0.05	0.11	6.17	966	8	0	73	2	288	129	4	4	2	0	0	211
38 SPRING	3862	8	0.39	0	1.29	0.8	90	0	2	13	1	47	23	4	1	32	2	1	75
56 WILLOWDALE & BARTON	5665	8	1.81	0.28	0	5.84	440	0	0	42	0	117	238	0	53	5	0	0	325
DELAWARE AVE	33033	8	5.37	0.22	0.97	7.84	1237	8	2	103	5	351	215	11	1	13	0	1	329
MC CLELLAN	30451	8	8.32	0	0.63	10.36	1916	0	4	155	2	545	233	3	0	9	1	2	384
SARATOGA	14202	8	2.5	0.05	0.18	4.7	575	14	5	39	5	192	97	4	4	1	0	0	154
44 SOUTH PARK	4464	8	3.13	0	0.77	5.37	713	0	0	68	0	185	160	3	10	18	0	0	237
SCHUYLER	66351	8	10.96	1	0.99	12.94	2498	12	50	164	23	676	437	13	0	28	1	4	652
127 DELAWARE ROAD	12762	8	1.75	0.37	0	3.69	398	172	0	34	1	106	128	0	22	4	1	0	182
W. OLEAN	3355	8	5	0	0.11	9.53	1136	0	2	84	2	391	158	10	0	0	1	0	267
24 KENMORE	2462	8	3.88	0	0.09	5.86	881	0	0	55	0	213	128	1	35	3	0	0	220
SEWALL'S ISLAND	76676	8	3.39	0	0.15	4.3	768	0	10	85	4	224	116	11	0	0	1	0	184
GLOVERSVILLE	7207	8	6.08	0	0.11	9.5	1375	0	3	95	3	402	170	14	0	1	0	0	286
82 11TH ST	8275	8	2.23	0	0.06	2.85	504	0	0	32	0	143	74	0	0	3	0	0	113
43 SENECA ST	4366	8	1.43	0	1.43	3.39	323	0	0	37	0	106	66	26	12	21	0	0	152
VALLEY	59471	8	4.16	0	0.13	5.82	937	0	2	77	2	288	156	10	0	2	0	0	240
31 STATION 31	3166	8	1.63	0	1.21	1.9	367	0	1	39	3	106	20	10	1	14	1	0	73
TIBBETS AVE	29252	8	5.47	0.52	0.27	10.03	1229	52	0	98	14	375	263	7	24	5	0	0	393
85 STEPHENSON AVE	8566	8	2.52	0	0.02	3.78	566	0	0	42	0	171	80	1	4	2	0	0	130
46 STATION 46	4663	8	2.56	0	0.88	4.22	574	0	1	49	1	166	99	28	8	18	0	0	195
PORTAGE ST.	75463	8	5.21	0	0.13	5.64	1167	0	40	98	5	304	199	4	0	0	1	0	280
57 COLVIN	5764	8	2.33	0.78	0	7.04	521	0	0	43	0	132	190	3	22	12	0	0	260
FAYETTE STREET	2860	8	1.76	0	0.13	2.82	391	0	2	37	2	177	141	0	0	5	0	0	190
MARKET HILL	32422	8	2.86	0	0.75	5.73	635	0	2	42	1	238	136	1	0	21	1	1	220
TEAL AVE	7254	8	14.85	0.39	0.46	19.34	3295	156	90	203	16	961	511	8	12	11	2	0	784
CONKLING	65274	8	4.16	0	0.99	5.39	922	0	4	73	3	329	203	9	0	62	0	0	356
63 HIGHLAND	6363	8	3.48	0.6	0	4.34	770	0	0	70	0	208	26	1	2	8	0	0	89
HILL ST.	31114	8	4.62	0	0.22	6.46	1019	0	3	75	2	295	134	11	0	2	2	0	223
83 WELCH AVE	8363	8	3.93	0	0.06	7.08	866	0	0	67	0	283	181	16	0	2	0	0	270
39 WILLIAM	3963	8	2.88	0	0.72	5.26	633	0	13	49	3	241	207	11	12	17	2	0	309
PLEASANT	66471	8	1.75	0	0.18	3.15	384	0	1	24	1	139	97	0	1	2	1	0	136
127 DELAWARE ROAD	12763	8	2.26	0.13	0	3.52	493	0	0	43	0	125	70	0	14	2	0	0	117
FAYETTE STREET	2867	8	2.34	0	0.99	5.48	505	0	2	55	5	226	205	9	0	44	3	1	319
MAPLEWOOD	30754	8	8.82	0.08	2.04	14.21	1902	18	158	148	13	584	292	11	12	14	0	5	480
PEAT STREET	25054	8	9.86	0.1	0.42	14.7	2125	2	153	151	8	704	526	34	2	10	0	1	749
BEVIS HILL	28691	8	3.73	0	0.24	4.44	801	0	0	65	0	222	75	9	0	2	0	1	143
TERMINA	65148	8	11.76	0	2.43	14.41	2523	0	3	158	5	803	551	7	0	102	6	4	871
127 DELAWARE ROAD	12761	8	2.44	0.18	0	3.73	523	1	0	44	1	134	31	6	3	2	0	0	76
35 WALDEN	3568	8	1.6	0	0.73	1.87	342	0	2	25	2	102	86	9	7	24	1	0	153
208 STATION 208	20870	8	3.43	0.29	0.81	5.07	732	1	2	57	2	183	98	15	33	21	0	1	214
GLENWOOD	22766	8	4.28	0	0.1	6.5	913	0	1	65	1	317	156	2	0	3	0	0	240



Station Name	Feeder	Avg. Distance b/w		OH primary miles	URD miles	UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)				miles	miles														
SPRINGFIELD RD. E.S.	16765	8	6.77	0.75	0.17	6.72	1441	119	180	98	16	454	254	7	0	2	0	0	0	377	
38 SPRING	3864	8	1.21	0	0.8	2.81	256	0	0	76	3	120	76	3	3	19	0	1	132	0	
26 STATION 26	2663	8	1.4	0	0.19	2.67	294	0	30	0	0	92	42	3	17	15	0	0	100	0	
28 STATION 28	2872	8	2.7	0	0.92	3.66	566	0	0	44	0	151	116	16	2	16	2	0	192	0	
WHITESBORO	63264	8	4.59	0	0.23	6.81	960	0	154	73	2	328	147	13	0	3	0	0	245	0	
32 BAILEY	3268	8	2.44	0	1.03	3.75	509	0	1	46	1	183	98	11	4	22	0	0	181	0	
82 11TH ST	8266	8	2.26	0	0.08	3.51	470	0	0	36	0	158	98	5	0	5	2	0	150	0	
51 ELK ST	5185	8	1.14	0	1.62	1.93	237	0	1	31	2	115	49	6	0	30	0	1	115	0	
22 KENMORE	2262	8	2.57	0	0.05	4.65	534	0	0	40	0	149	93	3	29	9	1	0	172	0	
SCOTIA	25577	8	3.9	0	0.37	5.51	810	0	66	72	5	289	145	0	0	20	0	1	238	0	
LANSINGBURGH	9351	9	2.02	0.09	3.6	3.19	417	17	160	32	17	165	118	0	2	52	1	5	219	0	
GLENS FALLS	7506	9	0.33	0	0.55	0.69	68	0	1	10	1	35	10	3	0	14	0	0	36	0	
ROME	76255	9	8.66	0	0.34	13.06	1778	0	111	142	5	627	399	36	0	15	3	0	610	0	
MILL ST.	74866	9	3.11	0.22	0.51	3.83	638	24	115	61	13	209	84	4	1	4	0	0	145	0	
155 ROBERTS	15564	9	5.27	0	1.17	7.11	1078	0	0	75	0	308	150	12	9	20	0	0	268	0	
22 KENMORE	2273	9	3.1	0	0.68	5.36	634	0	0	56	0	188	80	13	15	11	0	0	166	0	
NEWARK ST	30051	9	10.53	3.75	1.1	17.05	2152	256	152	176	67	734	401	13	71	9	1	7	686	0	
SEMINOLE	33905	9	4.95	0	1.3	8.49	1011	0	0	89	1	323	220	5	3	24	0	0	333	0	
SEWALL'S ISLAND	76678	9	3.11	0	0.05	4.05	635	0	0	63	1	235	78	2	0	0	0	0	139	0	
23 KENMORE	2365	9	1.13	0	0.76	2.62	230	0	0	15	1	68	64	0	14	13	0	0	108	0	
55 ELECTRIC AVE	5561	9	4.89	0	0	7.82	994	0	0	85	0	315	244	12	1	0	0	0	336	0	
COBLESKILL	21413	9	2.78	0.4	0.05	3.9	563	123	1	48	6	189	83	2	0	0	0	0	132	0	
82 11TH ST	8267	9	0.9	0	0.83	2.2	182	0	0	24	1	75	79	10	4	25	4	0	141	0	
57 COLVIN	5762	9	0.96	0.12	0	0.73	194	2	0	20	2	46	14	5	0	3	0	0	34	0	
LEVITT	66581	9	3.72	0	0.18	5.39	751	0	1	56	2	268	142	7	0	4	1	0	221	0	
82 11TH ST	8274	9	2.64	0	0.92	5.16	532	0	13	47	4	168	140	21	1	12	5	0	221	0	
GLENWOOD	22767	9	4.97	0	0.18	7.45	996	0	2	68	3	390	222	4	0	3	1	0	328	0	
28 STATION 28	2862	9	0.17	0	0.68	0.22	34	0	1	2	1	14	12	2	3	16	1	1	39	0	
24 KENMORE	2467	9	0.48	0	0.42	1.59	96	0	0	14	0	32	25	0	3	8	0	0	44	0	
ARNOLD	65671	9	3.24	0	0.11	3.56	646	0	3	38	3	209	158	3	0	0	0	0	213	0	
LENOX	51364	9	1.04	0	0	1.21	206	0	0	12	0	79	32	0	0	0	0	0	52	0	
22 KENMORE	2263	9	4.67	0.11	0.09	6.96	925	1	0	65	1	278	111	0	4	4	1	0	190	0	
154 GEORGE URBAN	15467	9	3.04	0	0.31	4.85	602	0	1	48	1	212	82	20	0	4	0	0	159	0	
42 OHIO	4263	9	1.98	0	0.51	3.17	391	0	0	35	1	154	95	2	0	9	1	0	146	0	
MESSINA	4276	9	5.41	0	0.13	7.27	1063	0	41	86	5	413	187	8	0	0	0	0	298	0	
22 KENMORE	2268	9	2.81	0.17	0	3.5	552	2	0	43	2	156	25	0	0	2	1	0	68	0	
85 STEPHENSON AVE	8562	9	3.64	0.07	0.43	7.15	0	0	52	0	0	217	90	1	0	2	0	0	147	0	
31 STATION 31	3165	9	0.27	0.04	1.05	1.25	53	1	1	6	2	21	28	0	6	19	0	0	58	0	
PEAT STREET	25052	9	7.52	0.53	2.07	12.96	1475	62	129	141	19	578	388	10	26	37	0	1	607	0	
53 BAILEY	5363	9	4.19	0	2.31	5.92	820	0	11	62	4	246	136	3	15	18	0	0	234	0	
EAST SYRACUSE	2767	9	3.11	0	0.1	4.53	608	0	18	49	3	257	136	2	0	0	2	0	204	0	
CARTHAGE	71763	9	1.61	0	0.02	1.72	314	0	0	38	1	92	58	6	0	0	0	0	87	0	
COURT ST.	12185	9	5.74	0	0	8.31	1117	0	0	92	0	425	239	17	0	0	0	0	362	0	
WEST OSWEGO	20908	9	1.47	0	0.04	2.07	286	0	0	29	0	140	98	0	0	1	0	0	134	0	
44 SOUTH PARK	4473	9	4.51	0	1.72	5.16	875	0	0	75	0	244	159	8	0	37	0	0	265	0	
JOHNSTOWN	6121	9	2.45	0	0.51	3.71	475	0	3	28	2	177	88	2	0	8	1	0	143	0	
TEMPLE ST.	24345	9	7.4	0	0.44	12.59	1433	0	10	123	5	582	365	5	6	9	0	1	532	0	
34 BEST ST.	3466	9	2.97	0.04	0.85	5.86	575	31	154	53	9	215	218	2	11	13	1	0	299	0	
27 JEWETT AVE	2768	9	0.31	0	0.61	0.37	60	0	1	6	1	21	11	2	0	15	0	0	33	0	
MENANDS	10158	9	7.77	1.68	1.29	10.66	1499	348	7	122	23	518	167	10	20	9	1	2	339	0	
52 HERTEL	5267	8	0.98	0	0.85	1.34	189	0	0	21	1	63	2	0	0	17	0	1	36	0	
63 HIGHLAND	6366	9	3.92	0.18	0	7.93	753	1	0	61	1	218	242	1	79	3	0	0	380	0	
ROME	76253	9	5.3	0	2.47	9.83	1016	0	263	83	23	333	256	10	1	50	4	13	417	0	
CHURCH ST	4355	9	3.4	0	1.49	5.97	651	0	108	42	7	195	165	9	13	25	3	4	268	0	
58 HARLEM RD	5871	9	3.44	0	1.26	4.4	658	0	32	44	11	171	67	10	7	7	3	2	139	0	
126 STATION 126	12662	9	2.68	0.09	0.05	4.32	512	0	0	43	0	197	107	11	6	3	0	0	176	0	
142 LEHIGH AVE	14272	9	3.37	0	0.29	5.06	642	0	1	51	1	236	192	9	0	5	1	0	266	0	
43 SENECA ST	4364	9	1	0	1.82	1.66	190	0	1	17	2	93	44	1	3	34	0	0	105	0	
139 MARTIN RD	13971	9	6.91	0.02	0.05	10.07	1309	0	0	112	0	393	203	17	9	1	0	0	328	0	
FAYETTE STREET	2874	9	4.8	0	0.49	6.24	909	0	7	73	2	356	204	1	0	13	0	0	307	0	
MENANDS	10176	9	1.22	0.23	0.37	1.38	231	40	5	26	9	63	36	2	0	6	1	0	61	0	
EAST FULTON	10062	9	2.44	0.15	0.37	4.13	462	32	17	41	6	170	108	8	5	15	0	1	181	0	
74 MILITARY	7462	9	4.4	0.06	0.17	6.84	832	78	25	77	3	334	161	10	1	1	0	0	257	0	
39 WILLIAM	3966	9	2.43	0	0.86	4.16	459	0	6	52	3	193	93	1	0	27	0	0	169	0	
39 WILLIAM	3973	9	2.15	0	1.15	4.52	406	0	1	50	1	185	163	12	5	25					



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch	Gear	Conductive Equipment
		OH Premises (Yards)	URD miles																	
63 HIGHLAND	6364	10	4.38	0.2	0	4.92	790	1	0	79	1	239	87	3	10	1	0	0	0	161
74 MILITARY	7461	10	5.32	0	0.13	8.26	957	0	1	95	1	353	160	6	0	2	1	0	0	257
EAST SYRACUSE	2769	10	4.22	0	0.19	6.2	759	0	1	65	1	351	136	4	0	3	0	1	0	232
46 STATION 46	4664	10	0.39	0	1.26	0.73	70	0	0	5	0	31	24	0	2	26	0	0	0	60
78 FASSETT ST.	7863	10	3.07	0	0.08	3.82	551	0	2	55	2	239	99	5	1	0	1	0	0	166
214 STATION	21465	10	1.62	0.68	0	0.79	290	1	0	19	2	42	21	6	12	1	0	4	5	55
VALLEY	59473	10	2.04	0	0.23	2.3	365	0	1	32	3	127	59	3	0	4	1	1	0	100
CHURCH ST	4352	10	10.3	0.14	0.73	16.64	1842	21	33	131	15	729	320	34	2	9	1	3	0	551
E. DUNKIRK	6353	10	12.39	0	0.14	22.99	2213	0	11	214	5	969	398	4	5	0	0	1	0	650
124 ALAMEDA AVE	12467	10	3.63	0.16	0.13	6.65	648	0	0	72	0	216	203	9	69	4	0	0	0	339
LENOX	51366	10	4.75	0.64	0.02	6.28	847	18	0	63	8	345	124	3	11	0	0	0	0	224
CENTRAL AVE	23523	10	4.76	0	0.12	7.19	847	0	0	77	0	267	154	12	0	4	0	0	0	237
31 STATION 31	3162	10	1.24	0.05	0.46	1.97	220	2	0	25	2	102	50	4	3	9	0	0	0	92
ROME	76254	10	2.18	0	0.06	3.58	386	0	2	31	2	162	98	2	0	5	0	0	0	146
PEAT STREET	25053	10	13	0	0.91	21.36	2293	0	14	209	6	857	528	18	8	22	2	1	0	793
MESSINA	4239	10	3.15	0	0.08	4.11	555	0	43	54	2	197	81	18	0	1	0	0	0	149
39 WILLIAM	3971	10	2.18	0.32	0.9	4.13	384	41	0	45	6	183	117	4	23	31	1	1	0	223
58 HARLEM RD	5862	10	3.93	0	0.21	5.7	692	0	0	68	0	254	104	2	14	3	0	0	0	187
85 STEPHENSON AVE	8564	10	2.93	0	0.08	4.09	513	0	0	41	1	162	76	0	0	4	1	0	0	122
130 NIAGARA FALLS BLVD	13055	10	2.61	4.66	1.11	7.68	455	244	104	43	62	146	230	42	78	8	0	1	0	396
AVENUE A	29110	10	2.63	0.45	1.41	4.18	457	12	2	45	8	164	136	0	24	17	2	1	0	221
SCOTIA	25572	10	4.91	0	0.34	7.83	850	0	1	82	1	344	186	1	0	16	1	0	0	290
77 EAST AVE	7765	10	3.93	2.1	0.03	6.28	680	119	8	68	22	261	182	17	28	7	0	6	0	305
61 STATION 61	6165	10	6.09	0	0.13	11.68	1395	0	1	113	1	457	174	5	3	4	1	0	0	301
216 LOCKPORT RD	21652	10	7.15	0	6.39	12.67	1229	0	3	113	5	456	310	25	8	42	2	5	0	506
22 KENMORE	2267	10	5.13	0.1	0.04	11.17	881	0	0	77	0	323	258	4	80	2	0	0	0	425
CENTRAL AVE	23521	10	3.16	0	0.23	4.29	541	0	1	65	1	170	101	7	0	5	0	0	0	156
QUEENSBURY	29558	10	7.2	0	1.56	10.22	1231	0	304	108	16	471	178	8	3	20	1	4	0	332
57 COLVIN	5761	10	3.93	0.18	0	6.02	671	0	0	59	0	212	101	5	16	4	0	0	0	179
63 HIGHLAND	6365	10	4.61	0.07	0	5.33	787	0	0	71	1	257	59	1	10	1	1	0	0	136
JOHNSTOWN	6124	10	3.3	0	0.36	3.58	563	0	5	45	5	208	83	3	0	4	1	0	0	143
CHRISLER AVE	25737	10	3.94	0	0.12	5.22	672	0	18	67	2	255	122	2	0	2	0	0	0	190
74 MILITARY	7465	10	4.34	0.05	0.08	7.04	740	0	2	69	2	301	74	4	1	1	0	0	0	155
79 RIDGE ST.	7968	10	5.35	0	0.04	7.7	910	0	1	92	1	354	235	1	0	0	0	0	0	325
ALBION	9062	10	0.73	0	0.03	0.93	124	0	1	16	1	45	18	6	0	0	0	0	0	35
MILL ST.	74865	10	4.22	0	0.04	5.28	716	0	0	77	0	264	95	6	0	0	0	0	0	167
CORTLAND	50204	10	5.9	0.14	0.43	6.8	1000	10	3	92	4	351	184	8	4	14	0	0	0	298
85 STEPHENSON AVE	8567	10	4.56	0	0.15	5.92	767	0	0	63	0	296	104	7	0	4	0	0	0	189
85 STEPHENSON AVE	8563	10	3.91	0	0.09	5.66	656	0	0	63	0	249	94	4	0	3	0	0	0	163
127 DELAWARE ROAD	12765	10	1.02	0.4	0	1.44	171	1	0	18	1	61	40	1	0	6	0	0	0	62
BURDECK ST	26552	11	16.87	0.74	0.3	22.92	2827	31	12	276	14	960	407	10	13	2	0	0	0	672
161 SHORT STREET	16164	11	2.91	0	0.84	5.39	487	0	0	62	0	225	126	60	5	19	2	0	0	268
VALLEY	59472	11	3.82	0.07	0.14	5.08	635	33	1	55	3	258	137	1	0	1	0	0	0	204
ROCK CUT	28652	11	5.37	0	0.85	8.17	892	0	5	77	5	383	246	0	0	12	0	2	0	356
HANCOCK	13772	11	8.3	0	0.11	10.65	1377	0	1	116	1	512	232	4	0	0	0	0	0	364
MILLER ST.	11706	11	3.07	0	0	3.91	509	0	0	45	0	187	94	1	0	0	0	0	0	142
210 MILITARY RD	21053	11	13.07	3.44	0.35	23.17	2147	431	9	215	65	750	332	55	126	6	1	0	0	708
NEW KRUMKILL	42127	11	6.87	0	0.6	9.35	1126	0	0	113	0	385	248	6	1	15	0	0	0	366
WHITESBORO	63261	11	4.81	0	0.06	5.99	787	0	8	65	2	318	132	7	0	0	0	0	0	219
PORTAGE ST.	75461	11	4.3	0	0.13	4.4	703	0	4	77	3	278	104	2	0	0	0	0	0	176
ROSA ROAD	13756	11	11.62	0.52	0.4	14.5	1893	172	3	176	6	645	274	5	0	7	5	1	0	453
21 MAIN	2171	11	4.97	0	0.27	9.22	809	0	0	72	0	297	243	2	35	8	0	0	0	362
61 STATION 61	6168	11	5.78	0	0.42	8.59	940	0	0	92	0	326	105	2	21	6	0	0	0	216
21 MAIN	2167	11	4.05	0	0.82	9.16	657	0	0	69	0	237	267	2	54	24	0	0	0	406
LEVITT	66583	11	1.58	0	0.05	1.61	256	0	0	24	0	89	52	6	0	1	0	0	0	81
79 RIDGE ST.	7961	11	6.29	0	0.07	9.79	1017	0	10	111	3	404	180	9	0	0	0	0	0	290
21 MAIN	2161	11	2.84	0	0.92	7.96	459	0	0	47	0	163	170	0	46	15	0	0	0	272
51 ELK ST	5161	11	2.48	0	1.16	3.64	400	0	2	44	2	194	98	18	0	14	1	0	0	180
CHRISLER AVE	25736	11	4.37	0	0.16	5.65	701	0	3	73	3	267	135	12	1	2	0	0	0	217
51 ELK ST	5164	11	0.35	0	0.83	0.52	56	0	0	13	0	31	12	1	0	20	0	0	0	41
142 LEHIGH AVE	14273	11	0.45	0	0.07	0.8	72	0	0	7	0	26	20	2	0	2	0	0	0	31
41 STATION 41	4162	11	2.19	0	0.22	2.15	350	0	1	27	1	136	82	11	0	5	2	0	0	134
154 GEORGE URBAN	15468	11	4.69	0	0.32	7.06	747	0	0	67	0	291	100	4	0	4	1	0	0	182
57 COLVIN	5766	11	4.37	0.07	0	4.92	696	1	0	61	1	221	58	3	2	2	0	0	0	120
EAST SYRACUSE																				



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
ROSA ROAD	13755	11	12.35	2.07	0.81	13.82	1911	409	83	203	32	801	262	22	4	6	1	7	502
TEMPLE ST.	24346	11	10.28	0	0.85	13.59	1590	0	146	154	11	655	307	9	0	4	1	3	488
41 STATION 41	4187	11	1.76	0	0.21	3	271	0	1	35	2	149	86	9	1	4	2	0	139
139 MARTIN RD	13972	11	6.04	0.02	0.98	8.11	926	0	96	104	3	347	135	15	3	19	1	0	260
78 FASSETT ST.	7867	11	5.33	4.34	0.02	7.34	817	486	0	78	33	281	148	4	20	0	0	0	242
GLOVERSVILLE	7206	11	2.91	0	0.2	4.28	446	0	44	44	2	185	102	8	11	6	1	0	174
127 DELAWARE ROAD	12764	12	2.96	0.68	0	5.16	453	159	0	56	4	187	106	32	12	9	0	0	206
GLENS FALLS	7508	12	2.36	0	1.16	3.11	361	0	4	36	3	144	65	6	0	25	0	0	132
GLOVERSVILLE	7204	12	4.46	0	0.08	6.13	680	0	0	57	0	271	118	8	0	2	0	0	196
ROME	76256	12	13.75	4.69	0.52	19.66	2085	864	19	196	57	845	466	55	0	2	0	3	737
HILL ST.	31119	12	5.33	0	0.4	6.47	806	0	6	72	4	316	125	11	1	2	0	0	218
78 FASSETT ST.	7868	12	7.24	0	0.02	10.54	1094	0	0	114	0	466	195	4	3	0	0	0	319
54 MAIN	5464	12	3.66	0	1.02	9.87	552	0	16	58	3	217	223	1	61	12	1	0	352
139 MARTIN RD	13961	12	7.62	0.87	0.16	10.96	1149	33	0	126	8	486	297	43	9	4	1	0	476
TERMINA	65140	12	8.42	1.06	1.82	10.48	1269	13	0	119	20	558	275	11	9	22	1	2	460
54 MAIN	5465	12	4.19	0	0.38	6.59	631	0	0	59	0	229	74	2	20	6	0	0	159
LEVITT	66586	12	8.72	0.22	0.15	13.07	1312	5	2	122	8	596	336	17	5	1	2	0	510
ARNOLD	65651	12	3.38	0	0.35	5.28	507	0	65	43	8	252	174	6	0	11	2	0	256
NYSEG	SEG04	12	0.02	0	0	0.05	3	0	0	1	0	3	0	0	0	0	0	0	1
SEMINOLE	33906	12	4.44	0.28	0.22	9.16	666	31	1	74	9	272	243	2	10	23	0	0	346
NEWARK ST	30057	12	17.89	0.43	0.91	22.38	2681	25	9	240	14	980	525	75	8	13	0	1	867
MADISON	65474	12	3.16	0	0.36	3.27	473	0	4	42	5	183	74	24	0	3	2	1	150
61 STATION 61	6163	12	5.36	0.14	0.68	6.92	802	18	4	80	6	330	102	12	7	1	0	0	205
129 BROMPTON	12963	12	4.36	0.65	0	6.45	652	1	0	70	2	211	184	2	2	9	0	0	250
215 BUFF AVE STA	21556	12	6.85	0	0.34	14.42	1023	0	7	102	6	522	411	41	9	16	1	2	611
21 MAIN	2169	12	4.83	0	0.86	7.01	721	0	0	73	0	272	181	5	13	25	0	0	292
129 BROMPTON	12974	12	3.69	0.48	0	4.37	550	2	0	71	2	207	58	0	17	7	1	0	135
78 FASSETT ST.	7864	12	1.6	0	0.14	2.25	238	0	0	20	0	118	51	5	0	2	0	0	88
57 COLVIN	5763	12	4.18	0.06	0	5.15	621	0	0	67	0	217	57	1	7	2	0	0	121
DRUMLINS	13261	12	1.85	0	0.17	2.91	273	0	0	24	1	159	101	1	0	2	0	0	144
28 STATION 28	2871	12	2.61	0	0.33	3.22	385	0	0	33	0	154	58	16	1	6	0	0	120
GALEVILLE	21372	12	8.09	0.58	0.38	9.26	1193	65	106	107	8	475	245	21	0	3	0	1	389
161 SHORT STREET	16163	12	0.53	0	0.78	0.95	78	0	0	14	1	32	37	9	3	12	0	1	70
MILL ST.	74867	12	1.66	0	0.36	2.14	244	0	112	34	6	82	48	2	0	2	0	1	74
154 GEORGE URBAN	15466	12	5.45	0	0.39	10	801	0	0	61	0	350	155	5	11	6	0	0	265
GUY PARK	23818	12	1.07	0	0.11	1.58	157	0	1	15	1	82	36	0	0	1	0	0	58
JOHNSTOWN	6120	12	5	0	0.29	8.48	732	0	7	79	2	334	168	19	11	7	0	0	289
DAVID	97967	12	5.16	1.28	0.24	6.79	755	63	5	90	16	349	206	14	17	1	1	3	328
TEAL AVE	7255	12	11.58	0.28	0.73	13.71	1690	60	6	132	12	681	390	27	4	6	1	4	602
54 MAIN	5473	12	4.38	0	0.36	6.1	636	0	19	64	3	249	95	9	4	2	0	0	172
44 SOUTH PARK	4462	12	2.81	0	0.27	3.36	407	0	0	36	0	152	81	7	9	5	0	0	140
MARKET HILL	32415	12	5.37	0	0.39	6.75	776	0	16	64	4	334	143	14	0	5	1	0	247
CENTRAL AVE	23520	12	4.22	0.36	0.31	5.47	609	19	6	73	12	211	136	5	8	2	1	0	205
39 WILLIAM	3964	12	1.83	0	1.25	2.89	264	0	0	41	0	130	71	6	0	28	0	0	138
139 MARTIN RD	13962	12	4.18	0.02	0.14	5.43	603	0	2	66	1	227	91	6	0	3	0	0	157
WHITESBORO	63262	12	3.33	0	0.08	3.88	480	0	2	53	2	215	108	6	0	0	0	0	168
124 ALAMEDA AVE	12466	12	3.16	0	0.15	2.32	454	0	0	47	0	182	58	7	0	3	0	0	114
W. OLEAN	3356	12	8.5	0	0.35	13.61	1218	0	37	133	10	496	213	53	0	0	0	0	390
58 HARLEM RD	5861	12	4.69	0.08	0.2	7.79	670	6	0	77	3	264	112	6	26	3	0	0	213
SARATOGA	14203	12	2.97	0.2	0.33	4.54	424	56	3	32	11	157	103	21	22	1	0	1	187
63 HIGHLAND	6362	12	2.55	0.06	0	2.49	364	0	0	46	0	130	20	2	1	2	0	0	58
77 EAST AVE	7766	12	3.58	0.59	0.14	6.21	508	7	0	66	4	253	182	10	23	8	0	4	290
83 WELCH AVE	8362	12	5.42	0	0.12	12.61	769	0	1	73	2	455	308	54	6	2	2	0	486
MARKET HILL	32412	12	4.88	0.63	0.36	8.63	692	44	2	76	16	316	159	7	15	7	1	1	269
DAVID	97966	12	3.98	0.37	0.21	6.71	563	33	55	64	8	284	143	20	13	0	1	0	248
56 WILLOWDALE & BARTON	5663	12	3.43	0.19	0	5.21	485	22	0	65	2	209	88	5	12	0	1	0	159
WINE CREEK	28352	12	7.4	0.17	0.37	12.55	1042	0	5	136	6	464	345	15	0	6	0	1	483
DUGAN RD. SUBSTATION 22	2256	13	7.09	0	0.49	14.86	998	0	22	108	6	538	233	44	9	2	0	1	424
DORWIN	2676	13	7.29	0.13	0.27	9	1026	14	2	100	5	475	263	3	5	5	1	0	396
MAPLEWOOD	30751	13	11.78	12.8	0.75	14.58	1650	1347	58	142	140	610	237	19	94	3	2	8	516
OLD FORGE	38363	13	2.75	0	0.13	4.05	385	0	4	52	2	201	84	8	1	2	0	0	145
BENNETT RD.	9957	13	0.55	0	0.13	0.98	77	0	0	6	0	39	15	3	0	0	0	0	28
JOHNSTOWN	6122	13	0.76	0	0.2	0.78	106	0	1	9	1	45	20	2	0	4	0	0	37
WEAVER ST	24552	13	3.78	0.77	0.81	5.75	527	9	403	62	17	243	215	3	0	20	4	1	304
MC CREA ST.	27226	13	6.35	0	0.03	9.37	884	0	0	100	0	386	257	18	0	2	0	0	374
51 ELK ST	5169	13	0.87	0	1.41	0.91	121	0	0	21	0	57	18	2	0	25	0	0	59
SPRINGFIELD RD. E.S.	16768	13	5.54	0.33	0.28	5.66	769	6	7	68	5	374	132	3	0	1	0	0	230
124 ALAMEDA AVE	12462	13	3.9	0.08	0.06	4.6	541	0	0	63	0	194	76	2	3	4	0	0	134
78 RIDGE ST.	7964	13	4.57	0.33	0.25	5.09	632	38	0	67	6	263	120	19	6	0	0	0	211
54 MAIN	5468	13	4.5	0	0.53	6.33	621	0	19	68	3	302	146	6	15	9	0	0	252
208 STATION 208	20867	13	3.72	0.84	0	6.38	511	1	0	60	1	209	126	11	21	13	0	0	223
81 BEACH AVE	8165	13	3.62	0.56	0.57	5.99	497	113	1	54	12	254	149	6	7	8	1	0	235
61 STATION 61	6166	13	5.92	0	0.45	7.77	811	0	4	82	3	345	144	9	7	4	1	0	251
130 NIAGARA FALLS BLVD	13058	13	8.09	3.52	1.49	15.29	1107	513	329	111	124	381	407	112	16	1	0	0	531
46 STATION 46	4661	13	0.91	0	1.25	2.47	124	0	2	18	4	87	67	12	7	23	1	1	133
CAZENOVIA	22076	13	1.63	0.03	0.56	7.1	222	1	169	18	2	96	45	10	17	132	0	3	231
BRIDGE ST. E.S.	29553	13	5.8	0.41	0.2	6.85	789	70	105	7	330	207	9	0	3	0	0	0	302
TRINITY	16458	13	3.82	0.86	2.6	39.51	518	159	3655	59	30	292	437	11	57	911	112	15	1616
124 ALAMEDA AVE	12473	13	3.24	0	0.71	3.64	438	0	8	44	2	178	43	3	4				



																				Conductive
Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary URD miles	miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Equipment	
STATION 41	4163	13	0.59	0	1.13	1.55	79	0	4	14	1	44	49	1	14	30	1	1	107	
21 MAIN	2164	13	3.72	0	0.3	5.68	498	0	0	61	0	224	100	1	6	9	0	0	172	
HENRY STREET	31637	13	1.69	0.81	0.96	2.89	226	143	14	36	18	127	60	0	1	14	0	1	108	
126 STATION 126	12663	13	4.14	0.33	0.16	6.87	553	20	0	58	4	273	95	5	8	2	0	0	178	
79 RIDGE ST.	7962	13	4.55	2.72	0.2	7.45	607	204	123	73	45	261	179	10	55	0	1	0	310	
129 BROMPTON	12976	13	3.84	0.33	0	3.65	512	0	0	66	0	201	58	12	2	6	0	0	128	
81 BEACH AVE	8167	13	5.77	0	0.14	6.77	768	0	0	74	0	351	163	56	4	5	1	0	317	
EAST FULTON	10061	13	6.21	0.21	0.45	9.54	826	13	24	92	9	384	198	19	21	14	2	2	352	
SCHUYLER	66352	13	8.56	0	0.42	9.41	1133	0	2	97	2	520	299	23	0	1	2	2	457	
PINE GROVE	5953	13	18.98	9.37	0.8	28.84	2512	582	17	258	108	1050	486	14	146	4	1	3	917	
LYNN	32076	13	6.7	0	0.18	8.83	884	0	0	93	0	416	147	7	0	2	0	0	260	
HENRY STREET	31636	13	3.32	0	0.41	4.44	437	0	125	57	8	217	110	9	0	0	0	1	174	
NEW KRUMKILL	42126	13	4.77	1.14	1.21	9.91	627	69	221	86	31	324	206	0	19	10	4	0	320	
21 MAIN	2165	13	5.73	0.28	0.23	8.69	752	16	1	89	4	324	166	16	28	5	0	0	296	
PALOMA	25457	13	8.88	1.95	2.09	17.27	1165	81	190	168	43	577	543	36	47	53	3	8	834	
WATT ST	23052	13	19.64	3.23	0.94	26.32	2573	152	10	310	49	1140	506	28	37	6	2	5	869	
ASH STREET	22356	13	5.83	0	5.35	10.54	763	0	9	121	8	429	264	17	0	88	0	0	479	
SOUTH ST	29752	13	2.47	0	0.05	3.34	323	0	113	40	2	158	83	37	0	0	0	0	160	
SYCAWAY	37251	13	3.81	1.11	0.45	5.73	498	174	120	64	12	244	107	21	2	3	2	2	198	
HILL ST.	31115	14	1.49	0	0.15	1.82	194	0	1	24	1	105	39	4	0	2	0	0	71	
54 MAIN	5461	14	4.54	0.33	0.64	5.56	590	27	0	84	4	277	159	12	18	12	0	0	270	
BROOK ROAD	36953	14	8.29	1.74	0.69	9.14	1076	187	84	106	37	408	154	53	62	0	0	4	375	
FAYETTEVILLE E.S.	1465	14	2.05	0.52	0.12	3.14	266	75	3	32	13	182	63	6	6	0	0	0	121	
58 HARLEM RD	5882	14	5.32	0	0.86	10.27	688	0	6	77	3	310	192	3	61	3	1	0	338	
N. OLEAN	3061	14	1.47	0	0.05	2.15	190	0	1	20	1	100	30	0	0	0	0	0	55	
BUCKLEY	14068	14	7.36	0	0.89	7.69	950	0	27	90	4	353	175	5	12	1	0	1	282	
85 STEPHENSON AVE	8565	14	2.42	0	0.42	3.35	312	0	4	41	4	176	69	1	1	5	0	0	120	
27 JEWETT AVE	2772	14	0.73	0	0.44	0.68	94	0	13	15	5	47	26	3	1	9	3	0	54	
BEVIS HILL	28694	14	5	0	0.18	6.27	643	0	0	74	0	271	55	0	1	5	0	0	129	
38 SPRING	3861	14	1.26	0	2.45	2.05	162	0	175	22	23	97	62	1	7	35	1	10	140	
130 NIAGARA FALLS BLVD	13051	14	7.3	0.27	0.14	11.59	938	6	25	128	5	400	297	15	16	4	0	0	432	
DEBALSO	68452	14	18.92	3.68	1.26	29.18	2431	271	110	226	65	1102	475	9	49	37	4	1	851	
NEW KRUMKILL	42151	14	16.53	4.18	1.54	28.16	2122	243	231	268	78	952	571	9	98	13	1	1	931	
BATAVIA STATION	156	14	10.02	0	1.7	12.38	1286	0	120	146	25	560	219	28	19	7	0	12	425	
BELMONT	26054	14	8.4	5.86	0.7	11.88	1206	931	6	128	62	376	160	16	36	4	0	2	312	
SYCAWAY	37252	14	16.19	3.44	1.12	19.85	2075	695	37	244	63	845	369	89	9	2	1	1	682	
LIBERTY	9450	14	4.61	1.54	0.55	5.23	590	147	181	63	26	244	131	2	24	8	0	3	229	
215 BUFF AVE STA	21555	14	8.18	0	0.45	14.57	1042	0	5	92	1	598	367	75	6	9	1	0	608	
HENRY STREET	31635	14	5.38	0	0.06	6.14	685	0	3	76	2	281	94	7	0	0	0	0	171	
TEAL AVE	7256	14	10.01	0	0.47	14.78	1272	0	9	173	4	628	292	30	0	1	1	0	481	
96 MILPINE	9667	14	3.12	0	0.07	3.56	396	0	0	35	0	144	57	4	0	2	0	0	99	
56 WILLOWDALE & BARTON	5661	14	4.53	0.82	0	6.82	573	72	0	68	19	247	128	6	22	2	1	0	221	
ROTTERDAM	13850	14	13.36	3.28	0.87	14.06	1689	169	8	181	44	705	232	12	10	3	1	6	440	
124 ALAMEDA AVE	12472	14	3	0.19	0.17	5.74	379	0	0	53	1	168	186	7	51	6	1	0	293	
57 COLVIN	5769	14	5.37	0.07	0	5.68	678	0	0	68	1	275	92	3	2	0	0	0	166	
WESTVALE	13374	14	7.86	0.98	0.41	10.57	988	50	2	99	11	430	215	6	26	2	0	0	357	
40 WILLIAM STA	4062	14	2.78	0	1.04	3.79	349	0	7	47	6	173	108	21	6	20	1	1	200	
87 LEWISTON	8763	14	5.3	0	0.16	6.48	664	0	11	95	3	348	103	28	2	0	0	0	220	
GLENWOOD	22769	14	9.3	0.4	0.06	11.27	1165	30	0	127	5	591	334	5	30	1	0	0	518	
WATT ST	23051	14	8.48	1.91	0.59	11.05	1062	110	44	118	25	473	253	6	22	5	1	1	406	
211 AYER RD	21155	14	8.68	2.02	2.11	10.36	1085	219	473	118	41	400	26	20	6	0	0	4	156	
58 HARLEM RD	5872	14	4.08	0	0.39	10.68	509	0	0	54	0	237	195	5	40	7	2	0	308	
54 MAIN	5462	14	3	0	0.12	3.33	374	0	101	51	2	158	66	2	0	2	0	0	110	
CUBA	563	14	4.66	0.09	0.02	7.33	579	18	1	78	4	340	54	19	3	0	0	0	161	
STATION 159	15962	14	3.58	0	0.02	7.58	443	0	1	62	1	313	87	16	0	0	0	0	181	
59 PERRY	5963	14	1.36	0	0.47	1.32	168	0	0	19	0	78	43	4	5	9	0	0	81	
DELMAR	27941	14	5.07	0	0.2	7.56	623	0	0	87	0	313	126	4	1	4	0	0	213	
RENSSELAER	13254	14	7.57	0.01	1.06	11.39	930	8	21	115	11	459	322	8	10	8	1	4	468	
MENANDS	10171	14	1.28	0	1.04	1.41	157	0	6	21	3	85	46	2	0	17	1	0	87	
21 MAIN	2166	14	4.18	0	0.16	7.81	511	0	0	72	0	260	145	2	15	5	0	0	232	
GALEVILLE	21371	14	1.62	0.4	0.15	2.79	198	25	1	22	4	85	46	2	10	2	0	0	81	
40 WILLIAM STA	4072	14	0.23	0	1.66	0.55	28	0	47	8	2	23	12	2	1	32	0	0	53	
HOPKINS	25351	15	9.29	2.23	3.1	15.98	1126	347	2	130	46	431	296	32	34	11	2	9	492	
MENANDS	10179	15	3.72	0	0.92	3.56	449	0	1	58	1	195	69	15	13	16	0	2	164	
EVERETT RD	42052	15	9.55	2.19	0.18	9.64	1150	100	8	153	25	463	199	42	11	1	0	7	376	
LIBERTY	9453	15	8.15	0.84	0.62	8.94	978	67	10	108	15	411	198	2	31					



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	SL Lights	Guy	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
RENSSELAER	13256	15	19.49	0.39	0.42	22.94	2273	150	248	258	22	1103	633	28	11	2	0	2	952
124 ALAMEDA AVE	12475	15	4.64	0.22	0.1	6.75	541	1	0	53	1	209	169	2	36	6	1	0	266
GREENBUSH	7851	15	4.95	2.23	0.31	6.98	577	64	1	62	15	252	140	16	4	1	0	5	229
WESTVALE	13373	15	5.69	0.07	0.14	8.05	662	10	0	77	2	337	197	1	3	6	0	0	291
129 BROMPTON	12975	15	4.66	0.28	0	7.08	542	0	0	72	0	230	290	8	61	4	1	0	422
PEBBLE HILL	29057	15	16.38	2.05	0.97	22.95	1905	108	103	233	37	1041	330	55	32	19	0	0	696
HOPKINS	25353	15	7.81	3.53	0.29	11.79	908	216	106	83	42	418	247	8	89	5	0	6	460
78 FASSETT ST.	7865	15	4.25	0.01	0.34	6.29	494	1	24	51	7	268	116	23	0	1	1	0	208
DEERFIELD	60657	15	8.95	4.69	0.67	10.22	1040	138	10	96	45	490	241	15	40	17	1	7	444
140 MAPLE RD	14052	15	11.38	0.31	0.31	18.89	1322	20	46	152	7	533	257	3	8	2	0	0	403
61 STATION 61	6167	15	6.18	0.37	0.2	6.07	715	85	1	84	10	327	148	4	8	2	1	0	245
SCOTIA	25573	15	4.38	0.26	0.22	4.7	503	16	3	65	5	236	74	6	7	3	2	0	151
41 STATION 41	4173	15	1.49	0	0.45	2.75	171	0	0	21	0	97	79	6	6	9	0	0	124
JOHNSON	35251	15	13.94	3.31	0.81	17.05	1595	230	32	215	69	659	141	21	44	3	0	3	377
DELMAR	27998	15	2.5	0	0.58	3.13	286	0	0	35	0	157	40	7	1	2	0	0	89
CURRY RD	36553	15	15.25	0.92	1.63	18.23	1742	130	58	218	32	756	209	20	4	19	2	0	443
97 SUMMIT PARK	9753	15	12.03	15	1.18	26.75	1374	880	40	151	150	676	248	34	272	1	1	1	726
BROCKPORT	7451	15	11	3.92	0.49	13.94	1253	297	10	138	56	529	297	33	56	3	3	0	524
142 LEHIGH AVE	14271	15	3.79	0	0.07	4.49	431	0	0	48	0	235	111	21	8	1	0	0	200
SYCAWAY	37254	16	5.74	0	0.49	7.49	651	0	10	81	7	263	143	1	5	3	1	0	219
129 BROMPTON	12973	16	5.61	0.63	0.07	6.64	636	3	0	80	2	307	105	3	12	1	0	0	198
TERMINA	65149	16	3.97	0.15	2.68	21.14	450	0	555	64	13	280	528	7	1	662	2	3	1273
FLY RD	26152	16	7.19	2.33	0.35	7.88	814	81	1	91	15	339	158	19	12	5	0	8	287
KARNER	31717	16	3.97	0.67	0.25	6.07	448	46	7	60	18	223	128	1	16	2	0	0	203
VALLEY	59475	16	0.71	0	0.39	0.82	80	0	8	9	4	47	19	2	0	8	1	0	42
81 BEACH AVE	8164	16	5.38	0	0.44	8.75	606	0	1	69	1	343	210	6	11	5	1	1	320
CARTHAGE	71764	16	3.57	0	0.02	3.86	401	0	2	49	2	199	112	5	0	0	1	0	168
46 STATION 46	4671	16	2.66	0	0.46	2.12	298	0	5	30	1	155	50	4	2	9	0	0	104
56 WILLOWDALE & BARTON	5669	16	3.89	0.14	0	6.29	435	4	0	52	3	181	117	2	15	0	1	0	180
LEVITT	66585	16	1.27	0	0.14	1.45	142	0	1	17	1	63	30	0	0	2	0	0	48
McKOWNVILLE	32753	16	0.68	0	0.48	0.48	76	0	14	9	7	35	13	1	0	3	1	0	27
PINE GROVE	5955	16	12.82	4.16	0.59	17.28	1442	280	27	172	32	640	261	50	45	8	1	7	532
NORTH TROY	12354	16	11.05	1.47	0.75	13.48	1233	75	105	140	22	540	193	8	14	3	2	3	358
SEWALL'S ISLAND	76679	16	4.1	2.74	0.27	4.56	457	16	59	24	198	67	4	20	1	1	0	0	163
BROOK ROAD	36956	16	12.32	1.88	1.58	16.83	1367	303	119	144	44	649	292	67	64	2	0	3	590
142 LEHIGH AVE	14269	16	3.56	0	2.51	3.91	395	0	0	44	0	226	177	1	1	39	2	1	278
SARATOGA	14206	16	5.32	0.26	0.17	7.78	590	14	3	64	7	306	155	6	9	1	0	0	248
SPRINGFIELD RD. E.S.	16766	16	6.07	0	0.15	4.99	673	0	1	76	1	306	72	3	0	1	0	0	153
57 COLVIN	5768	16	4.98	0.02	0	9.42	552	0	0	57	0	282	237	11	90	1	1	0	411
45 STATION 45	4568	16	0.19	0	0.18	0.21	21	0	0	4	0	19	6	0	0	6	0	0	17
WOLF RD.	34451	16	10.05	6.86	1.74	14.16	1109	357	438	142	129	504	322	4	112	5	0	4	573
HOPKINS	25356	16	8.59	7.31	1.96	15.15	947	328	89	117	85	388	269	19	135	7	0	8	535
ALBION	8061	16	5.38	0	0.03	6.52	593	0	0	66	0	259	122	42	0	0	0	0	229
CHADWICKS	66853	16	14.4	3.35	0.8	17.65	1585	243	131	170	53	810	208	32	57	5	0	0	505
GUY PARK	23917	16	0.2	0	0.22	0.23	22	0	1	2	1	12	5	0	0	4	0	0	12
78 RIDGE ST.	7966	16	3.27	0	0.05	2.73	359	0	0	39	0	156	52	1	0	0	1	0	93
COMMERCE AVE	43451	16	2.38	0.67	0.47	1.9	261	295	23	37	19	129	60	4	0	3	0	8	107
BENNETT RD.	9953	16	10.95	0.15	1.07	15.11	1193	7	16	144	8	645	294	44	4	3	0	0	506
87 LEWISTON	8764	16	5.15	1.08	0	8.37	561	91	0	73	13	295	101	16	41	0	0	0	232
55 ELECTRIC AVE	5563	16	4.39	0	0.03	4.27	478	0	0	45	0	223	124	1	0	0	0	0	181
COURT ST.	12178	16	2.82	0.17	0.04	2.72	285	0	5	53	3	165	66	15	0	0	0	0	122
206 TONAWANDA CREEK	20654	16	6.24	0.91	0.88	10.02	678	64	79	67	20	308	172	21	28	5	2	0	305
BELMONT	26055	16	12.99	1	1.27	20.71	1405	114	42	169	28	794	331	48	28	8	1	5	620
HOMER	12863	16	1.6	0	0	2.18	173	0	0	24	0	105	44	3	0	0	0	0	73
GENESEE ST.	26050	16	1.12	0.18	0.14	1.04	121	0	0	20	0	70	41	0	0	5	0	1	65
WALESVILLE	33151	16	16.72	7.29	1.36	20.41	1805	235	48	203	71	820	302	35	104	0	2	0	648
58 HARLEM RD	5873	16	1.65	0	1.1	1.2	178	0	3	26	3	81	19	5	0	13	0	0	57
CURRY RD	36557	16	11.95	0.86	0.34	13.75	1287	54	7	174	12	566	243	20	6	5	0	5	421
26 STATION 26	2673	16	0.26	0	0.79	0.23	28	0	0	5	0	19	6	0	0	15	1	0	27
ASH STREET	22358	16	5.77	1.73	1.3	8.17	621	14	11	83	14	327	245	12	9	39	2	4	393
COLVIN AVE	31380	16	2.8	0.2	0.59	4.05	301	0	17	48	8	164	133	6	0	22	0	1	203
212 HARBOR FRONT	21257	16	14.29	0	0.31	19.6	1535	0	56	177	5	819	392	35	52	0	0	0	684
CURRY RD	36555	16	15.8	3.64	1.29	17.68	1693	478	77	218	66	728	173	12	49	7	1	2	426
WINE CREEK	28353	16	10.53	4.8	0.89	15.76	1128	515	32	154	73	574	427	60	33	11	0	5	680
OGDENBROOK	42352	16	10.72	1.64	1.52	15.96	1147	102	87	151	42	546	280	25	52	13	0	10	517
SHALETON	8153	16	4.33	0	0	7.76	463	0	0	61	0	297	140	45	0	0	0	0	259
GALEVILLE	21373	16	2.03	0.66	0.19	2.87	217	81	89	30	11	93	41	1	0	2	0	0	67
HINSDALE	21864	17	5.63	0.13	0.02	6.27	600	1	0	68	1	335	136	7	0	1	0	0	228
TEMPLE ST.	24351	17	1.39	0.67	2.36	2.05	148	98	7	24	12	106	82	4	1	42	2	6	164
HINSDALE	21862	17	4.87	0.21	0.04	4.12	518	21	0	59	2	224	127	0	9	0	0	0	192
124 ALAMEDA AVE	12477	17	2.83	0	0.3	3.32	301	0	10	48	3	158	68	4	5	4	1	1	123
NEWTONVILLE	30583	17	3.23	0	0.15	4.11	341	0	1	52	1	210	39	3	1	2	0	0	98
67 STATION 67	6762	17	3.28	0	0.21	6.17	345	0	0	53	1	220	98	15	7	2	1	0	178
MADISON	65472	17	4.06	0.09	0.25	6.6	427	1	2	50	5	271	145	8	1	4	2	0	228
88 YOUNGSTOWN	8862	17	5.6	0.42	0.07	9.17	588	71	12	88	16	339	102	29	7	0	0	0	223
FAYETTEVILLE E.S.	1475	17	5.44	0.47	0.2	7.15	571	41	52	69	12	330	101	4	9	1	0	0	198
210 MILITARY RD	21051	17	5.72	0.13	0.32	7.38	600	41	7	77	7	333	126	25	2	3	0	1	240
DELMAR	27999	17	5.56	0.33	0.53	6.58	583	29	54	96	15	324	125	14	15	2	0	0	237



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	miles																
HOPKINS	25352	17	11.86	2.59	0.82	18.16	1240	109	38	154	41	617	317	15	76	5	0	2	569
KARNER	31715	17	5.02	1.66	0.35	8.36	521	93	0	62	29	228	166	0	32	5	0	0	260
THIRD ST	21673	17	6.31	0	0.44	8.92	653	0	6	101	2	363	237	5	0	6	0	0	339
38 SPRING	3872	17	0.58	0.76	2.03	1.1	60	333	22	15	16	45	29	2	17	32	0	7	98
COLVIN AVE	31387	17	2.07	0	0.23	2.37	214	0	3	37	1	150	98	8	0	4	0	0	148
ROSA ROAD	13757	17	13	2.2	2.99	12.52	1342	107	103	170	35	635	59	23	8	5	1	6	261
KARNER	31718	17	3.21	0.56	0.32	5.35	331	45	1	47	15	187	110	4	12	5	0	0	178
HINSDALE	21863	17	5.88	0	0.11	6	604	0	54	80	2	332	158	5	0	1	0	0	247
41 STATION 41	4172	17	1.57	0	0.41	2.46	161	0	0	34	1	125	73	5	4	12	0	0	125
52 HERTEL	5272	17	1.22	0	0.54	1.51	125	0	8	25	3	93	40	17	0	7	2	0	89
77 EAST AVE	7763	17	4.47	0	0.07	5.98	454	0	1	61	1	267	129	9	13	0	1	0	219
96 MILPINE	9668	17	2.07	0	0.05	2.86	210	0	0	28	0	120	35	0	0	1	0	0	86
124 ALAMEDA AVE	12465	17	0.92	0	0.3	0.79	93	0	2	23	2	70	27	2	0	4	0	0	51
140 MAPLE RD	14056	17	12.25	0.41	1.08	17.14	1237	68	127	151	19	569	219	15	12	2	0	1	391
55 ELECTRIC AVE	5567	18	1.88	0	0.03	2.03	189	0	1	32	1	118	59	4	0	0	1	0	94
ASH STREET	22350	18	2.31	0	7.13	2.99	232	0	2	27	4	158	85	2	0	132	2	7	268
210 MILITARY RD	21052	18	11.57	0	0.87	15.52	1161	0	7	128	3	658	212	36	1	14	1	1	430
WHITAKER	29651	18	14.46	5.75	1.22	19.84	1447	72	35	244	46	902	439	49	38	6	1	3	762
97 SUMMIT PARK	9757	18	10.44	0.48	1.28	15.26	1044	89	88	120	12	684	220	30	4	1	0	5	431
49 BEST	4972	18	0.01	0.11	2.31	1.17	1	0	87	1	18	4	51	0	13	32	0	7	104
MILL ST.	74875	18	0.07	0	0.42	0.07	7	0	0	4	0	5	3	0	0	13	0	0	17
48 GELSTON	4865	18	0.12	0	1.4	0.08	12	0	5	8	4	16	4	0	0	29	5	3	45
48 GELSTON	4868	18	0.32	0	1.22	2.85	32	0	4	18	3	38	95	2	45	20	4	0	176
CENTRAL AVE	23522	18	4.19	0	0.13	3.97	418	0	2	59	1	184	93	2	0	3	0	0	144
CLOVERBANK	9154	18	11.82	0	0.1	20.48	1179	0	1	136	1	752	394	67	0	1	1	0	651
77 EAST AVE	7761	18	1.91	0	0.27	3.15	190	0	8	36	3	163	75	7	1	2	1	0	127
DEBALSO	68451	18	15.68	9	2.58	18.27	1557	532	190	158	133	824	269	55	108	6	4	4	652
WESTVALE	13371	18	1.32	1.54	0.33	3.14	131	85	2	19	16	69	71	9	35	7	0	1	140
97 SUMMIT PARK	9751	18	0.7	0	0.11	1.17	69	0	0	8	0	50	6	5	0	0	0	0	24
DELMAR	27942	18	5.49	0	0.42	7.91	541	0	5	93	3	336	121	8	1	1	1	0	216
81 BEACH AVE	8163	18	5.75	0	0.16	8.43	566	0	1	82	2	378	137	19	0	3	1	0	255
36 SUMNER PL	3667	18	1.14	0	1.2	2.55	112	0	0	30	2	83	47	10	12	24	1	2	117
DRUMJINS	13260	18	3.77	0.23	0.18	5.78	370	15	0	47	2	233	72	2	10	3	0	0	145
ROCK CUT	28651	18	16.41	3.97	1.22	24.22	1805	165	8	240	45	968	399	16	48	11	1	11	728
EAST WATERTOWN	81758	18	15	2.22	2.62	16	1470	136	146	215	34	736	237	28	13	73	0	2	537
DUGAN RD. SUBSTATION 22	2255	18	15.52	1.38	1.11	21.35	1516	85	33	209	27	891	380	56	17	7	2	11	696
140 MAPLE RD	14055	18	5.82	1.99	0.75	11.32	564	238	5	67	38	265	172	0	6	3	0	3	250
BEVIS HILL	28693	18	6.86	0.98	0.37	7.84	663	51	0	102	16	329	83	1	20	2	1	0	189
JOHNSTOWN	6123	18	2.7	0.62	0.17	3.19	260	8	2	28	12	145	57	1	7	0	1	0	102
MENANDS	10157	18	11.7	5.79	1.02	12.36	1125	220	11	116	69	545	161	10	46	12	1	0	366
27 JEWETT AVE	2771	18	0.23	0	0.86	0.31	22	0	0	5	0	15	13	2	1	21	3	0	44
CICERO	1777	18	5.01	0.16	0.23	6.27	479	42	4	78	6	294	90	29	0	2	0	0	195
HINSDALE	21861	18	6.7	0.22	0.82	5.53	640	8	8	76	7	291	123	2	1	5	0	0	204
WHITESBORO	63265	18	4.61	0.06	0.1	4.94	439	26	2	56	3	250	101	7	0	1	0	0	172
SHELBY	7655	18	15.01	0.48	0.1	18.52	1429	22	2	204	6	748	226	56	14	0	0	0	483
LIVONIA	3763	19	1.56	0.07	0.04	1.61	148	27	1	24	2	85	20	19	0	0	0	0	60
FLY RD	26153	19	7.46	0	1.21	8.32	707	0	8	90	9	377	152	43	0	10	0	2	301
SORRELL HILL	26954	19	11.44	18.02	0.46	20.26	1082	1772	3	140	225	542	276	6	145	3	0	14	580
KARNER	31707	19	2.33	1.83	0.31	2.95	219	132	3	32	34	105	90	1	32	3	1	0	153
BUCKLEY	14067	19	1.16	0	0.08	1.27	109	0	1	13	1	62	24	0	0	1	0	0	41
HOMER	12962	19	5.57	0.06	0.26	4.79	523	15	17	65	8	278	89	16	0	1	0	0	176
HARRIS ROAD	23550	19	24.63	3.96	1.42	31.45	2306	186	73	300	44	1229	549	125	56	12	1	1	1051
29 POTOMAC	2973	19	0.46	0	1.71	1.03	43	0	0	19	0	44	28	11	8	40	0	1	98
BEVIS HILL	28690	19	2.8	0	0.11	3.35	261	0	3	45	2	167	35	7	0	1	0	0	85
DRUMJINS	13262	19	2.61	0	0.19	2.77	243	0	2	33	2	133	58	6	0	2	1	0	100
MALONE	89551	19	15.07	0.41	0.71	15.02	1403	39	8	206	14	737	262	38	0	0	1	0	485
CAVANAUUGH	61653	19	11.1	0.49	0.45	10.41	1031	37	22	119	16	512	119	22	9	0	0	0	278
BENNETT RD.	9955	19	13.73	0	0.36	15.56	1269	0	16	172	7	778	307	26	3	3	0	0	534
FISHER	27051	19	12.79	2.74	0.59	15.38	1181	212	109	142	42	598	222	14	16	2	0	4	408
McKOWNVILLE	32751	19	11.13	7.8	1.34	13.78	1026	903	26	170	108	549	127	6	83	19	1	3	376
DUGUID	26554	19	8.92	5.95	0.26	11.46	816	384	9	116	64	437	122	12	65	3	0	4	315
EUCUID	26753	19	8.8	11.12	0.24	14.93	802	810	2	91	160	368	259	5	239	9	1	2	607
206 TONAWANDA CREEK	20655	19	20.78	12.21	1.05	41.74	1892	733	8	264	143	1050	581	57	285	3	3	0	1192
DORWIN	2678	19	10.34	0.13	0.25	8.84	941	10	2	127	7	545	220	22	7	2	0	0	387
CEDAR	45352	19	22.4	7.52	3.91	23.91	2034	360	359	268	92	1051	337	39	153	2	0	8	802
WHITESBORO	63263	19	3.08	0	0.1	2.72	279	0	2	30	2	157	49	15					



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	SL Lights	Guy's	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
MILTON AVE. SUB. E.S. 266	26657	20	13.32	6.86	0.8	16.32	1181	872	15	146	101	609	264	25	129	8	0	1	579
GREENBUSH	7856	20	15.42	2.98	0.82	18.53	1367	209	31	228	55	780	284	90	48	1	0	3	621
CATTARAUGUS	1561	20	6.04	0	0.12	8.5	534	0	1	82	1	387	150	20	1	0	0	0	268
67 STATION 67	6761	20	6.12	0	0.49	8.38	541	0	5	85	4	352	156	11	18	4	1	0	278
60 HAUSAUER RD	6055	20	5.6	3.76	0.47	5.13	494	195	0	30	25	241	132	8	46	4	2	4	256
DUGAN RD.	2252	20	4.35	0.19	0.24	7.65	383	0	139	52	3	287	101	8	0	1	0	2	184
QUEENSBURY	29554	20	10.89	0.62	1.19	14.18	958	13	16	140	12	574	197	24	10	9	0	5	389
59 PERRY	5968	20	1.21	0	1.09	2.54	106	0	5	27	7	76	89	16	13	22	4	0	163
HUDSON	8756	20	5.59	1.04	0.34	7.81	489	100	3	72	31	299	122	19	22	2	0	0	240
REYNOLDS RD	33454	20	8.8	10.93	0.68	11.1	768	818	60	119	176	391	154	30	76	1	0	11	370
OGDENSBURG	93853	20	8.39	1.98	0.73	10.27	732	73	19	93	40	462	176	34	23	0	0	6	355
PINEBUSH	37152	20	13	2.2	0.74	13.45	1126	317	39	195	48	582	59	1	37	1	0	1	245
E BATAVIA STATION	2852	20	9.91	0	0.77	12.56	857	0	11	164	11	551	151	41	0	3	0	1	334
MILTON AVE. SUB. E.S. 266	26655	20	13.1	10.73	0.27	19.76	1132	567	2	158	88	561	277	6	102	7	0	11	543
BELMONT	26056	20	14.41	8.45	0.77	20.48	1245	738	70	198	121	704	355	27	93	11	0	7	669
224 SWEET HOME	22453	20	11.74	7.39	0.8	24.66	1014	263	3	121	79	519	321	30	119	2	0	0	602
WOLF RD.	34453	20	11.26	7.82	2.05	13.98	972	292	289	143	109	490	242	13	96	1	1	7	483
S2 HERTEL	5268	21	0.07	0	0.39	0.14	6	0	2	3	2	8	1	0	0	8	1	0	12
25 STATION 25	2573	21	0.89	0	1.06	1.49	76	0	113	19	3	65	52	5	4	18	0	0	95
209 LONG ROAD	20953	21	8.29	11.49	0.78	17.57	705	498	3	100	108	387	155	5	178	4	1	1	441
130 NIAGARA FALLS BLVD	13057	21	5.28	2.92	0.02	6.26	449	416	0	53	33	244	103	6	10	1	0	4	185
HOPKINS	25355	21	13.09	24.33	2.94	27.13	1110	1196	62	130	238	587	523	21	408	10	0	2	1111
BUCKLEY	14068	21	1.18	0.32	0.08	2.02	100	15	1	13	4	51	26	0	6	1	0	0	46
ALBION	8063	21	9.5	0	0.09	9.23	805	0	1	121	1	398	119	67	0	1	0	0	287
81 BEACH AVE	8166	21	1.36	1.11	1.18	2	115	164	0	17	22	95	51	2	0	17	0	0	94
COFFEEN	76055	21	5.4	5.88	1.33	4.41	456	183	9	76	52	266	89	10	7	1	1	15	190
BURGOYNE	33754	21	19.94	0.88	1.17	24.75	1680	90	86	244	23	1028	439	92	14	2	0	2	806
S4 MAIN	5472	21	3.1	0	0.16	3.17	261	0	2	39	2	147	44	13	2	0	1	0	97
FAIRMOUNT	11883	21	2.71	0.62	0.11	2.96	228	38	1	25	9	133	49	23	18	0	0	0	123
LYSANDER	29753	21	8.65	13.54	0.14	15.88	727	415	3	114	91	453	229	22	191	3	0	1	559
JOHNSON	35256	21	10.78	7.86	0.78	14.92	906	453	2	138	144	499	227	29	73	3	1	2	460
SCOTIA	25571	21	6.34	0.19	0.17	5.8	532	10	0	80	4	320	37	0	3	1	0	0	124
PLEASANT	66474	21	1.35	0.08	0.09	1.44	113	0	2	16	2	63	48	0	1	1	0	0	67
MINDA	4430	21	8.83	0.18	0.15	8.18	733	35	6	104	4	425	159	32	0	1	0	0	298
AVON	4382	21	5.4	0.23	0.09	6.54	448	61	2	69	7	291	114	14	1	0	0	0	202
NEWTONVILLE	30581	21	3.02	6.09	0.3	3.27	249	164	1	43	51	147	23	7	73	0	0	0	140
NEWARK ST	30052	22	5.29	0	0.4	4.13	431	0	3	44	2	255	101	4	0	6	1	1	177
BALLSTON	1254	22	11.3	0.13	2	9.71	920	8	15	134	14	508	149	18	8	2	0	0	304
WEIBEL 415	41554	22	10.12	2.72	0.88	13.97	821	134	27	104	44	503	283	17	81	3	0	1	511
ELSMERE	40772	22	2.99	0.78	0.15	2.87	242	35	6	49	15	147	64	4	14	0	0	0	119
CAVANAUGH	61651	22	16.23	0.06	1.25	12.86	1312	18	37	177	15	763	202	25	1	9	1	2	431
EVERETT RD	42051	22	20.4	5.85	2.17	25.69	1649	214	42	275	103	938	261	27	72	3	2	8	608
QUEENSBURY	29556	22	13.45	7.86	2.9	13.64	1086	582	30	188	142	557	124	44	178	7	2	7	501
JUNIPER	44651	22	3.8	3.98	0.26	4.29	306	343	1	57	47	201	21	24	8	0	0	4	107
HILL ST.	31116	22	10.02	0.62	0.71	10.16	806	16	10	116	17	491	138	34	6	2	0	0	303
CHURCH ST	4351	22	0.56	0	0.36	0.8	45	0	225	6	14	38	33	6	8	51	6	7	121
HOPKINS 253	25358	22	6.55	1.55	1.05	5.12	525	8	41	81	23	296	107	23	0	9	0	8	221
SMITH BRIDGE	46451	22	12.37	5.17	1.4	17.17	991	197	17	169	70	607	207	54	111	5	0	4	533
38 SPRING	3868	22	0.3	0	0.25	0.59	24	0	0	6	0	34	22	1	0	7	1	1	41
41 STATION 41	4166	22	0.4	0	0.55	1.38	32	0	0	18	0	48	35	11	12	15	0	0	85
140 MAPLE RD	14058	22	16.9	1.18	0.37	22.46	1350	113	2	193	23	829	249	16	26	5	0	1	504
CEDAR	45353	22	5.46	1.52	0.6	6.45	435	9	22	79	13	262	80	16	8	11	0	11	192
PROSPECT HILL	41352	22	22.12	1.73	1.87	15.95	1761	179	58	232	37	657	233	56	1	4	1	1	510
TERMINA	65150	22	18.67	2.78	0.92	16.13	1477	377	29	164	74	721	333	30	114	5	2	0	654
PEBBLE HILL	29055	22	3.43	0.75	1.12	4.3	271	25	18	44	11	196	85	2	0	5	0	4	145
FAYETTE STREET	2870	22	1.7	0	0.1	2.27	134	0	2	42	1	135	82	0	1	6	0	0	123
170 NEWFANE	17064	22	6.72	0	0.14	7.95	529	0	2	80	2	305	81	27	0	0	0	0	184
BELMONT	26051	22	4.81	8.7	0.48	9.31	378	616	5	46	112	190	156	2	198	6	0	2	412
CLOVERBANK	9151	22	9.41	15.58	0.51	16.22	738	713	0	102	207	491	400	56	154	3	0	5	741
LAKE COLBY	92759	23	13.48	0.45	0.59	11.4	1053	14	11	164	16	606	117	26	9	2	0	0	306
CURRY RD	36556	23	12.33	3.85	0.53	12.58	959	255	2	134	58	500	103	15	52	5	1	1	302
Walmore	21754	23	23.44	4.82	0.76	36.02	1819	315	35	325	64	1194	280	120	115	1	0	1	816
64 STATION 64	6452	23	18.23	3.63	0.79	24.46	1413	165	12	218	56	690	143	54	57	1	1	2	481
KARNER	31716	23	4.93	0.21	0.32	6.65	382	14	2	65	12	204	113	3	18	11	0	0	196
WEST OSWEGO	20907	23	2.39	0	0.12	2.71	185	0	5	31	2	119	73	4	2	1	0	0	110
RUTH ROAD	38151	23	16.3	15.67	0.64	21.6	1258	766	11	197	207	686	269	37	300	4	0	2	764
78 FASSETT ST.	7862	23	2.23	0	0.01	2.39	172	0	0	39	0	194	70	3	0	0	2	0	124
130 NIAGARA FALLS BLVD	13053	23	8.95	4.11	0.06	13.31	690	364	2	100	35	452	181	19	64	1	1	1	380
41 STATION 41	4168	23	0.61	0	0.17	0.37	47	0	0	4	0	42	24	0	0	4	1	0	40
NEWTONVILLE	30568	23	3.07	0.07	0.13	1.97	236	16	12	49	4	139	30	1	0	3	0	1	70
RUTH ROAD	38152	23	9.91	0.38	0.54	11.72	761	77	117	132	12	489	239	5	0	3	2	0	371
MCBRIDE	12365	23	0.43	0	0.05	0.45	33	0	0	9	0	40	29	0	0	2	0	0	41
DEBALSO	68453	23	7.26	2.8	1.64	7.92	553	156	21	78	39	354	135	27	1	10	4	15	281
PINE GROVE	5951	23	11.14	3.68	0.41	10.34	848	150	5	129	38	500	153	42	38	2	0	15	375
BREWERTON	764	23	6.9	0.42	0.18	7.56	524	0	14	107	3	311	63	15	5	0	0	0	161
211 AYER RD	21150	23	15.82	4.97	1.02	24.1	1200	204	15	223	50	785	214	163	84	1	0	0	658
WHITAKER	29653	23	24.81	3.59	1.38	27.78	1880	115	133	318	42	1249	396	48	31	7	0	0	794
MARK																			



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
GREENBUSH	7853	23	12.4	15.89	1.29	17.58	937	740	9	145	159	592	245	28	219	4	1	8	653
NORTH GOVERNOR	98351	23	12.12	0.6	0	9.73	912	42	0	143	10	566	9	10	7	1	0	0	169
SAND CREEK ROAD	45253	23	7.39	2.63	0.89	9.18	556	223	19	95	40	304	122	4	28	2	0	3	235
SAND ROAD	13163	23	1.13	0.22	0.05	1.22	85	12	0	12	3	50	31	0	0	2	0	1	47
REYNOLDS RD	33452	23	7.19	12.96	0.79	11.36	540	446	5	91	106	395	183	12	116	2	0	8	420
LERAY	81361	23	8.57	1.41	0.29	6.34	642	35	30	115	16	341	115	14	19	0	0	0	233
LAKEVILLE	4061	24	10.66	3.08	0.41	14.49	798	125	19	160	29	572	140	12	27	0	0	0	322
Walmore	21752	24	11.72	1.9	0.99	19.76	876	131	27	138	31	618	194	42	66	0	0	0	457
146 WALDEN AVE.	14651	24	2.05	0	0.02	1.28	153	0	2	14	1	82	0	0	0	0	0	0	21
51 ELK ST	5162	24	1.57	0	0.45	3.43	117	0	0	37	0	151	83	9	6	14	1	0	151
BERRY ROAD	15352	24	35.98	5.08	0.93	46.46	2653	242	147	407	52	1864	633	28	16	2	0	1	1146
COBLESKILL	21411	24	4.17	0.47	0.34	4.01	306	33	12	57	15	183	70	2	12	3	0	0	133
52 HERTEL	5261	24	0.3	0	0.28	0.12	22	0	0	7	0	16	2	0	0	7	1	0	14
54 MAIN	5469	24	6.5	0.15	0.24	6.94	474	0	12	79	7	345	87	2	5	0	2	1	183
SOUTH BAY E.S.	6061	24	8.07	5.13	0.18	12.12	588	271	6	98	52	428	124	35	121	2	1	0	390
140 MAPLE RD	14051	24	6.09	2.57	0.4	8.34	443	127	39	85	36	254	110	10	13	1	0	5	203
AMSTERDAM	32652	24	16.59	1.56	0.72	12.39	1204	34	12	134	18	713	264	99	18	8	1	1	569
STATION 150	15055	24	18.76	4.26	0.95	29.42	1359	117	89	227	40	1083	233	129	15	2	0	3	653
54 MAIN	5471	24	4.34	0	0.27	2.87	314	0	85	43	4	206	35	1	0	1	0	0	89
McKOWNVILLE	32754	24	3.71	1.68	0.52	3.91	268	56	41	65	18	194	10	3	9	4	0	6	81
BUTTERNUT	25554	24	11.66	1.47	0.65	14.09	842	74	5	135	27	553	93	23	25	12	0	2	293
124 ALAMEDA AVE	12471	24	1.29	0	0.05	0.71	93	0	11	24	2	72	13	7	0	1	0	0	39
224 SWEET HOME	22457	24	8.84	3.42	1.56	9.87	636	759	36	111	63	436	141	53	14	5	2	1	325
MIDDLEPORT	7764	24	4.31	0	0.2	3.4	310	0	19	59	4	216	67	9	1	0	0	0	131
216 LOCKPORT RD	21651	24	19.31	1.23	0.43	27.79	1388	29	10	229	11	977	278	137	11	6	1	2	679
SCHUYLER	66354	25	28.89	6.56	2.16	27.6	2062	317	149	278	64	1239	545	50	53	34	4	0	996
W. OLEAN	3353	25	22.36	0	1.09	17.06	1590	0	115	220	11	1002	238	43	7	1	0	0	540
DUGUID	26553	25	9.18	25.82	1.05	17.49	652	866	15	89	200	415	147	21	284	8	0	5	569
206 TONAWANDA CREEK	20652	25	2.92	0.9	0.19	4.68	207	47	0	35	10	148	85	39	14	5	0	0	180
129 BROMPTON	12964	25	2.14	0.14	0	1.79	151	0	0	23	0	103	2	0	0	2	0	0	30
211 AYER RD	21156	25	8.28	23.91	3.09	30.74	584	1111	99	106	313	388	725	15	364	4	0	4	1209
86 LEWISTON HEIGHTS	8664	25	7.02	0	1.64	9.67	494	0	2	83	2	303	76	33	0	26	0	0	211
McKOWNVILLE	32752	25	5.55	0.68	3.76	6.42	389	2	81	81	49	278	73	0	4	12	0	14	173
ASH STREET	22357	25	0.3	0	2.85	0.25	21	0	35	3	6	21	11	0	0	59	6	4	85
NEWTONVILLE	30567	25	1.56	0	0.09	1.72	109	0	2	27	2	85	8	6	0	2	0	0	35
WOLF RD.	34454	25	5.9	0	1.84	4.83	412	0	39	82	9	270	100	4	12	20	0	0	204
NORTH TROY	12352	25	10.71	0.44	0.31	11.15	747	43	2	128	18	503	78	22	6	2	0	0	234
GENESEE ST.	26060	25	1.71	0	0.97	1.79	119	0	67	75	6	299	143	9	0	25	0	6	258
SCHUYLER	66355	25	7.26	0.01	0.68	5.02	503	0	67	47	4	131	66	6	0	3	2	0	141
BROOK ROAD	36951	25	6.15	2.34	2.02	4.09	426	253	72	58	30	274	71	29	24	3	0	15	211
MENANDS	10156	25	9.74	2.39	0.53	11.64	674	40	24	135	21	432	130	16	9	2	0	8	273
OATHOUT	40253	25	4.21	3.27	0.55	5.25	291	178	7	50	66	188	31	3	60	2	1	0	144
55 ELECTRIC AVE	5565	25	2.05	0	0.05	1.58	141	0	0	15	0	95	47	2	0	1	0	0	74
TERMINA	65151	26	8.54	0	1.11	7.66	586	0	24	116	17	440	271	25	2	18	1	0	427
LYSANDER	29755	26	4.49	37.86	0.57	15.64	307	1715	6	43	304	178	150	27	429	7	0	39	697
SOUTH ST	29751	26	13.52	3.77	3.74	13.56	924	486	41	132	75	584	235	49	88	3	1	10	532
NEWTONVILLE	30584	26	8.14	1.44	0.39	8.19	556	75	5	88	37	372	81	21	8	3	2	0	208
97 SUMMIT PARK	9756	26	6.93	0.77	1.73	7.58	473	142	293	89	30	365	124	20	3	0	0	2	240
KARNER	31719	26	1.29	2.53	0.2	0.75	88	105	14	15	27	59	19	1	2	5	0	17	59
NORTH COLLINS	9261	26	10.19	0	0.82	10.01	691	0	33	120	14	471	152	16	7	0	2	0	295
60 HAUSAUER RD	6051	26	4.76	7.37	0.87	11.07	322	410	30	42	111	232	235	11	126	1	1	3	435
PEBBLE HILL	29056	26	11.51	11.91	1.02	22.09	778	449	16	132	87	565	232	24	145	4	1	6	553
PULASKI	6868	26	1.04	0	0	1.01	70	0	0	12	0	42	15	4	0	0	0	0	30
HOMER	12961	26	6.99	0.33	0.13	5.89	470	40	7	66	8	277	42	4	7	0	0	0	122
FIREHOUSE	44952	26	14.34	11.6	4.16	17.3	964	631	194	177	183	608	23	35	196	4	0	13	423
214 STATION	21463	26	4.81	0.21	0.16	6.58	323	21	2	73	6	297	121	34	7	1	0	1	238
McKOWNVILLE	32757	26	4.6	9.63	1.24	5.73	307	949	19	64	108	209	22	2	94	7	1	7	185
CLOVERBANK	9152	26	13.1	13.55	0.79	20.86	874	733	30	164	125	584	393	170	180	4	4	6	903
LIBERTY	9411	26	0.03	0	1.46	0.01	2	0	0	1	3	5	7	0	0	47	3	1	59
HANCOCK #2 138	13851	26	2.42	0	4.2	2.22	161	0	27	28	15	117	46	0	3	37	2	13	130
QUEENSBURY	29552	26	3.31	1.19	0.71	3.39	220	37	28	42	21	157	62	22	0	2	0	9	134
BROOK ROAD	36958	27	21.16	27	2.03	28.5	1402	1031	35	210	220	685	167	54	587	1	0	4	984
PINE GROVE	5957	27	11.39	31.41	0.29	26.98	750	1815	3	120	377	432	462	26	731	3	0	5	1335
SHORE RD	28187	27	5.56	2.35	0.56	5.18	366	55	24	81	28	273	76	10	19	2	1	0	176
208 STATION 208	20865	27	0.9	0.06	0.01	0.18	59	0	0	16	0	51	8	11	0	2	0	0	34
GREENBUSH	7855	27	4.15	0.16	0.3	4.57	270	12											



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	miles																
BARTLE	32554	28	11.53	8.31	0.99	15.63	727	634	56	148	88	538	168	57	76	8	1	5	450
COFFEE	76051	28	6.71	9.03	1.4	5.61	423	490	63	94	70	315	120	16	24	6	0	12	257
SWAGGERTOWN RD	36451	28	16.58	2.78	0.71	13.61	1038	122	8	216	46	663	19	21	43	2	1	0	252
DAVID	97968	28	0.72	0.24	0.22	0.47	45	4	7	13	6	38	18	2	0	0	0	3	33
SORRELL HILL	26951	28	22.94	10.85	2.35	25.33	1431	433	93	252	102	925	297	26	160	6	1	0	721
FIREHOUSE	44953	28	19.72	16.65	1.63	20.08	1229	1249	40	232	180	880	70	72	171	9	0	5	547
ASH STREET	22372	28	2.25	0	1.54	4.29	140	0	4	45	5	162	267	7	9	33	0	0	357
GLOVERSVILLE	7251	28	27.76	3.47	1.48	25.61	1724	196	29	300	69	1174	250	37	53	9	2	2	647
WOLF RD.	34457	28	0.58	0	6.67	1.93	36	0	87	18	39	51	65	1	34	32	0	29	174
210 MILITARY RD	21050	28	4.85	1.95	0.21	6.11	301	283	83	61	47	213	71	16	43	4	0	0	187
CURRY RD	36552	28	13.57	20.93	1.42	19.23	839	941	139	157	262	572	103	10	375	8	0	4	643
YAHMUNDASIS	64659	28	5.09	3.2	0.78	3.85	314	135	20	36	39	181	77	64	40	1	1	0	228
AVON	4363	28	12.41	0.9	0.23	11.81	765	79	4	131	22	549	193	48	20	0	0	0	398
PALOMA	25455	29	23.46	13.5	1.9	32.4	1445	483	24	259	142	1043	635	52	224	7	0	0	1179
CHITTENANGO	1672	29	17.39	2.42	1.21	16.48	1071	80	10	215	27	749	185	44	37	1	1	0	455
86 LEWISTON HEIGHTS	8663	29	6.17	2.21	0.28	8.21	379	41	24	64	20	289	53	29	21	1	0	1	177
BURDECK ST	26551	29	8.18	10.05	0.78	10.96	496	249	5	119	73	367	84	20	79	4	1	1	281
INMAN RD	37058	29	13.3	6.91	0.44	18.16	803	333	2	150	97	604	100	18	111	0	1	1	382
CASTLETON	3636	29	4.82	3.62	0.19	4.97	291	74	44	60	31	231	61	2	41	0	0	1	163
30 SPILLMAN	3071	29	1.03	0.09	0.59	3.59	62	3	6	11	7	57	100	17	21	11	0	0	163
NORWOOD	93662	29	10.75	0	0.99	8.41	646	0	52	135	10	435	124	27	0	0	1	0	261
E. DUNKIRK	6355	29	17.3	0.1	0.15	17.15	1039	6	1	170	6	793	212	75	2	0	0	0	487
BUTTS RD	7251	29	5.04	0.71	0.65	6.87	302	108	12	61	14	283	99	64	5	1	0	4	244
105 SWANN RD	10552	29	14.76	0.78	0.39	20.88	881	22	63	152	22	749	142	100	7	1	0	0	437
EVERETT RD	42053	30	1.99	2.12	0.04	2.98	118	40	1	22	12	105	43	0	5	1	0	9	84
OGDENBROOK	42351	30	5.94	15.05	0.59	11.29	352	1110	6	67	165	246	31	20	479	0	0	7	599
BRIDGE ST. E.S.	29551	30	8.11	1.87	1.1	8.66	480	86	129	112	26	382	160	34	0	15	0	11	318
PEBBLE HILL	29058	30	13.71	12.13	1.75	18.2	811	372	8	171	104	591	73	35	129	27	0	3	415
PHOENIX	5164	30	16.65	0.55	0.68	13.96	983	29	64	177	17	735	151	42	1	1	1	0	380
MAPLEWOOD	30753	30	9.22	9.5	0.26	12.88	542	626	2	98	145	401	63	6	198	2	2	0	371
211 AYER RD	21152	30	10.33	3.76	0.64	12.82	607	368	77	115	66	476	182	25	34	2	3	1	366
81 BEACH AVE	8152	30	0.87	0	0.07	0.51	51	0	0	4	0	55	28	1	0	2	0	0	45
SAND CREEK ROAD	45251	30	11.37	7.27	2.27	11.05	662	511	119	138	140	468	139	25	139	4	2	9	435
LAWRENCE AVE	97656	30	3.61	0.45	0.64	2.5	210	52	11	33	10	163	74	10	11	9	0	4	149
MAPLEWOOD	30752	30	1.86	0.03	1.44	1.04	108	14	1	18	4	36	15	0	13	0	1	0	56
ROTTERDAM	13853	30	21.35	0	1.16	14.84	1239	0	116	205	15	952	238	28	0	13	0	1	518
THOUSAND ISLANDS	81454	30	22.25	0.92	4	8.12	1290	98	74	258	48	753	162	54	1	0	0	1	406
CAMILLUS	1066	30	8.81	0.05	0.48	6.54	510	8	35	98	7	365	105	4	0	0	0	0	200
LAWRENCE AVE	97652	30	21.49	0.6	1.47	14.98	1244	65	115	239	22	821	183	35	12	0	1	3	439
BELMONT	26053	30	6.2	2.13	0.9	6.25	358	364	65	67	35	276	96	23	3	8	0	5	204
BELMONT	26052	31	25.16	18.96	1.59	29.31	1450	1020	31	237	200	1055	222	34	273	11	0	4	808
64 STATION 64	6457	31	10.36	18.1	2.45	25.63	595	718	9	103	167	465	209	62	278	2	1	4	672
MENANDS	10153	31	16.68	12.29	1.79	16.91	953	749	19	207	149	731	210	19	80	16	1	5	514
CURRY RD	36551	31	18.94	19.11	2.09	19.82	1078	984	63	230	266	754	57	33	271	12	0	6	568
224 SWEET HOME	22458	31	5.81	0	0.61	7.57	330	0	12	75	4	304	76	53	3	2	2	0	212
206 TONAWANDA CREEK	20651	31	10.41	0.47	0.57	11.49	590	42	24	92	13	511	179	29	16	3	1	0	356
CENTRAL AVE	23524	31	2.21	0	0.15	1.1	125	0	17	31	3	90	11	0	0	1	0	0	35
BUTTERNUT	25556	31	5.52	2.52	0.25	3.67	310	32	2	55	20	220	29	0	0	1	1	11	97
RICHMOND	3252	31	15.62	0	0.37	11.81	877	0	5	189	4	603	25	51	0	1	0	0	228
VALLEY	4458	31	9.22	5.66	1.7	7.91	516	462	40	89	60	358	99	56	54	1	0	0	311
60 HAUSAUER RD	6054	32	5.91	21.87	0.42	22.08	328	1373	6	58	290	257	531	8	341	1	1	0	946
BETHLEHEM	2155	32	11.28	5.66	0.81	10.7	626	160	21	131	67	472	50	41	53	3	1	1	267
SO. ROBERTS RD	15453	32	0.94	0	0.16	1.47	52	0	0	9	4	72	23	8	0	1	0	0	50
84 STATION 64	6458	32	24.36	2.69	1.2	30.37	1340	129	11	261	38	1116	85	95	49	1	2	1	512
88 YOUNGSTOWN	8863	32	7.26	1.03	0.34	8.39	399	48	2	67	13	258	32	18	22	0	0	0	137
EVERETT RD	42054	32	16.74	7.19	1.7	19.41	920	224	48	228	88	769	168	29	42	7	5	7	450
RAYBROOK ES	63951	32	26.19	3.24	12.82	20.73	1437	94	160	289	127	1114	258	104	34	2	1	4	682
ASH STREET	22305	32	2.56	0	0.78	4	140	0	8	55	5	163	184	24	0	27	2	2	280
JOHNSON	35254	32	13.46	9.5	3.28	15.29	735	306	55	172	127	653	93	44	78	9	0	13	400
JOHNSON	35253	32	8.04	3.11	1.45	7.69	437	56	25	87	18	357	84	33	19	11	0	7	243
DELAWARE RD	9354	33	59.12	4.3	1.84	76.97	3198	228	19	559	72	2818	638	322	58	2	0	1	1726
RUTH ROAD	38154	33	16.8	1.46	0.65	12.88	905	91	6	191	29	642	176	30	29	0	0	1	397
122 SOMMER ST	12262	33	1.43	0	0.16	2.17	77	0	11	25	1	94	37	4	1	1	1	0	68
PINEBUSH	37153	33	14.94	4.1	3.17	13.99	804	766	154	187	77	606	123	4	16	4	2	9	310
B																			



Station Name	Feeder	Avg. Distance b/w		OH primary	UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch	Gear	Conductive Equipment
		OH Premises (Yards)	miles		miles	miles															
BARTLETT	32555	34	15.48	15.77	1.58	23.59	807	650	9	145	160	627	207	45	255	4	1	4		673	
60 HAUSAUER RD	6057	34	4.28	12.94	0.28	15.42	223	738	5	36	147	212	410	13	218	1	1	1		697	
	34552	34	22.41	29.14	2.46	23.59	1166	779	63	261	239	828	71	17	283	9	0	13		600	
	GROOMS	34551	34	8.13	8.88	3.21	10.36	423	771	29	88	140	323	32	26	114	8	1	8		270
MILL ST.	74868	34	15.65	0	0.51	6.42	814	0	25	192	8	547	88	33	1	0	0	0		259	
BALLSTON	1253	34	44.23	15.08	5.65	34.41	2295	717	176	454	201	1683	272	248	334	2	1	1		1279	
MENANDS	10155	34	7.12	2.11	0.7	4.51	369	83	87	54	17	236	104	15	17	15	0	4		214	
81 BEACH AVE	8168	34	2.47	0	0.28	2.8	128	0	2	33	3	170	77	19	0	5	1	0		145	
211 AYER RD	21157	34	5.61	4.09	0.55	3.62	289	362	7	59	58	139	33	21	72	3	0	3		167	
MENANDS	10175	34	2.35	0	0.93	1.86	121	0	5	40	3	110	34	3	1	15	2	2		85	
LAKEVILLE	4063	34	10.31	0.37	1.41	8.72	530	6	15	122	13	333	12	20	3	0	0	0		118	
EAST MOLLOY ROAD	15154	34	4.5	0.22	4.01	3.54	231	3	16	72	18	178	45	50	0	1	0	7		148	
NEW KRUMKILL	42152	34	4.7	10.22	0.86	7.43	241	577	4	43	151	207	197	15	211	7	1	7		490	
FRONT ST	36053	34	12.9	5.07	2.93	9.66	660	569	80	163	85	588	103	43	33	14	2	7		349	
BATAVIA STATION	152	34	13	0.61	2.29	13.14	664	107	36	129	30	564	81	84	17	4	0	3		340	
64 STATION 64	6454	34	10.73	0.6	0.95	10.82	548	87	57	119	16	462	89	34	4	1	0	2		246	
BATAVIA STATION	157	35	34.96	0	2.36	21.47	1780	0	159	327	24	1315	231	178	4	7	1	10		760	
OATHOUT	40251	35	6.23	0	0.9	5.71	317	0	28	79	11	319	60	11	0	3	0	1		155	
138 OAKWOOD	13861	35	10.37	0.49	0	13.29	522	34	0	121	8	534	20	48	12	0	0	0		214	
PINEBUSH	37156	35	1.42	0.94	0.31	1.06	71	119	62	14	14	61	7	9	0	0	0	0		34	
49 BEST	4962	35	0.04	0.98	0.54	0.52	2	27	29	1	5	8	23	0	8	12	0	2		47	
MCBRIDE	12361	35	0.04	0	0.48	0.04	2	0	0	2	0	6	3	0	0	11	0	0		16	
48 GELSTON	4861	35	0.08	0	0.42	0.07	4	0	0	2	0	12	5	0	0	11	2	0		21	
TURIN RD	65358	35	29.09	9.6	1.67	26.3	1453	540	35	304	142	1247	285	47	118	4	4	2		772	
LOWVILLE	77352	35	1.55	0.49	0.05	1.08	77	126	0	19	4	62	24	2	0	1	0	2		45	
DUGUID	26555	35	25.58	17.6	2.29	27.99	1269	985	17	241	186	1016	156	63	226	3	0	7		709	
PHOENIX	5166	36	13.39	1.82	1.17	13.39	662	136	14	165	28	578	86	37	5	2	1	0		276	
DEERFIELD	60658	36	36.3	2.3	1.22	22.36	1789	141	11	320	34	1335	299	57	14	7	1	0		712	
ONEIDA	50154	36	4.97	0.71	0.29	2.46	244	24	5	40	12	237	63	47	2	1	0	6		178	
MARKET HILL	32425	36	0.98	0	0.22	0.56	48	0	20	12	2	39	10	2	0	3	0	1		26	
HILL ST.	31118	36	3.85	0.69	0.17	3.21	188	57	2	40	12	169	72	1	5	3	0	0		123	
DELAMETER RD	9353	36	57.37	4.86	1.14	62.18	2795	287	10	540	62	2464	573	165	54	2	0	0		1410	
NORTH TROY	12353	36	39.56	8.14	3.53	25.05	1925	400	35	391	130	1438	255	45	105	11	0	2		778	
BEVINS HILL	28692	36	8.03	1.67	0.04	5.17	390	65	0	97	22	256	5	2	21	2	0	0		94	
HUDSON	8752	36	26.49	2.27	0.59	19.05	1282	292	42	276	39	1085	241	88	23	1	0	4		628	
161 SHORT STREET	16161	36	0.93	1.62	0.95	1.03	45	104	0	10	14	54	40	7	25	18	0	2		106	
	STATION 159	15963	36	8.31	0.31	0.61	8.38	402	17	2	76	7	313	3	48	6	8	0		143	
	GROOMS	34557	36	30.99	6.09	2.1	22.93	1495	98	57	338	72	1213	152	64	41	9	2	0		571
212 HARBOR FRONT	21253	37	7.9	14.94	0.8	15.7	378	979	3	77	130	402	209	37	353	0	1	1		702	
SALISBURY ES	67853	37	30.8	0.61	2.14	16.51	1471	62	23	250	27	1127	227	50	6	5	0	0		570	
76 SHAWNEE	7654	37	33.94	11.86	0.6	49.55	1617	543	8	353	129	1625	124	141	193	0	1	2		867	
HARRIS ROAD	23554	37	20.44	29.91	3.11	33.63	973	1715	21	204	254	862	314	30	378	7	0	4		949	
BRIDGEPORT	16852	37	25.84	2.14	1.62	17.92	1230	228	26	233	41	957	127	45	24	0	0	0		435	
OGDENSBURG	93852	37	41.02	0	0.32	20.38	1948	0	11	389	7	1365	281	98	0	0	0	0		720	
R.P.I.	RPI01	37	0.19	0	0	0.16	9	0	0	1	0	10	0	0	0	0	0	0		3	
SYCAWAY	37253	37	41.78	4.49	2.57	31.66	1978	417	29	472	97	1652	300	63	47	1	3	0		827	
DORWIN	2677	37	11.38	0	0.38	7.65	538	0	1	95	1	468	100	30	0	1	0	0		248	
64 STATION 64	6453	37	7.42	0.31	1	10.46	350	11	5	90	7	314	44	41	6	8	1	2		181	
74 MILITARY	7466	37	5.83	0.14	0.16	3.73	275	2	0	55	1	217	47	9	0	1	1	0		112	
60 HAUSAUER RD	6053	37	1.76	16.69	1.35	7.69	83	929	3	25	268	93	191	17	90	3	0	17		341	
OGDENSBURG	93851	37	21.93	0.6	1.74	13.89	1031	26	20	243	17	850	188	69	6	4	0	1		481	
BUTTERNUT	25555	37	11.3	16.25	1.42	16.71	531	867	110	134	176	444	50	43	248	4	1	5		462	
214 STATION	21461	38	0.9	0.05	0.02	1.01	42	0	3	22	1	46	5	7	0	1	0	0		25	
STONER	35852	38	38.43	0.46	2.28	23.47	1786	35	44	339	28	1433	348	89	6	2	2	0		805	
CENTER ST.	37953	38	10.38	1.82	0.87	8.54	482	63	6	97	26	427	108	27	8	2	0	9		261	
CORINTH	28552	38	35.89	3.39	2.56	23.66	1665	130	51	358	61	1314	197	93	62	8	1	1		691	
N LEROY STATION	455	38	31.08	1.39	2.01	22.31	1482	110	28	316	30	1220	208	63	17	1	4	0		598	
LIVONIA	3762	38	17.39	1.22	3.15	14.46	803	53	37	186	45	627	81	41	26	0	0	0		315	
TEMPLE ST.	24343	38	1.04	0	0.2	1.89	48	0	6	15	4	95	90	1	2	2	0	0		119	
161 SHORT STREET	16167	38	0.37	0	1.75	0.17	17	0	19	14	4	30	2	4	1	36	1	0		52	
47 STATION 47	4763	38	2.96	0.21	0	4.56	135	2	0	30	2	155	128	9	7	5	0	0		188	
FARNAN RD Mini	47651	38	16.22	1.94	0.86	12.57	742	65	11	186	32	605	52	41	53	2	1	1		301	
BROCKPORT	7457	39	51.72	22.1	8.91	51.53	2363	711	226	564	214	2000	394	218	261	1	0	4		1378	
CHADWICKS	66854	39	17.1																		



Station Name	Feeder	Avg. Distance b/w		OH primary miles	URD miles	UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	SL Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	URD (Yards)			UG primary miles	UG primary miles														
GUY PARK	23910	40	0.25	0	0.08	0.15	11	0	0	0	0	2	0	11	3	0	0	0	0	0	8
ROME	76252	40	35.15	0.9	1.25	20.83	1545	41	14	307	20	1308	336	89	8	9	0	3	0	772	
ASH STREET	22363	40	0.82	0	0.91	1.05	36	0	22	19	5	61	35	2	0	17	0	0	0	69	
DUGAN RD.	2253	40	20.21	0.82	1.65	14.92	887	43	25	205	31	774	117	93	28	4	1	1	438		
ATTICA STATION	1261	40	21.51	1.45	2.14	13.64	944	71	15	211	27	836	167	85	12	1	0	0	474		
LITTLE RIVER	95556	40	22.84	1.68	1.13	13.99	1002	126	105	239	39	820	193	68	18	3	1	2	490		
ELNORA	44256	40	33.12	10.65	4.04	28	1449	537	50	371	194	1245	56	46	156	3	0	0	572		
STONER	35851	40	12.77	0	1.72	9.95	558	0	66	127	22	541	118	28	2	1	0	2	286		
PULASKI	6867	40	10.7	0.7	0.16	7.16	467	28	3	107	9	365	88	7	19	0	1	0	206		
ROCK CUT	28654	40	5.11	0.46	0.27	3.8	223	0	2	50	2	195	49	3	0	3	0	3	107		
BRIDGEPORT	16854	40	29.98	0.4	1.72	26.27	1306	12	12	307	19	1132	62	41	3	1	0	0	390		
ELNORA	44258	40	12.47	23.58	2.27	12.91	542	1093	111	136	343	467	33	17	323	1	0	11	502		
PETERBORO	51453	40	48.48	0.69	1.69	32.76	2107	48	36	421	33	1862	437	132	3	0	0	0	1038		
SCHUYLERVILLE	3912	41	28.94	4.1	3.2	16.07	1256	156	54	289	58	1043	196	67	89	2	1	2	618		
PINE GROVE	5956	41	15.34	41.6	1.55	32.6	665	1900	37	150	372	612	181	47	791	4	1	4	1181		
ONEIDA	50156	41	52.72	1.18	2.59	27.66	2283	78	29	444	41	2026	349	99	4	3	2	0	964		
YAHNUNDASIS	64656	41	29.8	11.54	2.11	23.02	1288	477	28	271	137	1177	92	70	95	0	1	2	554		
BRIDGEPORT	16853	41	37.21	3.98	2.36	29.19	1600	165	28	331	64	1332	130	62	62	0	0	0	592		
LYSANDER	29754	41	7.72	42.04	2.5	29.01	331	2545	70	482	313	390	56	831	3	0	0	33	1391		
HUDSON	8753	41	37	2.48	7.38	23.18	1572	248	357	322	101	1418	338	46	31	17	0	8	795		
MALONE	89553	42	35.68	4.3	1.86	21.28	1513	167	39	408	55	1205	280	96	7	0	1	1	686		
CLINTON CRCC	60453	42	31.36	1.37	3.51	17.7	1326	139	180	277	51	1099	107	85	9	2	0	2	480		
WEST OSWEGO	20909	42	8	0.07	0.31	6.07	337	15	14	84	6	346	63	15	1	1	0	0	167		
GREENHURST	6061	42	2.43	0	0	1.69	102	0	0	22	0	64	1	3	0	0	0	0	20		
GREENBUSH	7852	42	25.04	13.85	2.8	18.19	1049	817	61	281	191	975	139	62	117	7	1	14	584		
CORTLAND	50202	42	4.23	1.23	0.16	2.43	176	109	2	25	21	121	64	12	21	0	0	0	127		
PROSPECT HILL	41351	42	15.55	13.77	1.71	14.14	644	687	17	158	165	582	79	20	159	4	0	2	410		
E. DUNKIRK	6354	43	3.58	0	0.04	3.11	148	0	0	26	0	162	33	3	0	0	0	2	79		
FORTGAGE	31954	43	54.1	4.47	2.97	40	2236	125	28	552	65	2192	155	184	49	0	0	2	938		
126 STATION 126	12664	43	5.13	0	0.33	5.74	210	0	2	50	2	284	82	14	1	4	0	0	172		
STARR RD.	33451	43	34.69	5.32	1.94	24.05	1418	318	50	329	83	1166	251	83	67	6	0	0	699		
DELAWARE RD	8351	43	47.78	13.76	2.07	54.43	1952	750	48	401	176	1869	652	238	202	1	0	9	1569		
OAKFIELD STATION	363	43	20.4	0	0.98	10.51	833	0	36	195	8	709	109	168	0	0	0	0	454		
OLD FORGE	38364	43	19.57	0	2.07	11.14	799	0	40	199	13	658	103	104	3	1	0	0	376		
LATHAM	28251	43	4.44	0.83	4.2	18.1	56	8	53	25	179	28	13	13	6	0	0	4	109		
171 BURT	17161	43	18.05	0.75	1.86	14.66	654	18	21	134	18	573	103	45	15	0	1	0	307		
BURGOYNE	33753	43	42.29	3.88	1.76	25.54	1722	289	32	462	73	1480	193	92	81	0	0	1	737		
CLINTON CRCC	60451	43	7.94	0.96	2.2	4.86	322	91	22	73	27	309	30	15	0	4	0	1	127		
THIRD ST	21672	44	22.89	2.95	1.41	17.77	916	79	24	259	46	838	118	52	29	1	0	0	410		
41 STATION 41	4165	44	0.35	0	0.21	1	14	0	0	6	0	22	31	4	11	6	1	0	59		
TEMPLE ST.	24344	44	0.35	0	2.4	0.3	14	0	3	4	1	31	23	4	0	40	1	4	80		
MALTA	44358	44	16.83	9.58	1.57	13.01	672	385	22	159	92	601	18	50	140	8	0	7	373		
SHELBY	7654	44	23.29	0.11	0.72	16.63	928	26	34	236	12	845	168	95	9	0	0	0	483		
GLENWOOD	22768	44	3.72	1.41	0.47	3.1	148	127	13	30	16	148	36	5	24	0	0	1	103		
SOUTHWOOD	24451	44	19.42	4.63	0.69	15.62	771	168	8	183	48	699	109	120	66	2	0	1	473		
SMITH BRIDGE	46453	44	18.29	60.18	0.8	28.2	724	2281	16	190	465	679	30	76	980	2	0	11	1269		
FLY RD	26154	45	21.1	6.93	1.18	23.73	834	327	11	172	87	802	100	62	105	15	1	4	488		
BROOK ROAD	36952	45	25.94	19.73	2.56	18.34	1024	985	24	259	178	834	46	69	317	4	0	3	648		
VAIL MILLS	39253	45	79.55	1.19	3.27	54	3134	68	103	799	46	2855	147	322	25	3	1	0	1212		
Walmore	21751	45	22.16	4.65	2.59	28.28	867	290	17	225	49	1041	162	117	59	10	0	6	614		
BALLSTON	1251	45	25.5	9.82	2.45	17.43	997	376	163	259	105	954	58	90	125	5	1	8	526		
HUDSON	8751	45	41.92	1.97	2.78	24.67	1638	94	40	415	54	1661	323	86	25	2	1	1	853		
EUCLID	26756	45	1.08	0	3.04	1.52	42	0	13	11	9	46	9	22	7	2	0	9	61		
MIDLER (ES 145)	14561	46	5.51	0	0.28	2.21	212	0	5	70	4	199	39	22	0	2	2	0	115		
MIDDLEPORT	7761	46	24.93	0	0.56	16.66	958	0	15	266	8	999	103	59	0	0	1	0	413		
YAHNUNDASIS	64657	46	4.4	2.22	0.37	2.13	169	131	12	30	38	138	8	34	14	0	0	7	98		
CHADWICKS	68852	46	54.6	5.91	3.06	28.52	2096	316	41	442	98	1905	203	101	78	2	2	0	862		
170 NEWFANE	17061	46	12.43	0	0.71	14.5	477	0	10	118	9	490	90	43	1	0	1	0	258		
SO. WASHINGTON ST.	61452	46	24.92	0	1.19	17.31	955	0	131	215	15	956	200	46	3	9	0	0	497		
BOLTON	28451	46	48.86	6.29	6.3	39.76	1871	253	134	468	121	1908	245	146	78	3	1	10	960		
BROOK ROAD	36954	46	15.68	10.52	2.39	15.58	599	601	25	146	128	604	194	39	291	4	0	3	682		
QUEENSBURY	29557	46	26.35	14.68	2.75	23.36	1006	768	85	286	190	953	156	150	299	5	0	11	859		
INMAN RD	37056	46	19.9	26.23	1.61	18.59	759	961	9	203	264	793	28	10	293	9	1	4	543		
ELNORA	44257	46	12.92	19.28	2.64	14.38	492	864	26	129	237	452	45	36	267	8					



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St.Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment		
		OH Premises (Yards)	UG Premises (Yards)																		
GROOMS	34556	48	0	24.66	15.75	3.6	19.09	903	567	53	244	189	894	82	64	218	5	1	3	597	
THIRD ST	21671	48	0	23.79	0	0.33	11.12	871	0	3	252	3	777	123	52	0	1	0	0	370	
MAYFIELD	35651	48	0	71.07	5.34	4.15	41.65	2600	224	76	723	98	2445	161	186	88	6	0	0	1052	
JOHNSON	35255	48	0	2.16	0.81	1.09	1.11	79	24	21	22	14	82	14	6	0	2	0	10	53	
VALE MILLS	39251	48	0	45.73	2.52	4.17	27.6	1668	158	67	534	75	1627	53	181	40	1	0	1	683	
NYSEG	SEG44	48	0	0.11	0	0	0.07	4	0	0	3	0	7	0	0	0	0	0	0	2	
CAVANAUGH	61654	49	0	11.23	3.51	0.97	9	407	101	33	105	46	426	23	10	26	0	0	0	166	
SCOFIELD	45052	49	0	45.97	2.49	2.52	29.92	1660	58	31	454	64	1667	229	64	60	1	1	0	772	
VAL KIN	42752	49	0	57.96	9.86	6.19	32.87	2085	303	46	576	148	2203	253	61	62	3	1	1	932	
BATAVIA STATION	155	49	0	39.54	7.56	2.41	31.06	1422	556	61	383	94	1449	115	193	90	3	0	7	770	
MADISON	65473	49	0	12.06	1.72	0.31	5.87	432	181	5	113	32	429	108	28	5	2	0	0	250	
PETERBORO	51456	49	0	3.38	2.84	0.09	2.11	121	99	102	17	24	136	42	16	16	1	0	14	123	
N. EDEN	8251	49	0	27.21	6.09	0.97	32.37	972	248	7	271	43	1135	169	172	84	0	0	0	709	
VALLEY	59477	49	0	17.87	0.06	0.86	7.41	638	60	11	174	12	608	80	29	0	1	0	0	262	
OGDENBROOK	42354	49	0	26.85	31.33	2.05	29.95	957	1351	0	24	247	370	88	71	77	804	3	0	1182	
105 SWANN RD	10557	49	0	34.42	0	0.77	35.44	1226	0	33	287	8	1518	113	142	3	0	1	0	639	
206 TONAWANDA CREEK	20656	49	0	12.29	23.77	1.16	23.56	437	1501	5	95	287	562	458	62	275	0	1	7	944	
SCHODACK	45153	50	0	14.92	8.57	1.21	11.68	529	338	154	6	154	118	542	78	11	121	2	1	7	356
DUGAN RD.	2251	50	0	25.77	0.14	0.32	14.07	813	25	6	257	4	891	148	106	0	2	0	1	480	
CONSTANTIA	1923	50	0	29.76	0	0	19.47	1052	0	26	317	17	1063	104	62	1	0	0	0	433	
MILTON AVE. SUB. E.S. 266	26658	50	0	26.33	8.22	1.96	26.13	928	346	21	227	84	1088	180	89	176	15	0	1	733	
SANDY CREEK 66	6652	50	0	50.54	0.78	2.42	30.17	1780	22	66	436	31	1562	30	129	15	0	0	0	565	
LAKE COLBY	92758	50	0	53.23	3.05	12.66	28.6	1868	141	88	456	106	1927	210	156	17	3	1	0	869	
EDEN CENTER	8862	50	0	20.21	0	0.4	16.18	707	0	1	184	1	777	107	154	0	0	0	0	455	
105 SWANN RD	10558	50	0	46.77	1.34	2.73	51.03	1633	95	28	404	43	2040	101	162	26	1	0	0	800	
LYNDONVILLE	9563	51	0	18.45	0.54	0.29	10.55	643	23	3	194	8	598	75	75	3	0	0	0	303	
71 S. NEWFANE	7161	51	0	24.37	0.82	0.56	19.99	848	52	5	231	14	846	52	74	5	0	0	0	343	
WHITESBORO	63266	51	0	1.15	0	0.11	0.45	40	0	2	16	3	38	4	0	0	1	0	0	15	
SWAGGERTOWN RD	36452	51	0	63.98	3.72	7.01	31.01	2225	162	66	658	112	2160	41	109	56	3	2	0	751	
WEIBEL 415	41552	51	0	6.23	7.06	0.92	3.1	216	131	12	49	47	191	10	5	47	5	1	13	129	
CAROGA	21932	51	0	68.8	1.12	2.36	41.18	2385	21	17	575	22	2504	187	164	6	0	0	0	983	
24 KENMORE	2466	51	0	0.26	0	0.25	0	9	0	8	4	3	12	0	11	0	0	0	0	21	
NEWTON FALLS	77463	51	0	3.88	0	0	1.86	134	0	0	39	0	56	18	0	0	0	0	0	112	
ONEIDA	50150	51	0	28.75	4.45	2.18	13.91	1026	248	39	221	73	1002	163	75	63	6	0	1	558	
CHITTENANGO	1673	51	0	25.36	3.25	0.61	10.48	869	107	6	229	37	887	117	30	27	1	0	0	392	
224 SWEET HOME	22451	52	0	4.45	2.18	0.63	4.24	152	42	13	41	20	206	34	36	2	5	0	12	141	
SMITH BRIDGE	46452	52	0	29.88	23.05	3.06	26.32	1019	1002	43	258	254	841	42	88	459	2	2	2	840	
FLY RD	26151	52	0	13.52	3.47	0.98	12.62	461	105	8	113	32	514	106	53	43	15	2	7	355	
EAST PULASKI	32452	52	0	21.43	1.07	1.07	16.18	730	68	7	189	20	736	132	58	9	7	0	0	390	
SENECA HILL	20568	52	0	24.08	1.95	1.63	18.3	818	29	35	238	32	905	170	44	9	2	0	6	457	
VOORHEESVILLE	17853	52	0	40.65	16.73	2.73	20.04	1380	420	38	423	171	1369	224	69	149	1	1	7	793	
FINDLEY LAKE	7162	52	0	15.69	0	0.91	10.67	530	0	10	149	7	560	73	65	1	0	0	0	279	
LIMA	3661	52	0	14.09	1.5	2.25	7.52	475	105	48	128	30	520	84	57	11	0	0	1	293	
SALISBURY ES	67856	52	0	47.13	0	1.37	22.76	1588	0	59	379	16	1585	262	92	0	0	0	0	750	
208 STATION 208	20863	52	0	2.05	0.09	0.03	2.33	69	3	0	25	2	96	55	14	7	4	2	0	106	
SCHODACK	45151	52	0	32.56	6.15	2.71	18.13	1095	143	36	328	80	1138	57	25	39	7	3	5	421	
EUCLED	26755	52	0	16.81	18.95	1.29	24.32	565	837	20	144	174	624	252	49	322	3	0	0	782	
BREVERTON	763	52	0	11.8	0.48	0.89	7.52	396	23	8	105	12	430	31	20	13	0	0	0	173	
N. OLEAN	3062	53	0	29.17	0	0.32	19.15	973	0	28	284	7	995	122	78	9	0	0	0	458	
RICHMONDVILLE MUNI	RIC03	53	0	0.15	0	0	0	5	0	0	1	0	4	0	4	0	0	0	0	5	
NYSEG	SEG60	53	0	0.03	0	0	0.01	1	0	0	1	0	2	0	1	0	0	0	0	2	
SOUTHWOOD	24453	53	0	34.37	9.2	4.01	26.34	1142	477	827	313	116	1224	117	70	140	9	1	5	648	
RGE	RGE12	53	0	0.82	0	0	0.3	27	0	0	13	0	34	0	0	0	0	0	0	9	
171 BURT	17164	53	0	15.83	0	0.43	13.77	521	0	6	135	5	580	57	97	1	0	0	0	300	
GILBERT MILLS	24751	54	0	83.79	6.68	7.18	55.08	2750	269	71	853	123	2829	180	207	101	0	0	0	1195	
89 RANSOMVILLE	8964	54	0	20.24	0	0.95	16.83	664	0	11	187	10	813	99	65	0	0	1	0	368	
WALESVILLE	33153	54	0	53.58	3.06	2.86	26.25	1749	202	65	483	69	1803	197	166	19	5	1	1	840	
VOORHEESVILLE	17852	54	0	18.6	18.13	3.65	13.19	607	491	24	208	156	718	167	31	197	0	0	2	577	
N LEROY STATION	456	54	0	70.61	2.26	3.08	37.08	2300	176	48	647	62	2410	344	320	52	5	0	2	1326	
EAST GOLAH	5151	54	0	37.7	8.72	4.16	27.46	1227	276	125	289	94	1246	174	75	119	1	0	8	689	
EFFLEY FALLS	73061	54	0	0.83	3.4	0	0.42	27	8	0	9	7	27	0	3	0	0	0	2	12	
76 SHAWNEE	7652	54	0	53.14	1.1	2.38	65.11	1726	176	25	473										



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductivity Equipment
		OH Premises (Yards)			URD miles	miles														
RUSH	3482	57	21.96	2.26	2.67	14.16	684	54	26	236	41	880	62	156	21	0	0	0	0	459
EUCUID	26754	57	5.77	52.45	4.48	30.45	179	2880	165	46	570	214	538	19	1149	7	0	8	0	1775
BETHLEHEM	2158	57	30.86	14.17	4.18	19.01	953	558	99	277	212	1125	84	49	233	5	2	1	0	655
206 TONAWANDA CREEK	20653	57	30.98	10.13	0.79	43.86	956	326	4	283	69	1486	107	85	123	3	0	0	0	690
ROCK CITY FALLS	40415	57	16.65	0.32	0.71	7.86	513	13	24	158	12	474	15	54	12	0	0	0	0	200
138 OAKWOOD	13862	57	20.13	0.72	0	20.48	620	12	0	178	9	767	35	95	7	0	0	0	0	329
STUVESANT	3551	57	17.22	1.67	0.78	9.46	528	122	8	163	40	667	17	23	38	1	0	0	0	246
COLLINSVILLE	71663	57	17.44	0.21	1.04	6.33	534	0	19	187	10	485	102	71	4	0	0	0	0	298
PINE GROVE	5952	58	14.41	13.15	1.39	19.39	437	873	10	135	136	590	103	64	316	6	0	5	0	642
EDEN CENTER	8861	58	38.7	0.96	1.68	31.75	1170	42	20	343	27	1419	160	105	22	0	0	0	0	642
DELEVAN	1162	59	32.08	0.25	1.07	10.79	963	64	44	355	17	982	113	58	0	1	1	0	0	419
NORTHVILLE	33251	59	57.97	0.3	3.08	32.28	1734	16	93	502	29	1832	160	178	6	6	1	0	0	809
EAST MOLLOY ROAD	15151	59	4.25	0.96	0.73	2.73	127	5	13	57	17	197	69	13	0	9	1	3	0	144
PINEBUSH	37155	59	3.55	6.67	0.92	2.83	106	360	16	27	81	114	3	1	61	5	0	15	0	114
ST. JOHNSVILLE	33554	59	43.82	0.73	1.37	19.78	1307	28	58	324	27	1321	294	62	12	1	0	0	0	699
JEWETT	29154	59	32.79	0.47	3.66	28.57	977	17	38	278	37	1303	177	78	3	3	0	0	0	587
CONESUS LAKE	5261	59	40.05	0.11	4.25	20.43	1192	12	50	373	49	1456	105	156	0	0	0	0	0	625
SHORE RD	28186	59	15.06	1.06	2.15	6.43	448	15	30	166	34	530	17	26	2	4	0	0	0	182
ALBION	8064	59	17.59	3.5	1.77	9.59	523	246	16	173	57	575	38	183	50	1	0	1	0	417
TEAL AVE	7258	59	1.85	0	0.27	0.3	55	0	1	21	1	74	18	6	0	2	0	1	0	46
WARRENSBURG	32151	59	39.7	1.1	2.57	21.7	1179	15	22	334	29	1238	225	110	13	0	0	0	0	658
170 NEWFANE	17063	59	21.5	3.81	0.56	14.86	636	231	7	193	41	712	52	108	30	0	0	1	0	369
ROME	76258	60	31.87	5.21	2.44	19.35	940	194	25	297	62	1197	121	80	44	10	1	3	0	558
GILMANTOWN	15451	60	69.1	3.53	4.68	38.69	2035	55	45	591	58	2403	342	130	32	3	0	0	0	1108
STATION 150	15054	60	54.56	6.14	3.8	44.73	1605	201	72	471	60	2145	254	246	17	2	0	6	0	1061
COLVIN AVE	31385	60	0.51	0	0.38	2.48	15	0	6	6	1	30	57	0	0	10	0	0	0	75
NASSAU	11339	60	30.13	0.33	1.41	14.42	886	41	12	286	22	1025	60	21	13	0	0	0	0	350
TURIN RD	65355	60	44	5.46	2.4	23.44	1292	220	42	370	86	1565	88	89	65	3	1	4	0	641
CLEVELAND	1166	60	40.34	0.29	0.51	20.62	1184	4	8	378	11	1418	74	78	2	0	0	0	0	509
NEW HAVEN	25653	60	70.04	1.05	4.22	35.61	2049	143	53	687	64	2320	70	150	30	1	0	0	0	831
WINE CREEK	28354	60	63.06	3.04	4.69	38.05	1843	162	58	665	87	2199	112	101	37	4	0	0	0	804
ST. REGIS	97771	60	27.12	0.03	0.51	10.69	791	2	6	303	8	832	57	206	0	0	0	0	0	471
MUMFORD	5051	61	53.66	8.81	2.87	30.24	1560	568	29	449	111	1955	311	156	80	3	1	2	0	1042
224 SWEET HOME	22454	61	2.34	0	0.57	1.78	68	0	27	25	4	85	8	34	0	0	0	0	0	70
EAST NORFOLK	91362	61	15.5	0	0.15	4.75	450	0	0	133	3	424	83	41	0	0	0	0	0	230
48 GELSTON	4859	61	1.07	0	1.14	0	31	0	2	14	2	65	40	15	2	23	3	2	0	101
QUAIL HOLLOW	45731	61	17.14	2.24	1.38	8.34	496	68	29	174	30	689	18	53	28	1	0	1	0	273
CENTRAL SQUARE	1562	61	18.25	2.16	1.69	9.2	557	78	18	194	28	581	52	35	38	0	0	0	0	270
GRANBY CENTER	29351	61	48.24	7.13	4.13	33.05	1423	418	131	508	87	1644	163	138	83	0	0	4	0	799
PETERBORO SUB 514	51451	61	37.86	2.05	4.51	15.86	1087	61	68	282	60	1218	176	122	25	0	0	4	0	632
SORRELL HILL	26952	61	45.07	5.75	2.31	24.94	1294	444	20	402	66	1431	103	54	53	4	0	7	0	579
EUCUID	26752	61	3.24	4.98	0.43	4.71	93	193	7	31	37	133	6	27	2	14	0	25	0	107
SHELBY	7653	61	23.65	0.87	0.56	15.32	678	98	18	217	34	893	100	65	18	1	1	2	0	410
CASTLETON	3635	62	32.58	1.13	2.39	12.42	932	10	14	275	27	1037	147	36	2	1	1	1	0	447
MALTA	44356	62	55.83	15.36	8.6	27.36	1596	478	85	446	178	1758	23	160	178	8	0	10	0	819
52 HERTEL	5271	62	0.28	0	0.51	0.08	8	0	1	6	1	16	2	0	0	11	0	0	0	17
QUEENSBURY	29553	62	20.06	5.74	2.33	13.04	572	239	22	191	97	694	84	105	150	1	0	2	0	516
NORTHVILLE	33252	62	83.23	0.61	4.08	40	2372	6	37	771	37	2760	145	243	6	3	0	0	0	1087
BETHLEHEM	2156	62	8.54	2.21	0.65	6.05	243	175	134	85	39	364	33	20	30	2	0	5	0	181
STARR RD.	33452	62	28.95	6.77	2.16	13.51	823	196	22	267	70	848	84	72	57	1	0	9	0	435
LATHAM	28252	62	1.94	2.01	0.42	1.93	55	16	20	28	20	81	35	8	2	12	0	16	0	93
MIDLER (ES 145)	14563	62	2.19	0	0.14	2.11	62	0	5	28	5	72	66	4	0	22	0	0	0	110
PALOMA	25456	62	81.55	5.3	3.77	45.24	2299	133	63	828	106	2671	158	137	60	4	0	0	0	1027
GREENBUSH	7858	62	8.87	6.35	3.19	5.13	250	263	6	96	86	314	48	9	46	13	0	1	0	186
ONEIDA	50157	63	81.37	0.03	1.48	30.44	2290	15	26	578	20	2511	321	176	1	2	0	0	0	1128
130 NIAGARA FALLS BLVD	13054	63	3.88	0.29	1.2	3.75	109	21	36	32	16	188	50	26	1	3	1	8	0	136
HOOSICK	31452	63	54.12	2.41	2.91	23.06	1511	64	84	497	58	1666	306	74	34	9	0	1	0	841
STATION 150	15056	63	80.21	0.67	2.86	59.45	2239	50	42	640	42	2846	187	292	35	2	0	3	0	1231
EAST WATERTOWN	81756	63	52.63	7.3	2.53	18.54	1469	530	50	534	115	1629	168	72	29	1	0	1	0	678
COBLESKILL	21412	63	24.51	0.91	1.77	8.69	681	63	18	206	27	732	75	34	3	2	1	0	0	298
MORRISTOWN	93361	64	37.35	0	0.68	13.97	1033	0	20	368	5	1129	113	84	0	1	0	0	0	480
INMAN RD	37057	64	8.75	6.42	2.84															



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	SL Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment	
JEWETT	29155	65	26.8	1.97	3.52	21.16	722	26	39	240	48	1025	42	32	10	2	1	0	343
BROCKPORT	7458	65	59.29	4.01	3.47	26.85	1597	402	46	527	75	1750	176	370	42	0	0	4	1030
SCHODACK	45152	66	29.79	3.43	3.51	13.81	799	48	62	274	60	937	62	37	12	3	1	0	349
BARKER STATION	7862	66	22.14	0	0.87	11.21	592	0	7	224	7	740	83	53	0	0	0	0	321
MCBRIDE	12362	66	0.45	0	0.3	2.57	12	0	1	8	1	63	131	4	0	19	0	0	170
EAST MOLLOY ROAD	15153	66	1.8	0	0.79	0.61	48	0	6	23	5	79	23	13	0	5	0	1	62
NASSAU	11338	66	13.66	0.67	0.97	4.86	364	30	25	125	18	427	68	11	11	3	1	0	201
BUTTS RD	7252	66	22.16	2.79	1.07	10.13	589	203	12	191	44	752	75	186	16	0	0	0	465
EAST SYRACUSE	2766	66	0.64	0	0.08	1.86	17	0	1	11	1	47	61	0	0	8	0	0	81
WEST ADAMS	87553	67	59.33	1.34	2.41	15.62	1570	85	40	583	49	1790	181	145	12	2	0	0	788
POTTERSVILLE	42451	67	39.24	3.09	1.94	24.34	1038	67	35	335	45	1318	94	104	17	0	0	0	545
RICHMOND	3253	67	55.3	0.59	4.49	23.56	1457	21	70	503	47	1654	42	144	5	0	0	0	605
PETERBORO	51454	67	30.3	1.2	0.83	13.81	798	13	15	219	18	965	95	44	7	2	0	2	391
CORFU STATION	2261	67	17.44	0	1.34	12.84	459	0	14	158	10	593	22	298	6	0	1	0	475
CAZENOVIA	23078	67	11.19	0.82	0.33	4.53	294	27	7	97	14	420	27	16	7	20	0	0	175
SELKIRK	14951	67	80.39	2.64	3.82	31.34	2112	101	61	719	60	2628	309	120	45	6	0	2	1139
HARTFIELD	7955	67	32.16	5.91	0.78	18.76	839	220	4	261	49	977	76	41	30	0	0	2	393
COFFEEN	76053	68	29.46	3.33	2.29	9.03	767	169	23	274	55	895	179	36	30	3	1	4	477
CLINTON ERCC	36653	68	111.55	0.55	4.02	35.9	2901	67	70	780	41	3125	499	232	7	3	2	1	1525
SENTINEL HEIGHTS	12861	68	9.92	0	0.19	4.67	257	0	2	82	2	316	2	19	0	0	0	0	100
LEHIGH	66952	68	79.06	0.43	4.51	34.08	2048	36	71	663	42	2363	320	239	9	0	3	0	1162
BERRY ROAD	15351	68	51.89	0.67	0.94	34.43	1344	42	5	414	14	1788	138	154	11	2	0	0	752
SCHOHARIE	23451	68	34.85	1.07	1.36	12.13	901	71	41	330	21	1025	136	46	3	1	3	0	445
WEST CLEVELAND	32651	68	28.94	2.47	2.36	13.06	748	25	23	260	35	921	26	62	25	0	0	0	343
76 SHAWNEE	7651	68	37.68	1.95	1.32	41.24	973	80	16	290	35	1326	28	135	44	1	0	0	540
STUVESENT	3552	68	30.01	1.62	1.84	13.02	774	84	29	255	42	981	110	25	23	0	0	0	403
OGDENSBURG	93854	68	48.56	0.43	1.28	17.21	1248	14	22	405	28	1369	113	155	7	0	0	0	617
211 AYER RD	21154	69	3.99	8.26	0.76	10.58	102	396	0	33	118	143	301	5	106	9	0	0	457
56 WILLOWDALE & BARTON	5666	69	2.43	0.23	0	1.9	62	76	0	21	7	109	19	12	0	0	0	0	58
TULLY CENTER	27852	69	47.39	0.24	2.15	19.28	1209	2	15	364	19	1375	91	67	0	3	0	0	505
HARRIS ROAD	23552	69	3.92	0.55	0.16	3.04	100	0	0	23	1	140	5	4	2	2	0	4	52
INDIAN RIVER	32355	69	19.1	15.59	0.7	7.38	487	932	21	202	112	588	21	27	113	0	0	8	316
ALTAMONT	28357	69	18.33	3.72	2.44	8.92	466	222	22	155	48	662	112	19	30	10	0	2	339
LORINGS	27651	69	46.51	1.48	3.42	13.46	1189	72	34	381	49	1287	148	70	30	3	1	1	573
EAGLE BAY	38272	69	41.1	0.35	0.77	15.76	1041	30	54	281	45	1379	93	47	5	0	5	0	486
ALTAMONT	28355	70	58.62	9.6	4.65	28.38	1483	359	46	526	154	1926	92	62	92	2	0	3	733
BOLTON	28452	70	39.89	4.64	1.98	19.31	1009	147	29	339	67	1217	89	122	60	1	0	1	577
E BATAVIA STATION	2855	70	75.33	7.09	3.98	36.73	1902	307	41	649	105	2503	155	166	86	1	1	0	1035
BROOK ROAD	36957	70	7.98	1.48	2	3.96	200	27	13	63	24	257	14	16	19	0	0	1	114
EAST GOLAH	5156	70	60.85	11.09	14.34	38.2	1522	328	276	532	203	2186	193	234	108	2	0	0	1084
NYSEG	SEG25	70	0.04	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	1
NYSEG	SEG42	70	0.04	0	0	0.02	1	0	0	1	0	3	0	0	0	0	0	0	1
NYSEG	SEG45	70	0.04	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	1
NYSEG	SEG59	70	0.04	0	0	0.01	1	0	0	1	0	2	0	0	0	0	0	0	1
NYSEG	SEG08	70	0.08	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	1
FISHER	27052	70	51.54	2.26	3.21	21.51	1288	118	31	414	56	1583	175	112	27	1	0	0	711
CAVANAUGH	61652	70	15.49	0.17	1.25	6.31	387	3	6	118	9	497	26	72	2	5	2	1	232
SOUTHWOOD	24452	71	46.18	17.34	7.76	29.3	1150	441	77	382	223	1410	104	57	130	8	3	0	655
LAWRENCE AVE	97653	71	57.96	0.58	3.34	20.56	1439	91	116	481	43	1716	291	150	14	1	0	3	888
BUTLER	36251	71	59.37	26.33	3.67	32.63	1472	1377	39	538	338	1767	161	64	504	4	0	1	1176
LYME E.S.	73353	71	74.96	2.39	1.3	19.81	1856	0	14	685	26	1981	77	134	20	0	0	2	728
LOON LAKE	83761	71	7.19	1.21	0.44	3.21	178	15	3	67	16	234	8	34	4	0	0	0	105
RIFLE RANGE	45851	71	3.33	0	0.97	1.22	82	0	56	37	14	150	26	3	0	2	0	1	70
S2 HERTEL	5262	72	0.61	0	0.59	0.1	15	0	0	5	0	30	13	2	0	13	2	0	38
RIFLEY	5362	72	24.11	0.3	0.88	10.89	592	8	7	198	11	812	74	29	2	0	0	0	308
W. OLEAN	3354	72	48.81	2.85	1.83	25.56	1196	191	93	412	52	1690	143	227	38	2	0	3	836
WEST ADAMS	87552	72	66.92	6.34	3.27	18.35	1638	380	21	592	81	1935	153	120	17	0	0	4	778
RANDALL RD	46357	72	12.88	2.41	2.64	4.92	315	80	31	149	54	456	0	25	25	2	0	0	166
WATERPORT	7363	72	24.21	0	0.41	8.48	592	0	6	208	6	629	58	192	0	0	0	0	407
WEST HERKIMER	67651	72	58.38	1.54	2.3	22.14	1427	105	28	487	39	1735	197	135	3	0	1	2	772
CHESTERTOWN	4251	72	48.98	3.49	2.32	19.83	1196	126	50	370	59	1515	57	138	29	3	1	0	607
WELLS	20881	72	36.96	0	0.77	14.51	901	0	6	316	5	961	90	83	0	0	1	0	414
EAST GOLAH	5155	72	29.6	9.3	4.67	24.76	720	274	55	241	104	1028	24	143	114	2	0	7	547
FREWSBURG	6962	72	30.42	0.68	1.24	13.51	739	20	10	255	15	976	90	93	5	0	0	0	432
WEIBEL 415	41553	73	2.19	3.71	0.36	1.68	53	23	6	17	31	80	12	11	2	3	0	23	71
NEWSTEAD STATION	1462	73	24.39	2.25	1.74	13.91	587	200	33	227	34	833	35	274	46	0	0	0	563
BATAVIA STATION	158	73	12.6	0	0.8	5.47	303	0	8	126	8	411	11	42	0	2	0	0	158
SELKIRK	14952	73	10.48	34.84	2.02	11.98	251	1427	0	97	408	337	9	24	458	1	0	21	597
TEAL AVE	7257	74	3.22	0.31	0.42	2.5	77	5	8	36	11	130	44	8	0	2	0	4	91
BLOOMINGDALE	84162	74	31.98	0.42	3.7	12.39	764	51	26	302	35	983	86	116	8	0	1	0	457
AMSTERDAM	32653	74	31.7	0	1.47	11.97	756	0	22	230	18	945	132	38	0	2	1	0	409
DEXTER	72661	74	17.11	1.33	1.03	3.84	408	70	10	153	17	394	52	37	9	0	0	0	197
LYME E.S.	73352	74	117.51	0.9	5.67	25.35	2802	42	86	984	58	3074	192	331	23	0	1	3	1319
RAYBROOK ES	83952	74	3.65	0	0.66	1.98	87	0	7	32	5	146	21	19	1	9	0	1	88
HAGUE	41852	74	75.39	2.27	3.48	31.14	1796	63	13	544	37	2261	397	256	29	3	1	1	1252
RGE	RGE2662	74	0.21	0	0	0.06	5	0	0	3	0	9	0	0	0	0	0	0	2
BROOK ROAD	36965	74	114.52	16.11	11.06	40.43	2719	440	130	1029	238	3209	146	376	220	15	0	0	1559
SWAGGERTOWN RD	36453																		



Station Name	Feeder	Avg. Distance b/w		OH primary miles	URD miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St.Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	miles																	
NORTH CARTHAGE	81653	75	89.51	1.87	4.95	23.27	2105	96	80	802	52	2535	288	172	13	2	0	2	1111	
E.J. WEST HYDRO	3841	75	49	0	1.04	23.73	1151	0	10	413	9	1422	20	84	0	3	1	0	464	
EUCLID	26751	75	34.29	5.7	4.59	21.08	804	207	40	280	73	1176	85	96	75	3	0	2	555	
CEDAR	45351	75	58.56	5.71	5.45	26.67	1370	181	68	544	114	1887	47	167	107	0	0	2	795	
CANAJOHARIE	3120	75	31.52	0.1	1.72	7.81	737	4	5	205	7	763	143	49	2	14	1	0	400	
ROME	76251	75	39.05	0.61	1.41	15.43	913	42	9	323	17	1274	57	108	17	6	0	1	508	
HOOSICK	31451	75	70.67	0.65	5.83	20.15	1650	39	39	525	50	2018	220	137	4	4	1	4	875	
RIVER RD	44421	75	0.9	0	0	0.28	21	0	0	12	0	33	0	0	0	0	0	0	8	
ONEIDA	50153	75	56.11	0.94	3.4	18.63	1308	47	32	419	38	1633	129	151	4	1	0	3	696	
Z24 SWEET HOME	22455	76	1.59	0	0.38	1.41	37	0	10	13	7	63	5	17	0	2	0	1	41	
WEST MONROE	27451	76	71.18	5.48	5.2	36.15	1654	158	55	655	93	2080	58	118	47	0	0	0	743	
CASSADAGA	6162	76	36.73	0	0.61	15.89	852	0	5	308	4	1152	81	77	0	0	0	0	446	
JOHNSTOWN	6125	76	35.4	3.08	2.41	13.18	821	264	15	297	46	1075	115	74	17	2	1	0	478	
LIMA	3662	76	36.58	2.33	4.86	14.36	847	216	39	294	76	1191	88	110	46	0	0	0	542	
HOAG	22145	76	12.44	0	0.46	3.73	287	0	5	111	6	356	7	14	1	0	0	0	111	
SHALETON	8162	77	9.62	0	0.47	10.43	221	0	8	88	4	411	161	86	0	0	0	0	330	
W ALBION	7952	77	35.03	0.58	1.08	14.65	803	53	13	334	18	1173	89	270	2	0	0	0	654	
PARISH	4964	77	20.4	0	1.29	8.48	465	14	36	198	14	614	49	41	4	0	0	0	248	
LAKEVILLE	4062	77	30.2	1.1	4.36	13.47	687	39	62	278	63	902	59	103	17	0	0	2	407	
47 STATION 47	4761	78	6.4	0.48	0	6.03	145	10	0	67	4	349	113	17	1	9	2	1	230	
PHOENIX	5165	78	42.77	2.06	2.66	18.36	966	60	25	391	40	1343	69	51	18	1	0	0	475	
DEERFIELD	60656	78	26.94	2.67	0.58	10.05	607	55	12	232	40	837	21	52	19	1	0	1	303	
BRIDGE ST. E.S.	29552	78	2.93	1.23	0.5	2.3	66	26	20	34	23	116	47	9	0	3	0	9	97	
FRANKINVILLE	2461	78	76.2	0.09	1.21	21.36	1715	26	71	631	17	2141	207	156	8	1	1	0	908	
POLAND	6661	78	27.52	0	0.5	13.28	618	0	6	234	5	949	77	105	0	0	0	0	419	
YORK CTR	5351	79	37.35	0	1.75	17.53	835	0	18	262	19	1272	114	97	1	0	0	0	530	
STILES	5866	79	7.53	0.62	0.79	5.19	158	119	16	62	22	252	40	17	40	4	1	0	165	
BENNETT RD.	8956	79	40.39	0.42	2.03	20.83	900	8	28	335	20	1363	119	83	5	2	0	1	551	
VALE MILLS	39252	79	109.49	3.26	9.65	38.04	2438	142	116	986	128	3191	115	407	33	6	0	0	1359	
STAR LAKE	72762	79	29.82	0	6.65	10.38	665	0	30	213	17	886	140	42	0	0	0	0	404	
TURIN RD	65357	79	70.33	1.19	1.35	18.04	1561	64	15	514	34	2031	74	161	11	1	1	0	756	
ATTICA STATION	1262	80	40.8	0.23	1.81	13.13	903	36	16	307	23	1203	97	160	1	5	1	0	565	
BARKER STATION	7881	80	36.7	0	0.54	15.42	812	0	6	305	6	1085	74	75	0	1	0	1	422	
WATERPORT	7362	80	37.42	0.99	2.32	16.92	827	16	38	314	21	1136	37	314	28	3	0	1	667	
LOWVILLE	77353	80	73.09	1.14	1.3	13.84	1831	40	25	578	38	2216	315	220	9	2	1	0	1101	
122 SOMMER ST	12268	80	1.59	0	0.06	1.11	35	0	0	13	0	113	60	5	0	0	0	0	93	
CHADWICKS	66851	80	85.7	0.24	3.7	29.79	1885	11	39	670	45	2643	107	171	0	0	0	0	939	
SCHUYLERVILLE	3911	80	33.52	0.66	2.09	11.05	737	32	21	267	28	930	92	42	19	2	0	0	388	
W HAMLIN	8254	80	101.04	0.44	6.82	43.65	2217	26	61	928	59	3184	159	703	20	0	0	0	1678	
WALESVILLE	33152	80	12.98	0.69	1.59	5.97	284	17	26	98	21	443	18	12	14	9	1	2	167	
UNION ST	37653	81	58.33	0.71	5.12	18.44	1275	26	88	454	56	1629	146	63	16	1	0	1	634	
WARRENSBURG	32152	81	95.58	3.12	4.65	40.33	2088	170	37	712	75	2650	275	211	78	0	1	0	1228	
FAIRDALE	13565	81	35.36	4.2	1.53	11.95	772	45	20	352	28	977	16	73	18	0	0	0	351	
STATION 159	15961	81	47.24	2.48	1.52	20.74	1030	44	20	382	31	1457	82	209	27	0	0	0	682	
MILTON AVE. SUB. E.S. 266	26656	81	31.71	12.6	4.33	23.31	691	341	48	257	110	1033	110	35	152	1	2	2	560	
OATHOUT	40252	81	5.29	3.66	2.24	2.83	115	435	29	51	54	216	18	4	18	6	0	9	109	
OLD FORGE	38362	81	27.63	2.85	7.72	8.7	600	42	82	189	78	951	39	76	11	2	0	0	366	
LAKE RD	29951	81	9.91	0.3	0.46	4.65	215	34	0	74	10	312	24	77	11	9	0	2	201	
DUGAN RD.	2254	82	57.61	0.37	1.17	19.93	1243	3	19	493	12	1749	94	85	10	2	0	1	629	
HAMMOND	37061	82	44.08	0	12.43	9.2	945	0	71	351	37	1067	30	84	6	0	0	0	387	
WHITAKER	29652	82	78.91	3.44	7.64	31.65	1689	165	82	740	104	2493	58	175	11	2	0	0	875	
HUDSON	8755	82	19.6	5.13	1.71	7.06	419	182	73	184	58	642	65	37	25	0	0	14	302	
EAST PULASKI	32451	83	82.67	1.39	6.19	46.03	1968	109	53	789	58	2655	116	259	7	3	0	0	1049	
INDIAN LAKE	31076	83	32.91	2.31	0.69	16.99	698	76	7	232	42	965	105	29	40	0	0	0	415	
GASPORT	9061	83	35.75	0	0.9	15.89	754	0	11	306	9	1031	22	128	0	0	0	0	408	
CHAUTAUQUA	5762	83	33.86	4.05	2.02	15.75	714	147	25	246	53	1033	70	125	39	0	0	0	492	
WILTON	32952	84	53.99	6.86	5.14	22.8	1136	228	50	459	126	1499	114	59	120	3	0	2	673	
PINE GROVE	5958	84	13.73	2.82	1.9	11.18	288	56	25	104	36	471	84	118	34	4	0	8	366	
RGE	RGE90071	84	1.86	0	0	0.4	39	0	0	25	0	58	0	0	0	0	0	0	15	
MOIRA	85961	84	44.78	0	0.49	9.7	937	0	38	417	8	1152	72	119	2	1	0	0	482	
STATE STREET	95461	84	2.01	0.55	0.1	0.49	42	24	39	12	7	37	4	17	0	0	0	0	30	
FRANKFORT E.S.	67761	84	26.58	1.86	0.38	8.31	555	211	5	202	40	759	100	63	27	0	0	0	380	
BYRON STATION	1861	84	24.09	0	0.83	10.8	503	0	18	214	9	724	61	34	1	0	0	0	277	
CUBA	561	85	30.48	0.32	0.49	8.52	629	54	10	255	9	926	65	62	0	0	0	0	359	
SCHROON LAKE	42951	85	108.32																	



Station Name	Feeder	Avg. Distance b/w		OH primary		UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)		miles	URD miles	miles															
GLOVERSVILLE	7253	88		60.57	0.6	1.83		21.43	1216	27	13	457	24	1690	93	144	15	1	0	0	676
OAKFIELD STATION	362	88		33.88	0	0.98		11	680	0	13	237	12	1014	59	355	1	0	0	0	669
GABRIELS	83561	88		28.75	0.21	4.15		7.35	576	1	30	222	28	739	25	54	1	2	0	0	267
BLUE STORES	30351	88		70.38	1.1	6.7		23.95	1410	93	54	611	64	2120	30	89	17	1	0	0	667
TEMPLE ST.	24348	88		0.05	0	1.6		0.3	0	0	1	0	20	10	0	0	0	27	0	4	46
NASSAU	11340	88		36.44	0.53	2.83		9.71	728	52	19	311	24	1031	119	25	1	0	1	0	404
BRUNSWICK	26452	88		85.15	5.52	4.35		26.78	1701	206	51	730	123	2301	135	134	49	4	2	0	899
ONEIDA	50151	88		85.11	5.37	3.87		28.35	1700	166	70	563	81	2523	206	198	46	2	2	8	1093
EAGLE HARBOR	9261	88		19.83	0	0.64		8.19	396	0	4	159	5	626	12	74	0	0	0	0	243
BRASHER	85161	88		13.91	0	0.16		3.35	277	0	2	115	2	379	64	24	0	0	0	0	183
GILBERT MILLS	24752	89		26.88	0	2.02		9.33	534	0	15	260	15	758	7	36	0	0	0	0	233
PORT HENRY	38551	89		88.64	0.26	5.22		28.08	1755	4	88	634	39	2575	381	194	5	0	0	0	1224
HEUVELTON	92372	89		39.94	0	1.02		9.52	788	0	32	344	9	996	102	96	0	0	0	0	447
INDIAN LAKE	31075	89		39.05	1.3	0.9		18.29	770	19	26	258	20	1189	104	42	12	0	0	0	455
VALLEY	4455	89		43.74	12.74	3.96		17.5	862	459	110	326	113	1210	81	111	126	4	0	0	6
NEWSTEAD STATION	1463	90		8.77	4.27	0.46		10.46	172	230	5	75	45	330	65	113	81	0	0	1	631
LYNDONVILLE	9561	90		45.13	0	1.39		14.13	884	0	16	358	14	1214	24	234	1	0	0	0	343
97 SUMMIT PARK	9754	90		8.76	0.13	0.37		5.95	171	11	2	42	4	274	54	26	4	1	0	2	156
RIPLEY	5361	90		31.68	0	0.35		11.38	618	0	25	230	3	916	71	45	0	0	0	0	345
BROCKPORT	7459	90		47.06	8.79	9.36		19.84	916	411	413	433	137	1541	94	111	77	0	1	5	673
NEW HAVEN	25652	91		64.04	0.34	3.61		23.41	1245	77	614	51	1859	52	129	4	4	2	0	0	656
DELPHI	26253	91		52.59	4.01	16.53		10.21	8	33	367	38	1580	84	95	0	1	0	5	580	
VANDALIA	10451	91		56.54	0	1.09		19.29	1097	0	9	456	5	1629	82	98	0	2	0	0	589
WEST ADAMS	87551	91		110.19	0.16	3.13		25.6	2137	9	28	813	27	3130	126	218	2	0	0	1	1130
GILPIN BAY	95661	91		40.07	1.6	13.71		9.93	776	28	87	330	78	992	3	116	5	1	0	0	373
EAST SCHODACK	44730	91		21.21	1.41	4.13		6.26	410	37	28	193	46	666	36	14	10	0	0	1	228
BRIDGE ST. E.S.	29554	91		2.85	0.74	0.92		2.95	55	20	18	42	16	134	118	3	0	17	0	4	176
RIFLE RANGE	45852	91		8.5	1.55	2.01		4.08	164	79	37	74	41	314	44	18	24	3	0	2	170
ALDER CREEK	70161	91		47.74	0	1.97		13.97	921	0	17	340	16	1324	6	128	1	1	0	0	467
STONER	35853	91		35.83	1.74	2.79		14.53	691	18	67	276	33	1130	141	97	11	3	0	18	553
HOAG	22143	91		18.67	0	1.5		6.14	360	0	14	172	13	548	8	15	0	0	0	0	160
BREMEN	81557	91		34.39	0.07	1.56		6.82	663	7	7	315	8	901	108	173	0	0	0	0	506
KNIGHTS CREEK	661	91		42.02	0.87	1.33		12.03	810	18	4	324	12	1235	79	82	6	0	0	0	476
THOUSAND ISLANDS	81458	91		130.63	1	19.68		18.65	2514	43	144	1020	134	3188	219	283	5	0	2	2	1308
WATERPORT	7361	91		26.82	0	0.87		7.19	516	0	9	185	8	746	21	213	0	0	0	0	421
WHITEHALL	18751	92		91.72	2	2.11		23.37	1761	24	14	691	33	2584	215	276	28	0	1	0	1165
BURGOYNE	33752	92		125.23	0.65	5.35		29.76	2403	56	38	956	51	3245	244	328	13	0	0	0	1396
ONEIDA	50155	92		39.82	0.06	1.83		12.31	763	5	48	292	24	1128	69	96	0	2	0	0	449
TULLY CENTER	27851	92		88.25	6.49	7.36		34.14	1689	217	100	669	103	2503	215	115	38	7	1	1	1003
RIPARIUS	29395	92		23.79	0.89	0.7		8.32	455	25	26	179	17	680	17	54	17	0	0	0	258
224 SWEET HOME	22452	92		2.2	0	0.18		1.36	42	0	0	13	0	94	5	63	0	3	1	0	96
FT. COVINGTON	89642	92		51.04	0	0.58		14.2	972	0	18	402	5	1291	112	105	0	0	0	0	540
CANAJOHARIE	3124	93		51.93	0	1.56		11.78	986	0	30	360	11	1344	158	140	1	19	1	0	655
MUMFORD	95053	93		84.32	1.2	7.69		36.19	1604	47	100	609	95	2538	148	316	50	3	0	0	1152
42 OHIO	4262	93		1.21	0	0.09		1.09	23	0	3	14	2	76	41	9	0	1	1	0	71
HIGLEY	92452	93		74.59	1.12	2.14		20.91	1416	39	15	630	32	1975	209	240	16	1	0	0	961
NORTH TROY	12351	93		60.01	3.02	4.97		18.67	1138	91	46	521	84	1705	54	100	31	3	0	0	614
PINEBUSH	37154	93		8.92	22.83	1.32		7.9	169	1518	19	70	294	316	60	83	250	3	0	4	479
SCHUYLER	66356	93		70.42	1.93	3.79		22.64	1334	51	66	489	56	2021	40	123	15	7	0	0	690
ASHLEY	33151	93		61.51	0.52	5.76		15.77	1163	17	31	464	29	1604	62	140	11	0	1	1	616
NEWSTEAD STATION	1461	93		25.95	0.1	1.65		15.38	490	4	12	211	12	826	29	337	6	0	0	0	579
GILBERT MILLS	24753	93		37.52	1.08	2.04		11.08	708	133	19	366	41	1025	3	47	16	0	0	0	322
NORTH COLLINS	9262	93		39.38	0	1.15		20.15	743	0	7	298	7	1294	127	55	0	0	0	0	506
ROCK CITY	62371	93		1.91	0	0.05		1.12	36	0	4	14	3	69	32	3	1	0	0	0	53
BENNETT RD.	9854	93		80.25	0	1.99		41.23	1512	0	12	671	10	2667	52	134	0	3	1	0	857
SORRELL HILL	26953	94		39.82	6.79	2.54		18.21	749	169	17	300	59	1203	39	87	73	2	0	1	503
BRASHER	85162	94		49.93	0.65	1.44		11.57	938	64	9	397	20	1281	128	119	4	0	0	0	571
DARIEN STATION	1662	94		37.87	0	3.84		13.78	708	0	30	309	36	1125	76	118	0	0	0	0	475
LORDS HILL	15066	94		25.07	0	1.28		8.92	468	0	13	202	12	785	51	32	0	0	2	0	281
ROYALTON	9861	95		28.24	0	0.87		9.76	525	0	9	231	8	840	12	88	0	0	0	0	310
MIDDLEPORT	7765	95		28.78	0	0.38		8.93	534	0	31	231	5	862	50	61	0	0	0	0	327
AVON	4361	95		46.07	2.2																



Station Name	Feeder	Avg. Distance b/w		OH primary		UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	miles	URD miles	miles																
BATTENKILL	34257	100	131.43	3.09	7.08	29.78	2312	101	107	1004	111	3315	143	221	78	5	2	1	1279		
FREWSBURG	6961	100	59.59	0	1.96	20.38	1047	0	23	472	15	1869	79	206	1	0	0	0	753		
N. BANGOR	86461	100	29.22	0	0.43	6.47	513	0	25	265	6	742	37	86	2	0	0	0	311		
EAST WATERTOWN	81755	101	43.64	6.62	3.61	8.7	754	261	25	434	92	1152	46	108	42	1	0	1	496		
SOUTH WELLSVILLE	2362	101	53.8	0.91	0.22	12.06	941	87	2	411	16	1500	4	103	36	0	0	0	518		
HOPKINS	25357	101	4.75	3.53	2.38	4.98	83	699	2	49	71	206	64	7	41	13	1	10	188		
NYSEG	SEG40	101	0.46	0	0	0.04	8	0	0	5	0	12	0	0	0	0	0	0	3		
40 WILLIAM STA	4068	101	0.92	0	0.44	0.05	16	0	1	9	2	45	11	1	0	3	0	1	27		
BATAVIA STATION	153	101	41.61	0	2.17	19.89	723	0	21	332	25	1277	37	107	0	2	0	1	466		
LAWRENCE AVE	97655	101	76.91	0.83	2.07	19.66	1335	54	15	622	28	2016	150	221	6	4	2	0	887		
SHERMAN	33352	102	88.38	0.34	4.23	21.82	1549	25	40	644	42	2371	104	214	4	0	2	0	917		
BRADY	95756	102	64.43	1.1	2.54	15.68	1115	19	60	492	43	1636	151	110	14	0	0	0	684		
OAK HILL	6261	102	12.09	0.84	1.24	4.68	209	3	9	89	15	343	44	42	4	0	0	1	177		
HEMLOCK	3851	102	34.39	0	2.88	12.87	594	0	30	274	26	962	57	63	1	0	1	0	363		
GENESE	5551	102	12.39	2.49	2.88	11.79	214	147	24	98	39	448	31	45	36	1	0	2	227		
LIVONIA	3761	102	46.37	0.51	6.7	14.43	800	16	74	378	73	1353	38	164	8	0	0	0	548		
211 AYER RD	21153	102	2.61	4.16	1.28	3.45	45	172	0	5	42	34	77	11	66	3	0	3	169		
TRINITY	16443	102	10.13	0.34	2.96	4.25	174	4	15	108	19	375	90	17	0	32	1	12	246		
BASOM STATION	1561	103	36.89	0	0.79	9.47	631	0	4	261	5	1004	28	96	0	0	0	0	375		
CROWN POINT	24912	103	66.41	0.48	2.77	18.52	1132	13	20	476	28	1750	133	270	12	0	1	0	854		
CENTER ST.	37852	103	64.13	0.53	2.65	17.81	1063	22	21	421	23	1771	112	108	3	3	0	1	671		
GRAND ST.	43351	103	88.41	0.26	4.7	19.66	1506	23	60	634	45	2312	136	137	4	6	0	2	863		
SANDY CREEK 66	9651	103	102.8	1.67	3.19	37.66	1750	68	49	755	47	2621	175	238	21	0	0	0	1089		
BURDECK ST	26553	104	76.73	2.27	5.18	32.21	1303	222	99	637	71	2099	205	90	6	6	0	0	832		
N LEROY STATION	457	104	38.24	0.6	2.07	14.02	648	12	23	297	28	1133	7	79	8	1	0	0	378		
NYSEG	SEG28	104	2.67	0	0	0.37	45	0	0	20	0	56	3	1	0	0	0	0	18		
76 SHAWNEE	7653	105	14.75	0	0.39	7.58	248	0	2	79	2	394	13	32	0	1	1	0	146		
BROCKPORT	7452	105	89.1	5.47	5.88	31.84	1497	337	75	760	104	2539	61	254	169	0	0	0	1119		
E NEWSTEAD STATION	662	105	27.58	0.03	1.09	10.93	463	24	14	207	11	716	33	249	0	3	0	0	464		
SCOFIELD	45053	105	104.73	1.45	3.9	27.65	1756	60	43	728	54	2565	238	200	44	1	1	0	1125		
INDIAN RIVER	32356	105	56.19	1.48	1.79	8.51	940	22	23	546	26	1475	19	62	5	2	0	2	459		
PERRYSBURG	18151	105	35.88	1.17	1.45	26.42	599	66	24	247	19	1036	13	77	8	0	1	4	362		
ELBA STATION	2062	106	54.73	0.08	0.87	14.16	911	7	8	409	9	1559	74	386	0	0	0	0	850		
CHARLEY LAKE	25409	106	3.85	0	0	1.04	64	0	0	24	0	76	1	1	0	0	0	0	21		
UNIONVILLE	27652	106	43.77	0.54	2.6	10.87	727	0	15	356	15	1320	52	44	2	2	0	1	431		
LOWVILLE	77354	106	173.27	2.3	14.69	27.21	2866	163	68	1457	88	4267	105	540	17	0	0	0	1732		
DUGUID	26552	106	31.89	14.23	3.98	21.31	529	340	237	1436	142	1032	53	84	121	3	0	0	519		
HEMSTREET	32852	107	20.04	1.41	1.68	4.63	331	75	14	165	40	555	20	54	16	1	0	0	230		
MEXICO	4361	107	39.11	0.22	2.1	10.08	644	44	46	369	30	1059	71	56	12	0	1	0	405		
ALTAMONT	28356	107	118.64	7.22	5.45	27.41	1952	250	51	936	117	3155	192	95	49	1	1	1	1128		
NICHOLVILLE	86062	107	76.31	0	2.45	15.64	1250	0	27	552	18	1868	162	169	5	2	1	0	806		
ANTWERP E.S.	80161	107	38.4	0	0.43	6.54	629	0	30	273	5	910	133	51	0	0	0	0	412		
MOIRA	85962	108	54.24	0.39	0.11	8.24	888	36	12	408	13	1214	60	83	13	0	0	0	460		
CENTER ST.	37854	108	97.17	1.67	3.71	22.26	1588	32	68	660	48	2512	293	243	11	13	2	9	1199		
NYSEG	SEG43	108	0.49	0	0	0.13	8	0	0	5	0	15	0	3	0	0	0	0	7		
EAST MOLLOY ROAD	15152	108	1.41	0	0.4	0.67	23	0	9	10	4	55	15	7	0	3	0	1	40		
PORT LEYDEN	75563	108	53.76	0	1.71	8.17	876	0	26	437	13	1197	112	204	0	0	0	0	615		
EDWARDS	91671	108	36.35	0.59	0	7.85	591	34	0	246	7	877	85	92	2	0	0	0	398		
HAGUE	41851	108	39.76	0	1.85	12.75	646	0	13	281	13	1205	116	102	0	1	0	2	522		
SHERMAN	33351	108	89.5	0.34	6.47	22.35	1453	5	61	603	62	2424	90	137	3	1	3	2	842		
POLAND	62257	109	84.1	0.2	5.45	21.11	1362	20	66	553	50	2224	123	218	4	0	1	0	902		
COBLESKILL	21414	109	19.6	0	1.92	4.58	317	0	90	144	23	534	16	34	0	2	0	0	188		
PARISHVILLE E.S.	93961	109	38.04	0	1.05	7.12	614	0	12	294	9	918	73	65	0	0	0	0	368		
CORTLAND	50203	109	23.2	0	1.07	4.41	374	0	13	184	11	573	28	20	0	0	0	0	191		
RIVERSIDE	28854	110	0.81	0.16	4.05	0.35	13	1	28	10	11	50	56	3	0	104	1	4	181		
DELANSON	26952	110	107.1	0.14	4.38	27.5	1715	16	41	766	37	2775	136	118	5	0	0	0	953		
BATTENKILL	34258	110	85.1	1.5	7.37	14.03	1358	12	48	557	58	2156	99	106	8	4	0	0	756		
FRANKINVILLE	2463	111	9.74	0	0.08	1.84	155	0	1	85	1	303	12	57	0	0	0	0	145		
LOWVILLE	77351	111	53.55	1.33	1.63	9.84	851	57	20	390	29	1382	108	98	9	4	0	2	567		
NORTH GOVERNEUR	98352	111	155.78	4.19	0	31.74	2465	148	0	1054	37	3765	75	270	3	2	1	1	1293		
ELLICOTT	6561	111	46.14	0.75	1.53	16.03	730	7	15	339	17	1321	61	134	4	0	0	1	530		
VOORHEESVILLE	17851	111	135.94	0.44	7.05	31.14	2148	9	90	1119	84	3745	121	149	6	1	1	0	1214		
DARISH STATION	1661	112	30.35	0	1.78	9.37	479	0	14	247	18	859	36	77	0	5	0	0	333		
POLAND	6662	112	22.64	1.89	0.53	4.1	357	52	9	172	17	602	6	65	12	0	0	0	234		
TULLY CENTER	27853	112	70.73</																		



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	URD miles																
BALLINA	22151	116	57.87	6.14	7.16	22.43	877	248	57	408	115	1747	65	109	52	51	0	0	714
NORTH CARTHAGE	81652	116	148.77	0.16	4.69	21.8	2248	27	43	1172	47	3542	144	273	0	3	0	0	1306
OTTEN	41213	117	45.43	0	1.04	10.4	586	0	7	307	8	1195	5	79	0	0	0	0	383
DELEVAN	1161	117	30.84	1.47	0.58	5.18	465	4	4	268	10	823	30	52	5	0	0	0	293
WESTVILLE	88561	117	60.03	0.2	1.15	8.96	902	18	21	495	11	1350	18	157	5	0	0	0	518
PANAMA	7061	117	47.23	0.24	0.75	16.63	708	0	7	326	9	1387	85	138	1	0	0	0	571
LIGHTHOUSE HILL	6144	118	156.04	4.29	1.13	51.42	2332	20	12	1016	38	4034	194	377	11	0	0	0	1591
COMMERCE AVE	43452	118	3.28	0	0.28	2.23	49	0	20	31	8	158	113	2	0	0	0	0	155
LAWRENCE AVE	97654	118	50.44	0.41	1.13	10.81	751	144	8	353	13	1185	80	146	0	0	0	0	522
NYSEG	SEG35	120	0.34	0	0.17	0.06	5	0	1	4	2	10	0	0	0	0	0	0	3
CHASM FALLS	85251	120	77.07	0	2.61	17.54	1129	0	21	559	19	1899	58	209	0	0	0	0	742
97 SUMMIT PARK	9758	120	0.82	0	5.87	3.05	12	0	343	2	55	30	20	0	110	1	0	3	142
NORTH CREEK	12251	121	126.92	1.29	3.93	40.7	1852	49	65	810	50	3272	296	248	9	1	1	0	1373
DELANSON	26951	121	128.77	2.09	7.23	31.89	1878	46	57	1017	75	3394	134	195	12	0	2	0	1192
24 KENMORE	2465	122	1.59	0.03	0.62	1.18	23	2	0	18	2	80	36	3	5	13	0	0	77
SHEPPARD STATION	2952	122	60.98	1.03	3.36	15.75	881	50	26	440	45	1692	50	227	12	1	2	1	716
TURIN RD	65356	122	89.01	2.9	2.54	19.73	1281	100	29	638	42	2326	61	195	25	0	0	0	863
CARDIFF	1324	123	23.53	3.13	1.11	7.32	338	91	19	165	46	619	46	33	5	0	0	0	269
COLLINS	8362	123	65.9	0	1.59	20.95	944	0	9	454	8	1822	81	69	5	0	0	0	611
EPHRATAH	1831	123	64.96	0.09	3	15.6	930	6	27	472	25	1704	114	173	1	0	0	0	714
SHARON	36351	123	51.68	0.13	2.9	12.71	739	18	47	322	26	1266	143	91	6	6	0	3	566
NYSEG	SEG06	123	0.07	0	0	0	1	0	0	1	0	3	0	0	0	0	0	0	1
NYSEG	SEG21	123	0.07	0	0	0	1	0	0	1	0	3	0	2	0	0	0	0	3
NYSEG	SEG23	123	0.07	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	1
NYSEG	SEG33	123	0.14	0	0	0	2	0	0	1	0	3	0	0	0	0	0	0	1
NYSEG	SEG51	123	0.14	0	0	0.03	2	0	0	2	0	5	0	6	0	0	0	0	7
BREMEN	81556	124	122.96	2.94	8.6	13.9	1748	10	67	979	57	2949	99	460	2	1	0	0	1299
40 WILLIAM STA	4061	124	1.9	0	0.19	1.56	27	0	2	31	2	109	55	10	0	3	0	0	95
SHERMAN	5461	124	36.13	0.17	1.2	8.61	512	27	4	221	7	894	78	69	0	0	0	0	371
MIDDLEBURG	39051	124	116.08	1.03	3.82	20.5	1644	43	21	797	42	2749	79	106	14	6	1	0	893
YORK CTR	5352	124	68.16	0	2.62	18.21	964	0	24	474	21	2027	56	177	0	0	0	0	740
GROOMS	34558	125	18.55	5.81	1.67	6.12	261	317	14	118	99	476	18	25	105	0	0	2	269
AMSTERDAM	32654	125	73.07	0	3.65	19.4	1026	0	42	495	37	1982	145	168	0	24	1	1	835
WEST VALLEY	2562	125	38.75	0	0.77	6.41	544	0	7	302	6	987	38	70	0	0	0	0	355
N. LAWRENCE E.S.	86161	126	46.32	0	0.14	7.54	646	0	1	298	1	984	83	96	0	0	0	0	425
BURGOYNE	33751	127	121.5	2.4	6.21	23.29	1650	20	66	899	69	2967	75	285	13	1	0	1	1117
CLYMER	5561	127	35.68	0.24	0.56	11.23	496	18	9	227	9	1009	46	183	0	1	0	0	482
122 SOMMER ST	12265	127	1.01	0	0.64	0.02	14	0	2	10	1	38	11	10	0	6	0	1	38
LORDS HILL	15067	127	47.52	0.26	4.2	10.08	658	36	49	389	42	1290	27	70	0	0	0	0	420
DELPHI	26251	127	35.32	0	2.24	6.96	488	0	19	216	19	913	41	47	0	1	0	0	317
BOYNTONVILLE	33351	128	131.5	2.79	10.27	26.67	1813	139	137	948	136	3329	41	202	22	5	1	1	1104
McKOWNVILLE	32756	128	2.25	0.44	1.05	1.38	31	25	104	12	11	77	31	7	4	2	0	5	68
BYRON STATION	1863	128	51.97	0	2.14	11.11	714	0	23	373	22	1336	26	141	2	0	0	0	503
NORTH CREEK	12252	128	75.55	3.43	3.28	22.46	1037	123	28	515	60	1903	91	137	18	2	0	2	726
UNION	84461	128	2.04	0	0	0.27	28	0	0	14	0	43	2	7	0	0	0	0	20
CUBA LAKE	3761	128	56.12	0	0.56	11.98	770	0	6	396	5	1484	11	85	0	0	0	0	467
NYSEG	SEG46	128	0.73	0	0	0.22	10	0	0	6	0	23	0	10	0	0	0	0	16
VALLEY	59476	129	20.54	0	0.57	4.64	281	0	8	145	8	533	34	78	0	1	0	0	246
HANCOCK	13773	129	1.17	0	0.16	1.19	16	0	3	12	3	52	18	11	0	1	1	0	44
BARKER STATION	7863	130	39.11	0	0.3	10.67	530	0	2	304	2	1033	17	195	0	0	0	0	470
MIDDLEVILLE	66871	130	51.43	0	1.25	11.36	695	0	13	327	13	1312	66	108	0	0	0	0	502
NYSEG	SEG03	131	0.52	0	0	0.05	7	0	0	4	0	9	0	4	0	0	0	0	6
56 WILLOWDALE & BARTON	5667	131	2.08	0.07	0	1.67	28	3	0	14	3	81	33	7	0	0	0	0	60
POMPEY	12081	131	32.73	0.97	2.44	8.32	440	11	28	252	32	868	44	70	8	0	0	0	339
LISBON E.S.	96361	131	43.25	0.05	0.18	6.86	581	16	2	335	3	1048	51	94	0	0	0	0	407
UNION ST	37654	132	45.11	0.19	3.04	6.72	602	2	31	346	29	1113	16	22	4	0	0	0	320
STATION 130	13051	132	3.75	0	0.2	1.81	50	0	1	22	1	78	0	7	2	0	0	0	29
216 LOCKPORT RD	21653	132	4.59	0	0.28	4.35	61	0	2	30	1	242	85	34	0	3	2	2	187
SCHOMARIE	23452	133	118.15	0.24	3.54	19.2	1569	1	31	826	29	2906	82	119	0	3	0	2	933
BRADY	95755	133	67.72	0.15	1.41	10.78	899	0	17	462	13	1614	37	135	0	0	0	0	576
STEAMBURG	1761	134	29.74	0	1.44	5.5	392	0	5	218	2	854	4	79	0	0	0	0	297
TULLER HILL	24651	134	15.9	4	1.13	3.25	209	150	10	120	52	395	18	24	64	0	0	1	206
BLUE STORES	30353	134	97.28	1.99	9.96	20.83	1274	40	67	646	86	2491	52	132	3	13	0	0	823
UNION ST	37652	135	68.52	0	4.01	10.46	894	0	42	420	41	1588	82	107	0	3	0	0	589
ALDER CREEK	70152	135	76.64	0.46	4.65	17.78	998	17	44	479	60	1825	63	176	9	1	1	0	706
VALLEY	4457	135	89.88	4.54	1.29	18.26	1169	135	13	620									



Station Name	Feeder	Avg. Distance b/w OH Premises (Yards)	OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
BATTENKILL	34256	138	34.51	0	1.99	6.75	439	10	220	11	825	44	43	0	2	0	0	295
RICHMOND	3251	138	57.79	0.43	6.33	12.84	735	41	78	462	58	1561	12	137	3	1	0	543
BRADY	95758	139	85.16	0	1.1	14.03	1081	0	7	583	7	1956	101	175	1	1	0	767
STATE STREET	95464	139	35.08	0.32	0.69	3.64	444	37	7	260	11	785	14	52	0	1	0	264
VALLEY	4456	139	3.56	0.36	1.22	1.27	45	37	5	15	6	110	6	3	7	0	2	46
WORCESTER	18924	139	89.83	0.53	3.14	14.83	1135	32	18	545	21	1973	129	103	12	2	1	740
122 SOMMER ST	12272	140	1.27	0	0.33	1.47	16	0	1	14	1	98	44	13	0	2	0	87
SCHENEVUS	26127	140	77.89	0	1.05	14.46	981	0	14	466	9	1878	97	112	0	5	0	684
INDIAN RIVER	32358	140	130.45	9.45	3.64	15.97	1635	402	30	950	115	3119	84	262	77	3	0	1209
CHERRY VALLEY	4141	140	92.32	0.29	3.4	14.13	1157	3	29	525	30	2028	120	147	0	0	0	774
NYSEG	SEG11	141	0.16	0	0	0	2	0	0	2	0	5	0	0	0	0	0	1
NYSEG	SEG29	141	0.16	0	0	0	2	0	0	2	0	5	0	2	0	0	0	4
SALAMANCA MUNI	SPU02	141	0.48	0	0	6	0	0	0	3	0	8	0	1	0	0	0	3
NYSEG	SEG02	141	0.56	0	0.14	0.09	7	0	1	5	1	15	0	0	0	0	0	4
POLAND	62258	141	124.37	0.09	5.48	29.72	1553	8	52	723	54	3058	179	228	1	4	1	1178
WEST SALAMANCA	1681	141	29.42	0	0.35	6.45	387	0	3	229	4	807	18	80	0	0	0	300
UNIONVILLE	27651	141	27.26	0	1.77	4.67	339	0	14	213	13	767	35	23	0	0	0	250
SALISBURY ES	67857	142	83.75	0	1.73	18.1	1036	0	17	568	17	2207	117	196	0	0	0	865
HARTFIELD	7958	142	30.19	0	0.54	6.56	373	0	2	188	3	726	7	38	0	0	0	227
LEVANT	9861	143	11.92	0.4	0.11	2.76	147	81	0	85	7	330	5	35	10	0	0	133
BUSTI	6861	144	55.91	0	1.53	13.74	685	0	18	355	15	1192	47	101	0	0	0	446
CUBA LAKE	3762	144	55.68	0	0.55	9.62	680	0	3	385	3	1388	16	62	0	0	0	425
COLLINSVILLE	71662	144	29.53	0	0.29	2.54	360	0	2	203	4	639	46	80	0	0	0	286
FABIUS	5561	145	33.74	0.53	2.53	6.75	410	10	24	256	29	852	35	38	6	0	0	292
LIGHTHOUSE HILL	6141	145	84.08	0.8	1.91	24.97	1021	43	28	518	32	1911	93	172	20	0	0	763
LEHIGH	66953	145	60.86	0	0.52	10.6	739	0	10	366	11	1308	51	147	0	0	0	525
HAMMOND	37062	145	43.43	0	0.15	5.34	527	0	1	283	1	942	39	55	0	0	0	330
JEWEET	29156	145	24.58	0	1.49	11.25	298	0	10	162	11	699	26	26	0	4	0	232
LANGFORD	18061	146	83.69	0	1.39	22.77	1012	0	14	613	13	2400	98	139	0	0	0	837
RANDALL RD	46356	146	34.98	1.17	4.94	4.29	422	48	48	275	64	854	6	74	13	0	0	307
ROCK CITY	62370	146	50.67	0.36	1.55	10.7	610	49	10	332	19	1301	9	116	7	2	0	459
NICHOLVILLE	86061	146	76.05	0	0.95	9.88	915	0	8	538	8	1674	82	150	0	0	0	651
SOUTH WELLSVILLE	2361	146	13.55	0.26	0.61	2.69	163	23	12	87	9	305	18	23	8	0	0	125
PORTLAND	15151	147	3.92	0	0.11	0.95	47	0	11	26	4	111	2	8	0	0	0	38
BOMBAY E.S.	89761	147	45.83	0.19	0.45	6.37	36	16	292	9	973	46	60	9	0	0	0	358
NORTH GOVERNEUR	98353	148	108.41	5.69	0	16.17	1305	201	0	612	45	2546	60	187	4	2	2	892
EAST OTTO	2862	149	38.07	0	0.18	5.69	449	0	3	314	3	926	28	62	0	0	0	322
42 OHIO	4256	150	0.34	0	0.04	0.36	4	0	3	1	14	17	1	0	2	1	0	25
NYSEG	SEG26	150	0.34	0	0	0.07	4	0	0	3	0	11	0	1	0	0	0	4
INGHAM	2051	150	105.98	0	2.79	21.43	1245	0	19	647	21	2362	19	162	0	0	0	772
LITTLE RIVER	95554	150	61.9	0	0.86	7.07	727	0	7	456	7	1472	10	94	0	0	0	472
THOUSAND ISLANDS	81453	151	48.56	1.41	1.78	4.02	567	147	37	384	42	1132	31	172	8	1	0	497
WEST VALLEY	2561	151	58.1	0	0.4	8.83	676	0	4	408	4	1317	31	98	0	0	0	458
NORTH ASHFORD	3661	151	4.9	0	0.71	0.85	57	0	5	34	4	104	4	16	0	0	0	46
SAND ROAD	13162	152	1.12	0.47	0	0.19	13	21	0	4	5	34	0	0	1	0	2	12
PINEBUSH	37151	152	1.21	6.66	1.31	1.08	14	437	17	6	85	39	23	0	25	2	0	72
Depot Substation	42552	153	2.18	0	0.24	1.2	25	0	5	10	5	87	2	13	0	0	0	37
SUMMIT	34733	154	74.52	0.13	2.75	13.16	852	1	19	493	20	1825	17	104	0	0	0	577
NYSEG	SEG41	154	0.35	0	0	0.25	4	0	0	4	0	10	0	0	0	0	0	3
CANAJOHARIE	3122	154	26.6	0	1.54	5.26	304	0	127	146	10	620	69	28	0	28	2	282
DEKALB E.S.	98454	154	38.33	0.47	0	5.6	437	1	0	287	1	889	12	69	0	0	0	303
DEKALB E.S.	98455	155	157.38	1.98	0	23.21	1792	59	0	954	20	3632	201	463	0	0	2	1574
FINDLEY LAKE	7161	155	37.17	0.42	1.52	8.82	422	6	9	234	14	1024	18	103	6	0	0	384
SILVER LAKE	84561	155	14.72	0	0.94	1.83	167	0	4	88	3	311	9	23	0	0	1	111
MACHIAS	1362	155	47.71	0	0.75	5.95	540	0	6	325	5	991	10	91	0	0	0	348
218 LOCKPORT RD	21650	157	4.37	0.84	0.72	3.1	49	122	11	18	22	111	34	29	31	2	2	127
COMSTOCK	4808	157	34.89	0.37	2.13	4.34	390	28	9	223	16	817	9	101	17	3	1	335
FRANKINVILLE	2462	160	64.99	0	1.28	10.23	715	0	3	449	4	1512	0	79	0	0	0	457
PETERBORO	51455	160	13.76	0.53	0.31	3.47	151	8	4	59	8	429	19	23	8	0	0	157
BRADY	95757	160	70.63	0	1.56	8.9	775	0	9	426	9	1525	73	91	0	0	0	545
PIERCEFIELD	82961	162	31.48	0	4.78	5.72	343	0	51	145	39	752	23	38	1	3	0	253
THOUSAND ISLANDS	81456	162	81.29	0.66	1.05	6.76	885	72	9	521	16	1934	69	117	6	0	0	678
ORANGEVILLE STATION	1961	163	59.89	0	4.09	11.16	646	0	34	411	34	1454	9	138	1	0	0	512
CONESUS LAKE	5262	164	33.63	0	0.94	5.16	362	0	9	236	7	805	2	101	0	0	0	304
AMSTERDAM	32651	164	21.74	0.04	0.29	3.79	233	15	4	135	3	566	11	70	1	1	0	225
NYSEG	SEG22	164	0.28	0	0	0	3	0	0	3	0	8	0	4	0	0	0	6
CATTARAUGUS	1562	165	68.34	0	1.06	8.72	731	0	8	440	8	1575	11	120	0	0	0	525
SHARON	36352	165	169.16	0.9	3.45	23.04	1801	40	26	1032	37	3766	92	197	11	0	0	1243
RGE	RGE13	166	0.66	0	0	0.37	7	0	0	4	0	15	0	0	0	0	0	4
CUYLER	2425	167	39.2	0	0.81	4.21	414	0	6	242	6	885	36	36	0	0	0	293
McKOWNVILLE	32755	167	0.57	0	2.1	0	6	0	4	4	7	15	0	11	0	6	0	27
LENOX	51365	167	0.38	0	0.04	0.21	4	0	2	3	2	18	9	0	0	0	0	14
SUNDAY CREEK	87651	167	25.3	0	1.42	2.86	266	0	6	136	5	593	4	28	0	0	0	180
N. CHAUTAUQUA	7861	171	28.03	0	0.79	5.95	288	0	7	166	5	628	0	92	0	0	0	249
TRUXTON	7473	175	52.89	0.11	1.58	6.27	532	3	17	296	19	1157	35	67	0	0	0	391
LUNDEN STATION	2161	175	40.35	0	2.9	6.35	405	0	21	229	23	998	17	286	0	1	0	554
NEW WHITESVILLE	10161	176	66.25	0	0.55	6.9	664	0	3	338	4	1436	67	99	1	0	0	526
RUSSELL RD	22851	176	0.2	0	0.07	0.07	2	0	1	2	1	11	0	0	0	0	0	4
NYSEG	SEG48	176	1.1	0	0	0.19	11	0	0	5	0	30	3	0	0	0	0	11
LYNDONVILLE	9562	177	22.98	0	0.55	3.98	229	0	6	146	6	489	7	112	1	0	0	242



Station Name	Feeder	Avg. Distance b/w		OH primary		UG primary		secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St.Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	miles	URD miles	miles																
FINE	97866	177	37.93	0	0.75	4.22	377	0	10	245	7	807	34	85	0	0	0	0	0	0	321
FARMERSVILLE	2762	177	75.94	0	0.17	9.62	754	0	1	503	1	1779	55	96	0	0	0	0	0	0	596
MERRILLVILLE	83861	177	0.59	0	0.67	6.25	62	0	5	40	4	152	4	19	0	0	0	0	0	0	61
SOUTH RANDOLPH	3261	178	30.76	0	0.67	4.7	304	0	5	221	5	793	1	116	0	0	0	0	0	0	315
EAST OTTO	2861	179	57.62	0	1.82	7.77	565	0	16	367	8	1286	22	108	0	0	0	0	0	0	452
213 DALE RD	21351	180	1.43	0	0.6	0.02	14	0	8	5	4	60	0	0	0	2	0	0	5	22	22
MC ADOO 914	91451	180	138.56	0	1.07	16.6	1356	0	10	789	10	3038	101	161	0	0	0	0	0	0	1022
NYSEG	SEG37	183	2.29	0	0.08	0.55	22	0	0	12	1	54	0	2	1	0	0	0	0	0	17
EAST WATERTOWN	81757	184	165.52	3.2	7.52	13.74	1579	103	58	1052	68	3656	92	317	8	1	0	0	0	0	1333
WETHERSFIELD STATION	2361	187	45.54	0	0.71	6.37	428	0	7	279	7	1108	0	142	0	0	0	0	0	0	419
CHGE	CHG02	189	0.75	0	0	0.01	7	0	0	7	0	20	1	0	0	0	0	0	0	0	6
ST JOHNSVILLE	33551	194	119.24	0	2.29	14.1	1082	0	19	634	18	2654	27	151	0	1	0	0	0	0	843
STATION 56	5651	194	29.56	8.18	1.13	9.35	268	229	5	145	54	676	3	102	1	2	0	0	0	0	277
FARMERSVILLE	2761	195	30.88	0	0.88	2.96	278	0	6	190	5	629	3	31	0	0	0	0	0	0	191
40 WILLIAM STA	4076	197	0.67	0	0.62	0.01	6	0	5	3	4	36	10	2	0	6	0	0	0	0	27
ANDOVER	962	198	54.94	0	0.98	4.78	489	0	6	336	4	1207	3	80	0	0	0	0	0	0	385
SHERMAN	5462	198	42.26	0	0.63	6.3	375	0	7	223	5	891	32	84	0	0	0	0	0	0	339
RGE	RGE11	200	1.25	0	0	0.09	11	0	0	10	0	29	0	3	0	0	0	0	0	0	10
NYSEG	SEG65	202	0.23	0	0	0	2	0	0	2	0	5	0	3	0	0	0	0	0	0	4
COLLINSVILLE	71661	206	81.56	0.38	2.35	4.86	697	4	13	495	17	1691	55	198	1	0	0	0	0	0	677
212 HARBOR FRONT	21252	208	2.48	0	0.76	2.15	21	0	5	15	6	111	52	26	12	12	0	0	2	132	132
VALLEY	4451	208	38.45	0	1.4	4.85	325	0	12	229	11	940	0	111	1	0	0	0	0	0	347
LABRADOR	23051	210	6.93	0	0.09	0.56	58	0	3	40	3	181	0	6	0	0	0	0	0	0	51
205 ERIE DRIVE	20553	211	0.6	4.4	0.11	3.66	5	316	1	4	30	64	156	13	35	2	0	0	8	230	230
NYSEG	SEG51	211	0.12	0	0	0	1	0	0	1	0	3	0	3	0	0	0	0	0	0	4
RIVERVIEW	84762	218	27.27	0	2.37	3.26	220	0	44	143	17	585	32	58	0	0	0	0	0	0	236
NYSEG	SEG16	219	0.87	0	0	0.02	7	0	0	4	0	19	0	0	0	0	0	0	0	0	5
NYSEG	SEG12	220	0.25	0	0.02	0.05	2	0	3	2	2	8	0	0	0	0	0	0	0	0	2
NYSEG	SEG01	221	2.26	0.16	0	0.05	18	2	0	14	2	44	0	2	0	0	0	0	0	0	13
WETHERSFIELD STATION	2362	223	23.06	0	1.28	2.13	182	0	8	139	8	597	1	57	0	0	0	0	0	0	207
FRANKLIN	84361	226	20.93	0	1.49	2.25	163	0	13	99	13	378	4	29	0	0	0	0	0	0	128
NYSEG	SEG38	229	0.13	0	0	0	4	0	0	1	0	4	0	0	0	0	0	0	0	0	1
132 BUELL AVE	13261	229	0.52	0	0.08	0	1	0	1	2	1	17	0	0	0	0	0	0	0	0	4
LITTLE RIVER	95561	229	0.52	0	0.08	0	4	0	0	3	0	13	0	0	0	0	0	0	0	0	7
S. PHILADELPHIA	78462	233	70.25	0	1.5	3.9	531	0	6	373	7	1380	0	45	0	0	0	0	0	0	390
NYSEG	SEG24	234	1.86	0	0	0.13	14	0	0	11	0	41	0	0	0	0	0	0	0	0	10
CLYMER	5562	236	40.7	0	0.75	5.79	304	0	2	202	3	889	3	51	0	0	0	0	0	0	276
NYSEG	SEG20	238	0.27	0	0	0.05	2	0	0	1	0	8	0	2	0	0	0	0	0	0	4
RGE	RGE90072	245	0.14	0	0	0.02	1	0	0	1	0	6	0	0	0	0	0	0	0	0	2
NYSEG	SEG32	245	0.14	0	0	0	1	0	0	1	0	3	0	0	0	0	0	0	0	0	1
47 STATION 47	4762	248	1.27	0.17	0	1.85	9	0	0	9	0	90	54	6	0	11	0	0	0	0	94
STATION 14	1451	253	7.91	0	0.05	0.47	55	0	1	46	1	198	0	13	0	0	0	0	0	0	63
SEVENTH NORTH	23163	262	1.19	0	0.45	0.03	8	0	7	7	4	28	0	0	0	1	1	2	11	11	11
MC ADOO	91453	264	23.36	0.04	0	1.31	156	0	0	123	0	503	2	25	0	0	0	0	0	0	153
RGE	RGE10	264	0.3	0	0	0	2	0	0	2	0	8	0	0	0	0	0	0	0	0	2
NYSEG	SEG49	264	1.05	0	0	0.09	7	0	0	5	0	28	0	7	0	0	0	0	0	0	14
40 WILLIAM STA	4064	275	1.25	0	0.41	0.37	8	0	3	6	2	45	6	14	0	10	0	0	1	42	42
100 CAMPBELL	10061	282	0.16	0	0	0	1	0	0	1	0	4	0	0	0	0	0	0	0	0	1
NYSEG	SEG50	282	0.16	0	0	0	1	0	0	1	0	4	0	5	0	0	0	0	0	0	6
NYSEG	SEG58	282	0.16	0	0	0	1	0	0	2	0	5	0	2	0	0	0	0	0	0	3
NYSEG	SEG10	282	0.32	0	0	0	2	0	0	2	0	6	0	0	0	0	0	0	0	0	2
NYSEG	SEG53	282	0.48	0	0	0.02	3	0	0	3	0	10	0	5	0	0	0	0	0	0	8
CUBA	562	298	2.37	0	0.24	0.08	14	0	1	11	4	14	2	2	0	0	2	0	0	0	10
124 ALAMEDA AVE	12468	299	0.17	0	0.25	0	1	0	14	1	2	2	0	2	0	4	0	0	2	9	9
TUPPER LAKE MUNI	TJL01	307	1.22	0	3.86	0.06	7	0	17	5	13	44	0	3	0	1	0	0	0	0	15
42 OHIO	4261	325	2.03	0	0.78	0.83	11	0	2	11	3	87	27	2	5	16	2	1	75	75	75
LAKE RD	28952	334	0.19	0	0	0	1	0	0	1	0	7	0	8	0	0	0	0	0	0	10
NYSEG	SEG62	334	0.19	0	0	0	1	0	0	1	0	6	0	0	0	0	0	0	0	0	2
NYSEG	SEG07	337	1.15	0	0	0.02	6	0	0	5	0	22	0	7	0	0	0	0	0	0	13
212 HARBOR FRONT	21258	340	2.9	0.55	0.48	3.75	15	0	29	18	6	135	79	22	2	2	0	6	145	145	145
NYSEG	SEG63	345	0.98	0	0	0.09	5	0	0	4	0	18	0	0	0	0	0	0	0	0	5
RICHMONDVILLE MUN	RIC01	350	1.59	0	0	0.05	8	0	0	10	0	35	0	5	0	0	0	0	0	0	14
SALAMANCA MUNI	SPU01	353	4.61	0	0	0.45	23	0	0	21	0	132	0	2	0	0	0	0	0	0	35
PAUL SMITHS	83462	355	34.28	2.89	0.89	2.31	170	16	12	89	21	772	5	11	0	7	0	0	0	0	216
RGE	RGE14	358	0.61	0	0	0.01	3	0	0	3	0										



Station Name	Feeder	Avg. Distance b/w		OH primary miles	UG primary miles	secondary miles	OH Premises	URD Premises	UG Premises	OH Trans	UG Trans	Poles	St. Lights	Guys	Handholes	Manholes	Vaults	Switch Gear	Conductive Equipment
		OH Premises (Yards)	URD miles																
NYSEG	SEG52	642	0.73	0	0	0.01	2	0	0	2	0	6	0	1	0	0	0	0	3
121 CLINTON ST	12161	711	2.02	0	0.18	0.61	5	0	8	8	4	87	30	8	0	1	0	0	61
RGE	RGE06	827	0.47	0	0	0	1	0	0	1	0	6	0	0	0	0	0	0	2
CLINTON ERCC	36652	862	0.49	0	0.78	0.02	1	0	18	1	1	19	4	2	0	10	1	2	24
OAKFIELD STATION	361	939	1.6	0	0.01	0.17	3	0	1	3	1	33	4	12	0	0	0	0	24
RICHMONDVILLE MUN	RIC02	950	0.54	0	0	0	1	0	0	2	0	10	0	0	0	0	0	0	3
54 MAIN	5467	1003	0.57	0	0.42	0	1	0	0	1	0	28	14	0	1	7	0	0	29
RESERVOIR	10351	4453	2.53	0	0.3	0	1	0	1	1	1	62	0	3	0	0	0	0	19
FAYETTEVILLE E.S.	1474	#DIV/0!	0.01	0	0.05	0	0	0	0	0	0	2	0	0	0	1	0	0	2
207 STATION 207	20752	#DIV/0!	0.02	0	0.12	0	0	0	0	0	0	2	0	4	0	0	0	0	5
NYSEG	SEG1915	#DIV/0!	0.02	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
NYSEG	SEG334	#DIV/0!	0.02	0.06	0	0.04	0	3	0	0	1	2	0	1	1	0	0	0	3
NYSEG	SEG61	#DIV/0!	0.02	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1
INDUSTRY STA	4761	#DIV/0!	0.03	0	0.01	0.32	0	0	0	4	0	22	25	17	0	0	0	1	49
67 STATION 67	6763	#DIV/0!	0.03	0	0.06	0	0	0	0	0	0	0	0	0	0	2	0	0	2
RENSSELAER	13252	#DIV/0!	0.03	0	0.16	0	0	0	0	0	0	8	2	0	0	3	0	1	8
QUEENSBURY	29551	#DIV/0!	0.03	0	0.1	0	0	0	0	0	0	2	0	0	0	0	0	0	1
PORTABLE	33454	#DIV/0!	0.03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
STATION 612	61261	#DIV/0!	0.03	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
MC ADOO	91452	#DIV/0!	0.03	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1
NYSEG	SEG13	#DIV/0!	0.03	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	1
NYSEG	SEG17	#DIV/0!	0.03	0	0.21	0	0	0	2	0	1	1	0	1	0	0	0	0	1
52 HERTEL	5263	#DIV/0!	0.04	0	0.79	0	0	0	3	0	1	5	2	2	0	13	0	1	19
SCOTIA	25570	#DIV/0!	0.04	0	0.1	0	0	0	0	1	0	4	1	0	0	2	0	0	4
BENDIX Customer	BEN01	#DIV/0!	0.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAND ROAD	14158	#DIV/0!	0.05	0	2.82	0.03	0	0	25	1	6	4	0	0	0	27	1	8	37
STATION 612	61262	#DIV/0!	0.05	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2
NYSEG	SEG55	#DIV/0!	0.05	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1
146 WALDEN AVE.	14662	#DIV/0!	0.06	0	0.02	0	0	0	1	0	1	4	0	0	0	0	0	0	1
LAKE SHORE	14961	#DIV/0!	0.07	0	0.03	0	0	0	4	0	2	7	1	0	0	0	2	0	5
PAUL SMITHS	63461	#DIV/0!	0.07	0	0.04	0	0	0	0	0	0	3	0	0	0	0	0	0	1
RGE	RGE07	#DIV/0!	0.07	0	0.25	0	0	0	2	1	1	4	0	2	0	0	0	0	3
CHURCH ST	4358	#DIV/0!	0.08	0	0.06	0	0	0	0	0	0	6	1	0	0	2	0	0	5
WEST OSWEGO	20914	#DIV/0!	0.08	0	0.03	0	0	0	0	0	0	3	0	0	0	0	0	0	1
CLINTON CRCC	60452	#DIV/0!	0.09	0	0.03	0	0	0	0	0	0	3	0	0	0	1	0	0	2
STATE STREET	95462	#DIV/0!	0.09	0	0	0	0	0	0	0	0	4	0	2	0	0	0	0	3
WESTVALE	13372	#DIV/0!	0.1	0	0.23	0	0	0	19	0	2	6	0	1	0	3	0	2	8
NYSEG	SEG31	#DIV/0!	0.11	0	0.08	0	0	0	1	0	1	4	0	0	0	0	0	0	1
BALDWINVILLE	561	#DIV/0!	0.13	0	0.02	0	0	0	1	0	1	5	0	0	0	0	0	0	1
RGE	RGE03	#DIV/0!	0.13	0	0.15	0	0	0	1	0	1	4	0	1	0	0	0	0	2
SEVENTH NORTH	23162	#DIV/0!	0.14	0	0.44	0	0	0	0	0	4	5	0	0	0	7	1	3	12
NYSEG	SEG39	#DIV/0!	0.14	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1
WEST OSWEGO	20910	#DIV/0!	0.15	0	0.03	0	0	0	0	0	1	6	1	0	0	0	0	0	3
RGE	RGE2461	#DIV/0!	0.16	0	0	0	0	0	0	1	0	5	0	3	0	0	0	0	4
LEVITT	66584	#DIV/0!	0.18	0.77	0.1	0.03	0	181	0	0	13	9	1	0	7	2	0	0	12
124 ALAMEDA AVE	12463	#DIV/0!	0.19	0	0.65	0	0	0	20	0	5	1	0	0	4	5	0	5	14
NYSEG	SEG18	#DIV/0!	0.2	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	2
03 SEVENTH ST.	303	#DIV/0!	0.21	0	2.85	1.22	0	0	63	0	3	14	87	1	24	117	4	2	239
12 PERRY ST	1220	#DIV/0!	0.21	0	0.66	0	0	0	0	0	0	10	1	0	0	15	0	0	19
51 ELK ST	5163	#DIV/0!	0.21	0	0.57	0.04	0	0	0	1	0	14	3	0	0	9	0	0	16
SO. ROBERTS RD	15451	#DIV/0!	0.25	0	0.18	0	0	0	0	0	0	10	2	8	0	3	0	1	17
NYSEG	SEG14	#DIV/0!	0.27	0	0.08	0	0	0	1	1	1	7	0	4	0	0	0	0	6
WOLF RD.	34452	#DIV/0!	0.28	0	1.88	0.19	0	0	264	1	6	23	4	0	0	9	1	7	27
12 PERRY ST	1208	#DIV/0!	0.3	0	3.02	0	0	0	0	0	0	5	8	0	0	59	3	0	71
207 STATION 207	20751	#DIV/0!	0.34	0.35	0.12	0	0	6	0	0	4	12	0	8	0	0	0	3	14
MESSINA	4277	#DIV/0!	0.4	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2
58 HARLEM RD	5881	#DIV/0!	0.45	0	0.2	0	0	0	0	0	0	23	12	2	0	4	0	0	24
SCHOOL STREET	3151	#DIV/0!	0.67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PERRY ST	1210	#DIV/0!	0.75	0	0.62	0	0	0	1	0	1	39	18	0	0	15	1	0	44
MENANDS	10152	#DIV/0!	0.87	0	0.45	0	0	0	0	0	1	0	1	0	1	5	1	2	10
REYNOLDS RD	33451	#DIV/0!	1.31	6.07	0	0.1	0	77	0	2	24	28	0	0	0	4	0	30	41
140 MAPLE RD	14054	#DIV/0!	2.16	0	0.12	0	0	0	0	0	0	2	0	0	0	2	0	1	4
LAWRENCE AVE	97651	#DIV/0!	2.29	0	0.56	0	0	0	0	0	0	98	33	3	0	8	0	1	70
COLTON	80961	#DIV/0!	2.7	0	0	0.29	0	0	0	4	0	66	0	0	0	0	0	0	17
12 PERRY ST	1214	#DIV/0!	3.06	0	2.42	0	0	0	0	1	0	169	82	1	0	55	0	0	190
71 ROBINSON ST	7128	#DIV/0!	4.33	0	0.18	0	0	0	0	0	0	203	95	9	0	2	1	0	158
Total			35737	3761	2692	21095	1480603	198170	164770	321744	57274	1199148	229531	87821	55659	24302	2014	2966	702080
Miles Customers w/ >100yds b/w			12399																
Count			383																
			2050																



**FORM OF LETTER SENT TO MUNICIPALITIES**

February \_\_, 2005

[Town or City] of \_\_\_\_\_

The purpose of this letter is to request certain information from the [town or city] regarding the street lights and traffic signals in the municipality that are owned by the [town or city] (as opposed to those owned by Niagara Mohawk). This inquiry is very important to assist the Company in complying with electric safety standards that were adopted by the State of New York Public Service Commission ("PSC") on January 5, 2005.

In the January 5, 2005 order adopting the safety standards ("Order"), the PSC required utilities to perform stray voltage testing on all of its potentially conductive street light standards. In addition, the PSC required utilities to perform stray voltage testing on potentially conductive street light and traffic signals that are owned by municipal entities (who are not electric corporations themselves) if such facilities are being served by the utility. This testing, however, may not be necessary if the municipality already has a stray voltage testing program of its own upon which the utility can rely. A copy of the January 5, 2005 Order can be found on the internet at the following web address (following the instructions footnoted below): <http://www.dps.state.ny.us/><sup>1</sup>

The discussion in the Order relating to the testing of street lights owned by municipalities appears on pages 55 and 56. On page 56, the Commission stated, in pertinent part: "The municipalities have primary responsibility for safely maintaining their facilities, and should take all appropriate actions to satisfy this responsibility. However, because we do not have jurisdiction over such entities and for the foregoing reasons, we are imposing a concurrent responsibility on the utilities. We encourage the municipalities and the utilities to work together and coordinate their efforts in order to address this important safety issue."

In accordance with the Order and the PSC's encouragement for cooperation, it would be greatly appreciated if the following information can be provided to the Company:

- (1) Does your municipality conduct stray voltage testing or intend to conduct stray voltage testing in the near future? If so, please provide us with the name

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<sup>1</sup> To obtain a copy of the Order from the internet, follow these steps on the PSC website: (1) Left click the button entitled "Commission Documents" which gets you to the "File Room" page; (2) On the "File Room" page, left click the link entitled "Search Our Database"; (3) Scroll down to the function that allows searches by "Case Number" and plug in the following case number in the two drop down boxes and associated empty box that is provided: 04-M-0159; (4) On the "Search Results" page, you should find a table of Commission documents. Click the PDF link for the order dated 01/05/2005, entitled: "Examine the Safety of Electric Transmission and Distribution Systems, Order Instituting Safety Standards." This should bring up a printable PDF file of the January 5, 2005 Order.



of the individual who is most familiar with the testing program in order that we may contact him or her to obtain the details.

- (2) If you are not performing your own stray voltage testing program for your facilities, it is extremely important that we obtain sufficient information to identify the location of every street light and traffic signal owned or operated by the municipality. The facilities that need to be identified should include but not be limited to street light and traffic signal standards, crosswalk poles, controller equipment and handholes. Additionally, information regarding street lights and/or traffic signals owned and operated by private parties but located in the public rights-of-way and providing service upon roadways open to the general public would also be appreciated.

Please provide to us the physical location of each of these facilities (as well as any others that may not be reflected in our records summarized above). To be reasonably assured that we can actually locate each and every facility, we would prefer GPS longitude and latitude coordinates and street addresses (if available). In the event this is unavailable, we request the locations be provided through marked street maps or other useful means that reasonably facilitates identification of the locations.

Should your municipality not own or operate any street light or traffic signal facilities, correspondence attesting to this fact would be appreciated.

Please provide this information directly to the following person at Niagara Mohawk:

[Contact Name, address, and phone number]

In order to make this process as orderly and efficient as possible, we recommend that you call [contact name] before you assemble the information, to be sure that your response and method of displaying the information will be practical and usable for the Company as it takes steps to comply with the PSC's Order.

Subsequent sections of the referenced Order describe actions and responsibilities to be taken by the utility when a voltage is detected. In the event this voltage occurs upon municipally owned/operated equipment, Niagara Mohawk requests relevant 24 hour/7 day contact information for those individuals responsible for this equipment. Further communication on the immediate actions to be taken and the appropriate follow-up process will be forthcoming.

We must begin this testing as soon as possible in order to meet the testing completion deadlines. Thank you very much for prioritizing this inquiry in the interest of public safety.

Sincerely,



## Quality Assurance Program

### I.) Purpose

The Quality Assurance (QA) program is intended to insure consistency and adherence to procedures (i.e., EOP 211A-D, NG-USA-EOP T007), using a 95% confidence level statistical sampling. The QA program will check a random sample of inspections searching for any non-conformance to procedures.

Sampling Criteria consistent with a 95% Compliant Population is provided in Exhibit I (see partial table below)

**Sampling Criteria:**

Minimum Number of Compliances	Minimum Number of Samples req'd
84	85
133	135
182	185
231	
280	3,584
329	3,633
	3,682
3,669	3,731
3,708	3,781
3,766	3,830
3,804	3,879

Each sampling process (cycle) will have one of the following outcomes:

- a. *confirmation of 95% compliance* (i.e., if the number of samples (inspections) confirming compliance is no less than that required for the respective sample size (inspections performed) - or, stated differently, if the number of non-compliances is no greater than the limit for the respective sample size).

OR

- b. *additional random samples* (inspections) **are required** (i.e., an additional sampling cycle). If additional random samples are required, the additional quantity to be sampled and the respective minimum number to be compliant will be obtained from the "Sampling Criteria" (Exhibit I).

### II.) Quality Level for the QA Program

The QA program is designed to confirm and/or achieve a minimum confidence level of 95% compliance. As a method to confirm/achieve the required quality of testing and inspections, a process of statistical sampling will be implemented for



the population of assets for which the quality requirements are to be confirmed and/or achieved. Such sampling is viewed as being an accurate representation of a homogeneous population, so long as the samples are randomly chosen.

### **III.) QA of Stray Voltage Testing**

- a. Stray Voltage Testing. Per the requirements of EOP 211D - Stray Voltage Testing conductive, publicly accessible electrical facilities (refer to equipment list in EOP 211D for a detailed listing of equipment that must be tested) must be checked for the presence of stray voltage. Further, pursuant to EOP 211D the following must be recorded: (i) if a stray voltage test is required; (ii) if yes, then test for the presence of voltage; (iii) if yes, then take a voltage measurement; and (iv) if yes, then any required corrective actions must be taken.
- b. Sampling to Review Stray Voltage Testing. A statistical sample of 85 facilities (each facility having its own longitude and latitude coordinates) would provide a 95% confidence level (see Table 1 of Exhibit I). Within each year the following shall be completed:
  - 1) From the asset register, i.e., GIS for distribution poles equipment, MAPINFO or Transmission Grid Manager for transmission, AIMMS for substations, or various lists for UG Networks, 85 facilities ("QA Facilities") times one-fifth per year, shall be randomly selected (but will provide for multi-QA-facility checks in a day) by the Manager and assigned to the Regional Supervisor of Inspections & Testing.
  - 2) As the circuits are tested for stray voltage, the Manager shall issue the applicable QA Facility list to the Supervisor.
  - 3) The Supervisor shall accompany the stray voltage tester on the equipment test to assure that the testing procedure, record keeping, and notification protocols are adhered to by filling out the attached form Exhibit II, for each facility.
  - 4) In the event the as found non-conformance to procedures exceeds the non-conformance ceiling (Exhibit I), then additional samples shall be done until the as-found non-conformance is less than the ceiling.
  - 5) In the event as-found non-conformance exceeds the ceiling after the aforementioned sample size increases, then a failure within the program exists and action to remedy it is required, such as implementation of a contractor QA program, re-training of workers, root-cause analysis, etc., as necessary to rectify the non-conformance trend.
- c. 100% of facilities where stray voltage is identified shall be investigated for adherence to procedures guarding the site, to summarize the temporary repair, and to summarize that the permanent repair was made within 45 days, and to summarize actions taken to affect a permanent repair/correct the problem.



- d. The results of QA investigations described above will be recorded on a monthly basis.
- e. The quantity of QA Facilities shall be re-calculated annually to adjust the number of stray voltage tests that must be reviewed to achieve a 95% confidence level.

**IV.) QA of Inspections**

- a. Per the requirements of EOP 211A, B, C, D, and NG-USA- EOP T007, inspections and protocols must be completed for one-fifth of each system per year to meet applicable inspection requirements and to identify the priority maintenance items defined in each EOP. The primary focus of the QA for Inspections is to assure consistency in assessment of maintenance priorities (i.e. akin to on-the-job training). To assure quality the following shall be completed:
  - i. A statistical sample to account for a 95% confidence level shall be completed for OH, UG, and Street Lighting Standards. The QA Inspection Quantities shall be as specified in Table 1 of Exhibit I.
  - ii. For OH, UG, and Street Lighting Standards, the QA Supervisor shall join the inspector for the relevant inspections (i.e., along a circuit) to assess consistency in evaluation of priority maintenance items.
  - iii. As the circuits are inspected, the Manager shall issue the applicable QA Inspection list to the Supervisor.
  - iv. The Supervisor shall accompany the worker performing the inspections to assess whether applicable procedures, record keeping, and notification protocols are adhered to by filling out the attached form Exhibit III, for each facility inspected.
  - v. In the event the as-found non-conformance to procedures exceeds the non-conformance ceiling (Exhibit I), then additional samples shall be done until the as-found non-conformance is less than the ceiling.
  - vi. In the event as-found non-conformance exceeds the ceiling after the aforementioned sample size increases, then the program will be assessed to determine whether a failure exists within the program and to determine whether further remedial measures, such as requiring a contractor QA program, re-training workers, root-cause analysis, etc., are necessary to rectify the non-conformance trend.
- c. The quantity of QA Facilities shall be re-calculated annually to adjust the number of inspections that must be sampled to achieve a 95% confidence level.

**V.) QA Record Keeping**



- a. A database of the QA inspections for Stray Voltage Testing and Inspections shall be maintained by the Manager, along with paper files of the completed forms.
- b. On a monthly basis, a QA summary report shall be submitted to the Vice President Distribution Planning & Engineering and the Sr. Vice President – Operations.

**VI.) Internal Audit**

- a. The QA Program shall be audited by the Company's Internal Audit Department in its fiscal year 2006 plan. The QA Program shall be subject to further internal audits at the discretion of the Internal Audit Department.

**VII.) Training**

- a. Training Course Requirements for Stray Voltage Testing:
  - i. Electric Hazard Awareness
  - ii. Personal Protection Equipment
  - iii. Hazardous Communication
  - iv. Work Area Protection
  - v. CPR
  - vi. Hazardous Equipment Condition and Recognition
  - vii. Applicable EOP (including testing devices)
- b. Training Course Requirements for Street Light Inspection
  - i. Licensed Electrician to work 600 V
  - ii. Courses in VII(a)
  - iii. Computa-pole software
  - iv. Applicable EOP and priority maintenance codes and Company standards
- c. Training Course Requirements for OH
  - i. Line Qualified
  - ii. Courses in VII(a)
  - iii. Computa-pole software
  - iv. Applicable EOP and priority maintenance codes and Company standards
- d. Training Course Requirements for UG
  - i. Underground Qualified
  - ii. Enclosed Confined Space



- iii. Courses in VII(a)
  - iv. Computa-pole software
  - v. Applicable EOP and priority maintenance codes and Company standards
- e. All Company employees doing inspections are trained to be line-qualified inspectors for overhead and/or specially trained for underground equipment. The respective Supervisor shall be responsible for assuring each inspector meets the required qualification requirements.
  - f. To utilize the Computa-pole database (i.e., to electronically gather data), all applicable employees (in-house and contractor) are trained on the use of the hand-held device, its operation, and the various asset class screens (OH, UG, Street Light Standards, Stray Voltage Testing); and the corresponding maintenance priority codes.
  - g. Company employees working on-the-site are line-qualified with the aforementioned training and as such are skilled in the ability to take the required stray voltage testing and voltage measurement requirement of the Order. Since the same workers will be the repair crew – they can be used to make any necessary repairs on the site.
  - h. The Company's Construction and Management Services (C&MS) group will provide assurance that contractors conducting inspections meet comparable training qualification criteria to that of in-house workers. C&MS will coordinate safety and proficiency training for contractors on a routine basis when using such contractors. Bid specifications for such workers can be used to require proof of such qualification.
  - i. Contractors participating in the stray voltage tests shall be provided orientation training regarding the program, for a subset of their workforce, who will then serve as trainers to instruct and train the remainder of the contractor's workforce using Company training materials.



**QA Program - Exhibit I – Universal Statistical Samples and Non-Conformance Ceiling  
for Stray Voltage Tests and Inspections**

Table 1 – Facility Population & Non-conformance Ceiling

Attachment 1: Sampling Criteria

Attachment 2: Sampling Flow Chart

Attachment 3: Numeric Example of Sampling Criteria Application

Attachment 4: Developing Sample Criteria (i.e., minimum Sample Size/Sample  
Compliances)

Attachment 5: Accuracy of Sample Sizes vs. Population vs. Population Sizes

- A. Per the requirements of EOP 211A, B, C and NG-USA-EOP T007, inspections protocols must be completed for one-fifth of each system per year to identify the priority maintenance items in each EOP. The primary focus of the QA assessment (Audit) for Inspections is to assure consistency in the assessment of maintenance priorities (e.g., akin to on-the-job training).

Therefore, the same method applied for confirming/achieving the Quality Requirement for Stray Voltage Testing of OH, UG and Streetlight assets shall be applied to the Audit of Inspections themselves (i.e., by sampling of the Inspections):

1. Given the number of total Inspections that may be performed, the number of Audits completed shall be as tabulated below.

Number of Inspections	Audits
85	no less than 20
86 thru 135	no less than 35
136 thru 240	no less than 50
greater than 240	no less than 65

Should the Audits yield additional Non-Compliances beyond those found in the Inspections:

- such Audit Non-Compliances shall be added to the total found by Inspections;
  - Attachment 1 shall be reviewed reflecting the new total number of Non-Compliances; and
  - additional Inspections (Sampling) shall be performed as provided by Attachment 1.
2. For OH, UG and Street Lighting Standards, the QA Supervisor shall join the Inspector on the QA Inspection Audit of circuits (mainline only for



OH and UG) and the Street Lighting Standards, to assure consistency in the evaluation of priority maintenance identified during the inspection.

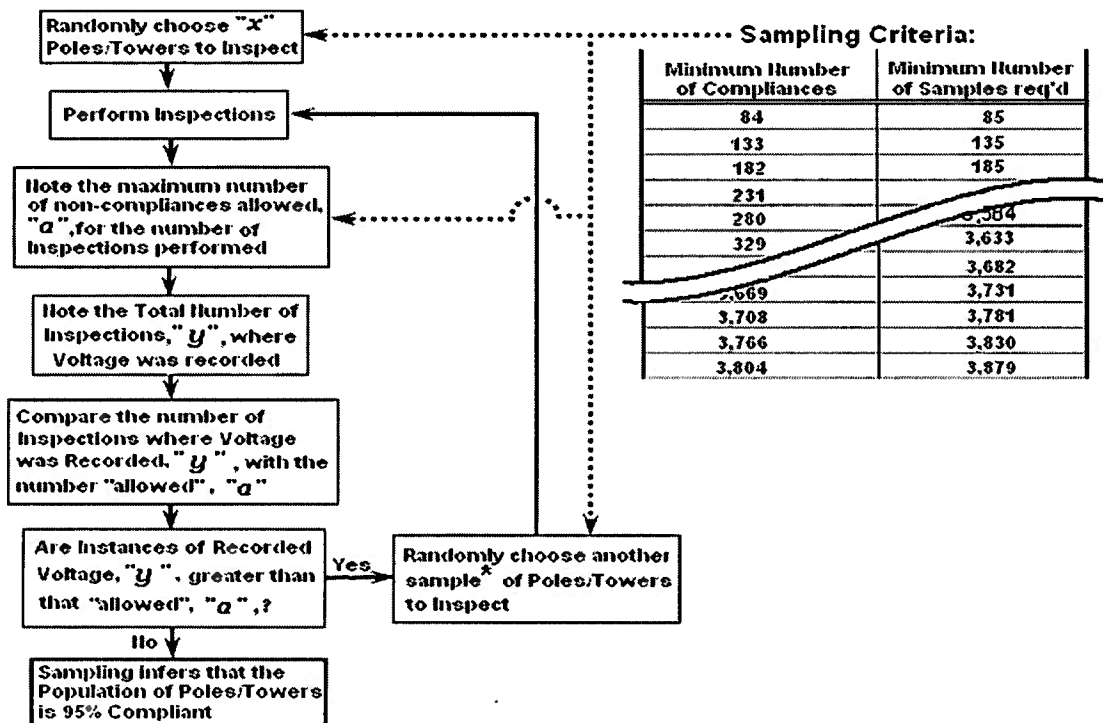
3. A summary document of lessons learned shall be completed for each QA Audit and shall be conveyed to the Inspectors.

B. Determination of Random, Statistical Sample Size and Corresponding Maximum Number of Non-Compliances

The following flowchart provides a general outline of the Sampling Process:

- Inspection Quantity (sample size) is chosen from Sampling Criteria;
- respective Minimum Number of Compliances noted from Criteria;
- actual number of Inspection Compliances noted and compared against that required;
- new, greater Inspection Quantity chosen as well as new, respective Minimum Number of Compliances required; and,
- the cycle continues until the Minimum Number of Compliances is achieved.

Attachments 1 and 2 provide the Sampling Criteria and a more detailed flowchart, respectively.





**Table 1 - Facility Population & Non-conformance Ceiling**

Facility Descriptions	Count	Initial Number of Inspections (Sampling) required (also see Attachments 1 & 2)
OH Feeders w/ URD & UCD	2,225	85
Transmission Miles	9,333	85
Street Light Standards	62,000	85
UG Handholes (non URD/UCD)	16,736	
UG Vaults	1,852	
UG Manholes	<u>16,342</u>	
UG	34,930	85
Stray Voltage		
Dist Poles	1,212,965	
Transmission Poles	600,000	
Transmission towers	22,000	
Handholes - excluding concrete & fiberglass <sup>1</sup>	16,736	
Manholes	16,342	
Vaults	1,852	
Vaults w/ Transformer	174	
Pad Mount Transformer	56,998	
Switchgears	2,700	
Traffic Signals	4,500	
Outdoor Lighting	<u>52,000</u>	
Stray Voltage	1,986,267	85

While every pole (e.g., wood poles) may not be physically tested for stray voltage, they are all visually examined to see if a stray voltage test is required or not.



### Attachment 1: Sampling Criteria

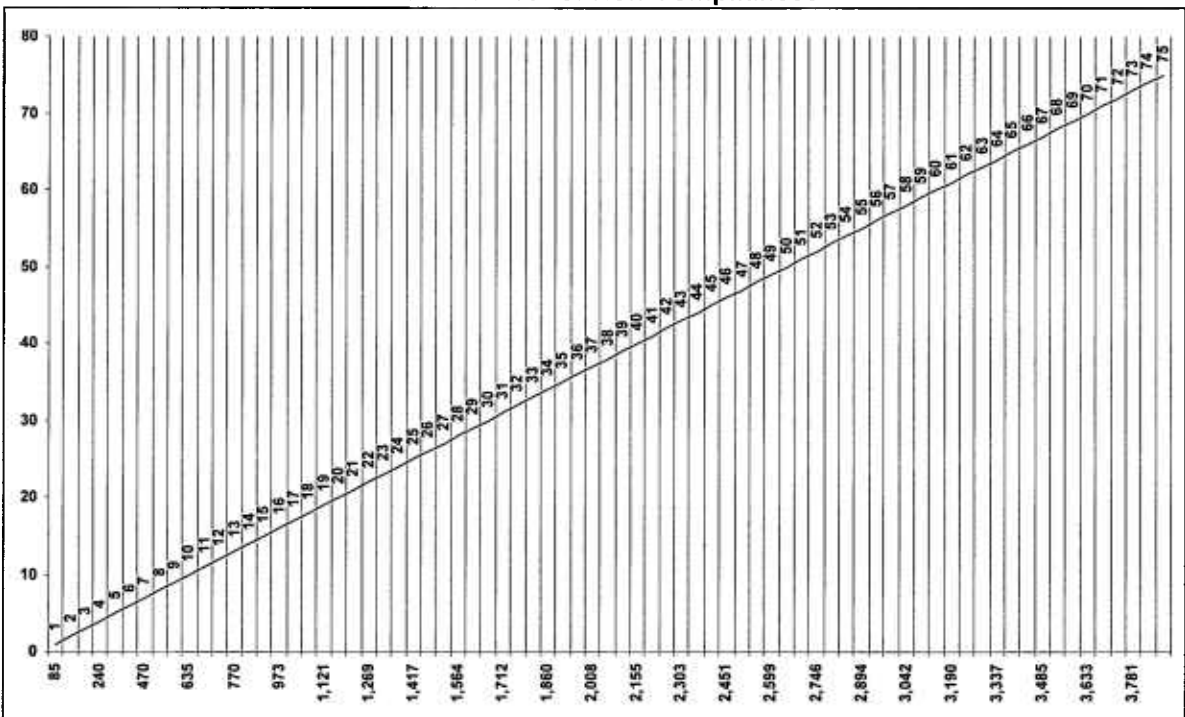
#### Sampling Criteria for 95% Compliance/Quality Level

Sample Size (minimum) vs. Number of Compliances (minimum)/Number of Non-Compliances (maximum)

Maximum Number of Non-Compliances	Minimum Number of Compliances	Minimum Number of Samples	Maximum Number of Non-Compliances	Minimum Number of Compliances	Minimum Number of Samples	Maximum Number of Non-Compliances	Minimum Number of Compliances	Minimum Number of Samples
1	84	85	26	1,440	1,466	51	2,646	2,697
2	133	135	27	1,488	1,515	52	2,694	2,746
3	182	185	28	1,536	1,564	53	2,743	2,796
4	236	240	29	1,585	1,614	54	2,791	2,845
5	310	315	30	1,633	1,663	55	2,839	2,894
6	389	395	31	1,681	1,712	56	2,887	2,943
7	463	470	32	1,729	1,761	57	2,936	2,993
8	522	530	33	1,778	1,811	58	2,984	3,042
9	566	575	34	1,826	1,860	59	3,032	3,091
10	625	635	35	1,874	1,909	60	3,080	3,140
11	669	680	36	1,922	1,958	61	3,129	3,190
12	718	730	37	1,971	2,008	62	3,177	3,239
13	757	770	38	2,019	2,057	63	3,225	3,288
14	806	820	39	2,067	2,106	64	3,273	3,337
15	855	870	40	2,115	2,155	65	3,322	3,387
16	957	973	41	2,164	2,205	66	3,370	3,436
17	1,006	1,023	42	2,212	2,254	67	3,418	3,485
18	1,054	1,072	43	2,260	2,303	68	3,466	3,534
19	1,102	1,121	44	2,308	2,352	69	3,515	3,584
20	1,150	1,170	45	2,357	2,402	70	3,563	3,633
21	1,199	1,220	46	2,405	2,451	71	3,611	3,682
22	1,247	1,269	47	2,453	2,500	72	3,659	3,731
23	1,295	1,318	48	2,501	2,549	73	3,708	3,781
24	1,343	1,367	49	2,550	2,599	74	3,756	3,830
25	1,392	1,417	50	2,598	2,648	75	3,804	3,879



Sample Size vs.  
Max. Number of Non-Compliances









	A	B	C	D	E	F	G	J	K	L
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

**OH Feeders with URD & UCD - SAMPLE CRITERIA for 95% Compliance/95% Confidence**

No More Sampling Is Required

Attempt	Attempt's Sample Size	Number of Non-Compliances from respective Attempt	Total Sample Size	Total Number of Non-Compliances	Status
1	50	2	50	2	105 more Samples needed. 155 Total needed.
2	105	5	155	7	285 more Samples needed. 440 Total needed.
3	285	1	440	8	55 more Samples needed. 495 Total needed.
4	495	11	935	19	25 more Samples needed. 960 Total needed.
5	25	1	960	20	35 more Samples needed. 995 Total needed.
6	35	0	995	20	OK
7					

5.) Enter Number of Non-Compliances

3.) Observe if (and how many) additional Samples are needed

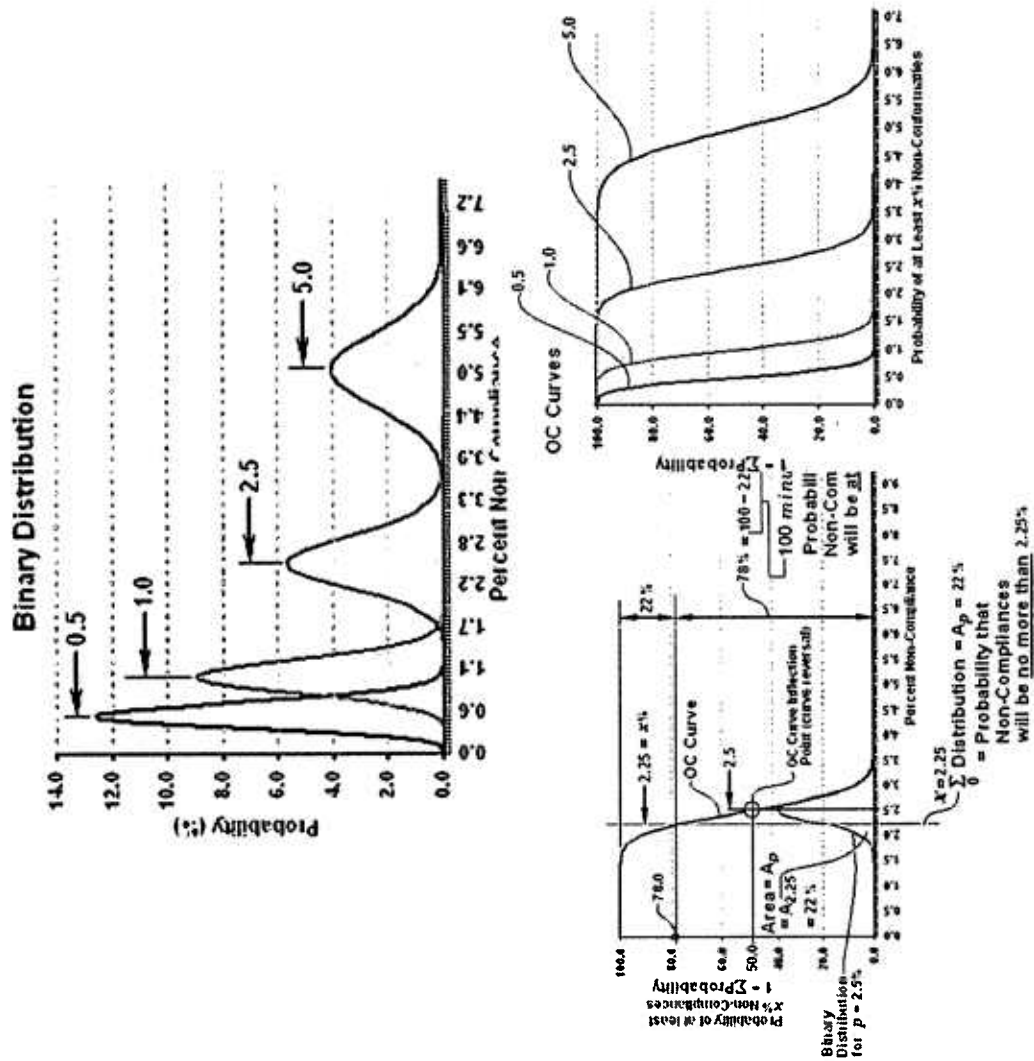
4.) Take Additional Samples

2.) Enter Number of Non-Compliances found in respective incremental Sample

1.) Enter INCREMENTAL Sample Size of respective Attempt

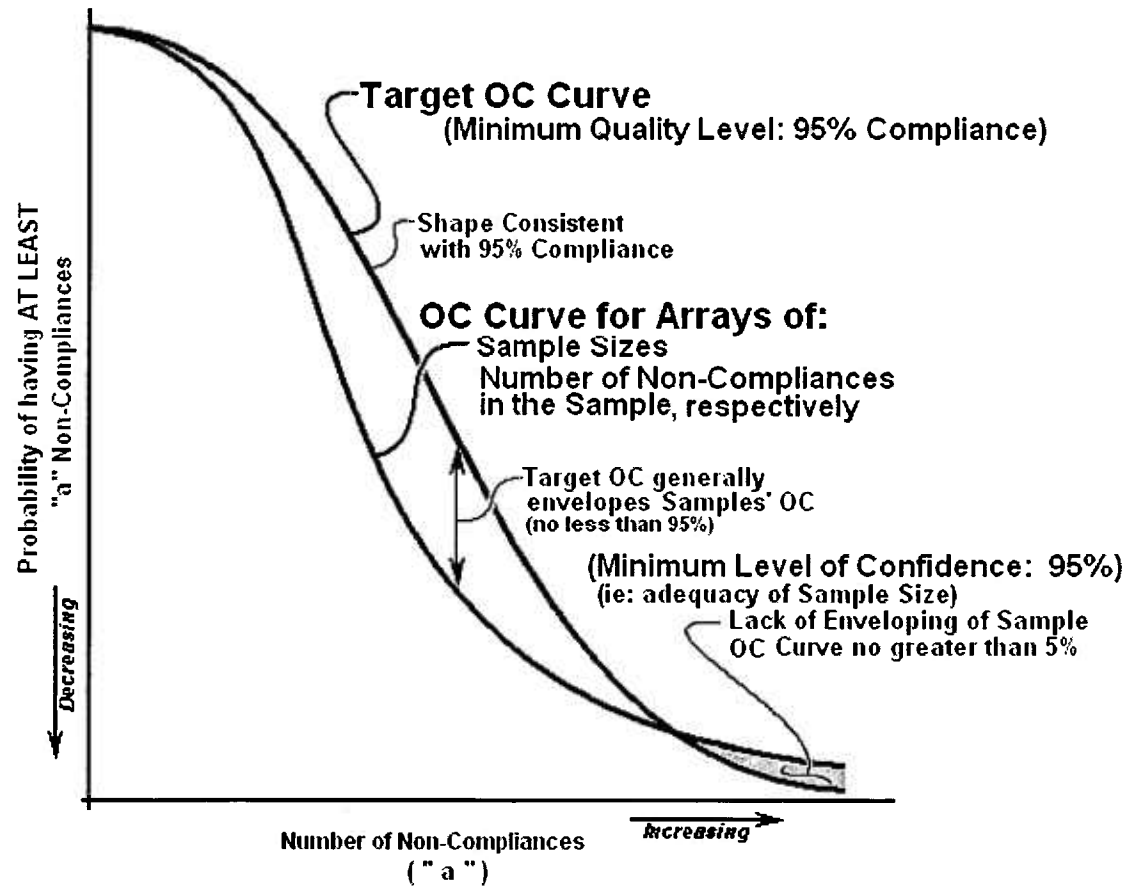


# Attachment 4: Developing Sample Criteria (i.e., minimum Sample Size/Sample Compliances)





## Basis for Determining Acceptable Arrays of Sample-Size / Number of Sampled Non-Compliances



Attachment 4: Developing Sample Criteria (i.e., minimum Sample Size/Sample Compliances) (con't)



## Attachment 5: Accuracy of Sample Sizes vs. Population Sizes

Data is for 5% Non-Compliances

Population Size	Sample Size	Error (%)	Population Size 1,986,267	
			Sample Size	Error (%)
2,225	85	4.5450	85	4.63
9,333	85	4.6124	170	3.28
34,930	85	4.6278	340	2.32
62,000	85	4.6302	680	1.64
1,986,267	85	4.6332	1,360	1.16
			2,720	0.82
			5,440	0.58
			10,880	0.41
			21,760	0.29
			43,520	0.20
			87,040	0.14
			174,080	0.10
			348,160	0.07
			696,320	0.04
			1,392,640	0.02



**Exhibit II**  
**Stray Voltage Facility Testing QA Form**

1. QA Inspector
2. Location
3. Facility
4. Facility #
5. Circuit
6. Survey date
7. Name of person performing survey
8. Stray voltage test required Y/N
9. If yes, voltage found Y/N
10. If yes, voltage measurement result \_\_\_\_\_
11. Immediate action taken \_\_\_\_\_
12. Date permanent repair \_\_\_\_\_
13. Description of repair made \_\_\_\_\_
14. Equipment found in need of repair \_\_\_\_\_
15. Employee # of individual responsible for repair \_\_\_\_\_
16. Applicable safety equipment and protocols \_\_\_\_\_
17. Conformance to EOP 211D testing protocol (Y/N) \_\_\_\_\_
18. Conformance to EOP 211D Documentation (Y/N) \_\_\_\_\_
19. Conformance to EOP 211D notification (if applicable) and repair (Y/N) \_\_\_\_\_
20. Description of Non-Conformance to EOP 211D



**Exhibit III**  
**Facility Inspection QA Form**

1. QA Inspector
2. Location
3. Facility
4. Facility #
5. Circuit
6. Survey date
7. Name of person performing survey
8. Applicable EOP (211A, B, C, NG-USA EOP T007)\_\_\_\_\_
9. Applicable safety equipment and protocols\_\_\_\_\_
10. Maintenance Priority Assessment Conformance\_\_\_\_\_
11. Hand-held Computer Use Conformance\_\_\_\_\_
12. Description of Non-Conformance



**CERTIFICATION**  
**[STRAY VOLTAGE TESTING]**

STATE OF NEW YORK )

) ss.:

COUNTY OF )

\_\_\_\_\_, on this \_\_\_\_ day of \_\_\_, 200\_, certifies as follows:

1. I am the \_\_\_\_\_ of [Name of Utility] (the "Company"), and in that capacity I make this Certification for the annual period ending November 30, 200\_ based on my knowledge of the testing program adopted by the Company in accordance the Public Service Commission's *Order Instituting Safety Standards*, issued and effective January 5, 2005 in Case 04-M-0159 (the "Order"), including the Quality Assurance Program filed by the Company with the Commission.
2. In accordance with the requirements of the Order, 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 November 30, 200\_ (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.

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**CERTIFICATION**  
**[INSPECTIONS]**

STATE OF NEW YORK )

) ss.:

COUNTY OF )

\_\_\_\_\_, on this \_\_\_\_ day of \_\_\_\_, 200\_, certifies as follows:

1. I am the \_\_\_\_\_ of [Name of Utility] (the "Company"),  
and in that capacity I make this Certification for the annual  
period ending November 30, 200\_ based on my knowledge  
of the inspection program adopted by the Company in  
accordance the Public Service Commission's *Order*  
*Instituting Safety Standards*, issued and effective January 5,  
2005 in Case 04-M-0159 (the "Order"), 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 Order (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 November 30,  
200\_ (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 \_\_\_ % of  
its Facilities during the year 200\_, in order to comply with  
the five-year inspection cycle required under the Order.
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