



NIAGARA PENINSULA ENERGY INC

Conditions of Service

This most recent version of the Conditions of Service will be effective as of the date of approval of the 2011 Cost of Service Application.

Version 4

SUMMARY OF CHANGES

Version	Description	Date
Draft Version	Initial Draft	August 11, 2008
Version 2	Update of section 2.3.7.5.1 – Service Changeover	August 24, 2009
Version 3	Update and edit of Dispute process	December 29, 2009
Version 4	Mass review and update relevant to the Cost of Service Application where rates are harmonized	October 18, 2010

Table of Contents

SUMMARY OF CHANGES	0
PREFACE	0
1 SECTION 1 – INTRODUCTION	1
1.1 Introduction	1
1.2 Identification of Niagara Peninsula Energy Inc and Territory.....	1
1.2.1 Distribution System Overview.....	2
1.3 Related Codes and Governing Laws	2
1.4 Amendments and Changes.....	3
1.5 Contact Information	4
1.6 Customer Rights.....	5
1.7 Distributor Rights.....	6
1.7.1 Safety of Equipment	6
1.7.2 Operating Control	7
1.7.3 Repairs of Defective Customer Electrical Equipment	7
1.7.4 Repairs of Customer’s Physical Structures	7
1.8 Dispute Resolution.....	8
2 SECTION 2 – DISTRIBUTION ACTIVITIES (GENERAL)	9
2.1 Connections.....	9
2.1.1 Building That Lies Along	10
2.1.2 Expansions / Offer to Connect.....	10
2.1.3 Connection Denial	14
2.1.4 Inspections Before Connections	15
2.1.5 Relocation of Plant.....	16
2.1.6 Easements	16
2.1.7 Applicable Contracts contributing to Distribution Activities	17
2.2 Disconnection	17
2.2.1 Reason for Disconnection	18
2.2.2 Disconnection of Electricity Due to Arrears.....	19
2.2.3 Reconnection of Electrical Service	19
2.2.4 Unauthorized Energy Usage Disconnection / Reconnection	20
2.3 Conveyance of Electricity.....	20
2.3.1 Limitations on the Guaranty of Supply.....	20
2.3.2 Power Quality	22
2.3.3 Standard Voltage Offerings	23
2.3.4 Back-up Generators	24
2.3.5 Metering.....	24
2.4 Tariffs and Charges	28
2.4.1 Service Connections.....	28
2.4.2 Energy Supply.....	29
2.4.3 Deposits.....	30
2.4.4 Billing	36
2.4.5 Payments and Late Payment Charges	38

2.4.6	Damaged Electrical Equipment	40
2.5	Customer Information	40
2.6	General Information	40
2.6.1	Pole Attachments	40
2.6.2	Service over Swimming Pools	41
2.6.3	Moving Oversized Loads	41
2.6.4	Preventative Programs	41
2.6.5	Customer Owned Primary Lines	42
2.6.6	Customer Owned Substations	43
3	SECTION 3 - CUSTOMER CLASS SPECIFIC	44
3.1	Residential	44
3.1.1	Electrical Service Characteristics	44
3.1.2	Limitations	45
3.1.3	Overhead Secondary Services	45
3.1.4	Underground Secondary Services	46
3.1.5	Metering Details	47
3.1.6	Row Type Multiple Dwellings	47
3.1.7	Subdivisions	50
3.2	General Service	52
3.2.1	Supply and Maintenance of Transformers and Primary Switchgear	53
3.2.2	Early Consultation	53
3.2.3	Electrical Service Characteristics	54
3.2.4	Delivery Point and Point of Entry Locations	55
3.2.5	Overhead Line Construction to Type “A” Customers	56
3.2.6	Overhead Line Construction to Type “B” Customers	57
3.2.7	Underground Line Construction to Type A and Type B Customers	57
3.2.8	Equipment Rating in Customer-Owned Substations	59
3.2.9	Transformer Specifications When Supplied by Customer	59
3.2.10	Plans and Specifications for Customer Owned Sub-Stations	60
3.2.11	Pre-Service Inspection and Energization of Customer Owned Substations	61
3.2.12	Operation of Primary Disconnect Devices on Customer Owned Sub-Stations	61
3.2.13	Maintenance of Customer Owned Sub-Stations	62
3.2.14	Metering	62
3.2.15	Apartment and/or Office Buildings	63
3.2.16	Commercial/Industrial Plaza’s	66
3.2.17	Commercial/Industrial Sub-divisions	68
3.2.18	Transformer Vaults	72
3.3	Temporary Services	73
3.3.1	Early Consultation	73
3.3.2	Service Entrance Location	73
3.3.3	Installation and Removal	74
3.3.4	Supply of Transformers	74
3.3.5	Metering	74
3.3.6	Temporary Pole Requirements	75
3.4	Motors	75
3.4.1	Review of Requirements	75

3.4.2	Single Phase Motors	75
3.4.3	Three Phase Motors	76
3.4.4	Information Needed	76
3.4.5	Reduced Voltage Starting	77
3.4.6	Electrical Disturbances	77
3.5	Line Extensions and Private Pole Lines.....	77
3.5.1	Line Extensions.....	77
3.5.2	Private Pole Lines	77
3.6	Embedded Generation.....	80
3.7	Embedded Market Participant.....	81
3.8	Embedded Distributor	81
3.9	Unmetered Connections.....	81
3.9.1	Street Lighting	82
3.9.2	Traffic signals, Bus Shelter, and all other Unmetered Scattered Load	83
4	SECTION 4 - GLOSSARY OF TERMS.....	84
5	SECTION 5 – APPENDICIES	97
5.1	Table 5.1 Retailer Dispute Resolution Procedures	98
5.2	Table 5.2 Customer Dispute Resolution Procedures	99
5.3	Table 5.3 Demarcation Points and Charges For Connection For Customer Classes	101
5.4	Table 5.4 Service Location Report	110

PREFACE

The Conditions of Service document provides the details of the services offered by Niagara Peninsula Energy Inc. This document represents the current version of the Conditions of Service.

Any inquiries related to the details found within this document should be directed to:

Margaret Battista
Vice President, Customer Services & IT
Niagara Peninsula Energy Inc
Niagara Falls, Ontario
Margaret.Battista@npei.ca <<mailto:Margaret.Battista@npei.ca>>
905-356-2681, extension 6013

1 SECTION 1 – INTRODUCTION

1.1 Introduction

This document provides information regarding the services offered by Niagara Peninsula Energy Inc and the conditions associated with the supply of electrical energy to its Customers.

These Conditions convey Niagara Peninsula Energy policies with respect to service to buildings and other associated matters.

1.2 Identification of Niagara Peninsula Energy Inc and Territory

Niagara Peninsula Energy Inc, referred to herein as “Niagara Peninsula Energy,” is a corporation incorporated under the laws of the Province of Ontario.

Niagara Peninsula Energy is licensed by the Ontario Energy Board (“OEB”) to supply electricity to Customers as described in the Transitional Distribution License issued to Niagara Peninsula Energy on December 28, 2007 by the OEB (“Distribution License”).

Additionally, there are requirements imposed on Niagara Peninsula Energy by the various codes referred to in the License and by the Electricity Act, 1998 and the Ontario Energy Board Act, 1998.

Niagara Peninsula Energy may only operate distribution facilities within its Licensed Territory as defined in its Distribution License. The area in which the licensee is authorized to distribute and sell electricity in accordance with paragraph 8.1 of its License is specified as:

1. The City of Niagara Falls as at January 1, 1980 excluding the customers located at 8001 Daly Street, 7780 Stanley Ave and 6225 Progress Street.
2. The Town of Lincoln as of December 31, 1990 as established in the Regional Municipality of Niagara Act R.S.O 1990.
3. The Township of West Lincoln as of December 31, 1990 as established in the Regional Municipality of Niagara Act R.S.O 1990.
4. The former Village of Fonthill (in the Town of Pelham) as of December 31, 1969, prior to the amalgamation under the Municipality of Niagara Act R.S.O, 1980. The location of the former Village of Fonthill is described as:
 - Part Lots 1&2 Concession 7, Pelham Township
 - Part Lots 1,2&3 Concession 8, Pelham Township
 - Part Lot 167, Thorold Township
 - Lot 168 Thorold Township

Nothing contained in this Conditions of Service or in any contract for the supply of electricity by Niagara Peninsula Energy shall prejudice or affect any rights, privileges, or powers vested in Niagara Peninsula Energy by law under any Act of the Legislature of Ontario or the Parliament of Canada, or any regulations there under.

1.2.1 Distribution System Overview

Niagara Peninsula Energy distributes electrical power through 27.6kV, 13.8kV, 8.32kV and 4.16kV primary distribution systems. On the 27.6kV and 13.8kV systems, all feeders are arranged to run radial by maintaining open points between interconnections. These feeders supply distribution transformers either directly or through sub-distribution systems operating at 8.32kV and 4.16kV. There are presently three types of distribution design systems at Niagara Peninsula Energy's primary distribution voltage levels:

- Underground open loop
- Overhead open loop
- Overhead radial

The supply of electricity by Niagara Peninsula Energy to any Customer will be at one of the following primary voltage levels: 27.6kV, 13.8kV, 8.32kV, or 4.16kV depending on the proximity of the Customer's premises to the nearest distribution facility and the anticipated peak energy demand.

1.3 Related Codes and Governing Laws

Niagara Peninsula Energy is limited in its scope of operations by the following related as well as any such codes and governing laws as provided within its license as regulated by the Ontario Energy Board.

- Energy Competition Act, 1998;
- Ontario Energy Board Act, 1998;
- Distribution License;
- Affiliate Relationships Code;
- Distribution System Code;
- Retail Settlements Code;
- Standard Supply Service Code;
- Ontario Electrical Safety Code;
- Ontario Business Corporations Act;
- Applicable Canadian Standards Association Codes;
- Federal Electricity and Gas Inspection Act;
- Ontario Public Service Works on Highways Act;
- Municipal By-Laws.
- Green Energy Act
- Privacy Act

In the event of a conflict between this document and the Distribution License or regulatory codes issued by the OEB, or the Energy Competition Act, 1998 (the “Act”), the provisions of the Act, the Distribution License and associated regulatory codes shall prevail. If there is a conflict between a Connection Agreement with a Customer and this Conditions of Service, this Conditions of Service shall govern.

These related codes and governing laws outline rules, codes and mandatory practices Upon, which Niagara Peninsula Energy’s operations are governed. The related codes and governing laws are not all-inclusive; other codes and laws may apply.

These Conditions of Service will be deemed to have been automatically amended to the minimum extent necessary to achieve compliance with such laws, regulations and codes.

When planning and designing for electricity service, Customers and their agents must refer to all applicable provincial and Canadian electrical codes, and all other applicable federal, provincial, and municipal laws, regulations, codes and by-laws to also ensure compliance with their requirements. Without limiting to the foregoing, the work shall be conducted in accordance with the latest edition of the Ontario Occupational Health and Safety Act (OHSA), the Regulations for Construction Projects and the harmonized Infrastructure Health and Safety Association (IHSA) guidelines.

Interpretations

In these Conditions, unless the context otherwise requires:

- Headings, paragraph numbers and underlining are for convenience only and do not affect the interpretation of these Conditions;
- Words referring to the singular include the plural and vice versa;
- Words referring to a gender include any gender
- Reference to any document, Act, Code or By Law shall imply the latest version.

1.4 Amendments and Changes

These Conditions of Service will be deemed to have been automatically amended to the minimum extent necessary to achieve compliance with such laws, regulations and codes listed in Section 1.2.

The provisions of these Conditions of Service and any amendment thereto form part of any contract that is between Niagara Peninsula Energy and any Retailer, generator, connected Customer or their respective agent(s).

In the event of changes to these Conditions of Service, a public notice shall be made in the form of either a notice in the local newspaper or a notice on Niagara Peninsula Energy website, or a notice on the Customer's bill.

The Customer is responsible for contacting Niagara Peninsula Energy to ensure that the Customer has the current version of the Conditions of Service, or to obtain a current version. Niagara Peninsula Energy may charge a reasonable fee for providing the Customer with multiple copies of this document.

This Conditions of Service document dated as of its inception in January 1, 2008, supersedes all previous Conditions of Service, oral or written, of Niagara Peninsula Energy or its predecessor municipal electric utility.

1.5 Contact Information

Niagara Peninsula Energy Inc
P.O. Box 120
7447 Pin Oak Dr.
Niagara Falls, Ontario,
L2E 6S9

Phone	(905) 356-2681
Toll Free:	1-877-270-3938
FAX	(905) 356-0118

Normal Business Hours: 08:30 – 16:30
Monday to Friday (excluding holidays)
24 Hour Emergency number (905) 356-2681
Internet Web Site: www.npei.ca

E-mail: info@npei.ca

1.6 Customer Rights

Niagara Peninsula Energy shall only be liable to a Customer, and a Customer shall only be liable to Niagara Peninsula Energy, for any damages that arise directly out of the willful misconduct or negligence of:

- Niagara Peninsula Energy in providing distribution services to the Customer;
- The Customer in being connected to Niagara Peninsula Energy's distribution system; or
- Niagara Peninsula Energy or the Customer in meeting their respective obligations under these Conditions of Service, their licenses and any other applicable laws.

Notwithstanding the above, Niagara Peninsula Energy shall not be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of good will or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise.

A Customer has the right to receive distribution-related services delivered in accordance with standards established by the Ontario Energy Board and the Municipalities of the City of Niagara Falls, Town of Lincoln, Township of West Lincoln, and the Town of Pelham.

Customers experiencing outages or other disturbances will be advised, upon request, of the cause of the outages.

A Customer has the right to access current meter and price data, and to interrogate his/her meter or to assign this right to others, in accordance with any relevant technical specifications and codes.

A Customer has the right to receive historical Customer-specific usage, meter and payment data as defined in the *Retail Settlement Code*.

1.7 Distributor Rights

This section outlines the rights that Niagara Peninsula Energy has with respect to a Customer or embedded generator/Niagara Peninsula Energy that are not covered elsewhere in this document.

In accordance with section 40 of the Electricity Act, 1998, the Customer shall authorize Niagara Peninsula Energy to have access to the premises at all reasonable times to perform the following tasks:

- Read meters,
- Inspect, repair, maintain, or remove Niagara Peninsula Energy meters, wires or equipment,
- Perform switching operations or interrupt the Customer's supply to maintain or improve the supply system or to provide new or upgraded services to other Customers.

1.7.1 Safety of Equipment

The Customer will comply with all aspects of the Ontario Electrical Safety Code with respect to insuring that equipment is properly identified and connected for metering and operation purposes and will take whatever steps necessary to correct any deficiencies, in particular cross wiring situations, in a timely fashion.

If the Customer does not take such action within a reasonable time, Niagara Peninsula Energy may disconnect the supply of power to the Customer.

The Customer shall not build plant or maintain any structure, tree; shrub or landscaping that would or could obstruct the running of distribution lines, or interfere with the proper and safe operation of Niagara Peninsula Energy's facilities or adversely affect compliance with any applicable legislation in the sole opinion of Niagara Peninsula Energy.

The Customer shall not use or interfere with the facilities of Niagara Peninsula Energy except in accordance with a written agreement with Niagara Peninsula Energy. Any unauthorized installation which interferes with the operation of Niagara Peninsula Energy's equipment shall be removed at the customer's expense.

The Customer must also grant Niagara Peninsula Energy the right to seal any point where a connection may be made on the line side of the metering equipment.

1.7.2 Operating Control

The Customer will provide a convenient and safe place, satisfactory to Niagara Peninsula Energy, for installing, maintaining and operating its equipment in, on, or about the Customer's premises. Niagara Peninsula Energy assumes no risk and will not be liable for damages resulting from the presence of its equipment on the Customer's premises or approaches thereto, or action, omission or occurrence beyond its control, or negligence of any persons over whom Niagara Peninsula Energy has no control.

Unless an employee or an agent of Niagara Peninsula Energy, or other person lawfully entitled to do so, no person shall remove, replace, alter, repair, inspect or tamper with Niagara Peninsula Energy's equipment.

Customers will be required to pay the cost of repairs or replacement of Niagara Peninsula Energy's equipment that has been damaged or lost by the direct or indirect act or omission of the Customer or its agents.

Niagara Peninsula Energy requires outside access to its equipment. The Customer shall provide keys and/or an area for mounting a key box at the request of Niagara Peninsula Energy.

1.7.3 Repairs of Defective Customer Electrical Equipment

The Customer will be required to repair or replace any equipment owned by the Customer that may affect the integrity or reliability of Niagara Peninsula Energy's distribution system. If the Customer does not take such action within a reasonable time, Niagara Peninsula Energy may disconnect the supply of power to the Customer. Niagara Peninsula Energy's policies and procedures with respect to the disconnection process are further described in these Conditions.

1.7.4 Repairs of Customer's Physical Structures

The Ownership demarcation point defines ownership of Customer supplied facilities. This point distinguishes the change of Ownership and responsibility between Niagara Peninsula Energy electrical distribution assets and Customer owned electrical distribution assets. Construction and maintenance of all civil works on private property owned by the Customer, including such plant as poles, anchors, transformer vaults, transformer rooms, transformer pads, cable chambers, and cable pull rooms and underground conduit, will be the responsibility of the Customer. All civil work on private property must be inspected and accepted by Niagara Peninsula Energy and the Electrical Safety Authority where applicable.

The Customer is responsible for the maintenance and safe keeping conditions satisfactory to Niagara Peninsula Energy of its structural and mechanical facilities located on private property meeting the requirements of any applicable codes and regulations.

1.8 Dispute Resolution

Any disputes between Customers, Retailers or embedded retail generators and Niagara Peninsula Energy concerning the implementation of Niagara Peninsula Energy's responsibilities under its distribution license, for reasons other than termination of the Customer's Connection Agreement or disconnection of the Customer from Niagara Peninsula Energy's distribution system, which are not disputable, will be settled according to the following dispute resolution process.

- a) The Customer should endeavour to resolve the dispute through discussion with one of Niagara Peninsula Energy's Customer Service Representatives who will investigate the issue.
- b) If the Customer Service Representative cannot resolve the dispute to the satisfaction of the Customer, the dispute will be forwarded to the appropriate Niagara Peninsula Energy Supervisor or Manager who will attempt to resolve the dispute informally through good-faith negotiations.
- c) Once the dispute has been resolved, the Customer may, upon request, receive a documented version of the actions taken by Niagara Peninsula Energy in order to resolve the dispute. The Customer may also request a copy of the code, policy or other document that affected the outcome of the dispute.
- d) In the event that the issue cannot be resolved between Niagara Peninsula Energy and the Customer, complaints can be escalated to a third party complaints resolution agency that has been approved by the Ontario Energy Board. Until such time as the Ontario Energy Board approves an independent third party dispute resolution agency, the Ontario Energy Board will assume this role.

Disputes concerning the settlement amount billed or owed to/by Niagara Peninsula Energy to a Customer, Retailer or an Embedded Retail Generator/Niagara Peninsula Energy do not relieve either party from their obligation to make payment in full at the time payment is due. Any deviations between the amount paid at the time due and the amount determined through the dispute resolution process shall be subject to payment of interest. Please see Table 5.1 and Table 5.2 in the Appendices for pictorial view of the dispute resolution process.

2 SECTION 2 – DISTRIBUTION ACTIVITIES (GENERAL)

2.1 Connections

Under the terms of the Distribution System Code, Niagara Peninsula Energy is required to make an “offer to connect” when requested to construct new distribution system facilities or increase the capacity of existing distribution facilities for new Customers or development (i.e. System “Expansion”).

The Customer or their representative shall consult early with Niagara Peninsula Energy concerning new or upgrade service details such as;

- Nature of connection (i.e. load or generation)
- Anticipated required in service date.
- The availability of supply.
- Service entrance capacity and voltage rating of the service entrance equipment.
- Electrical demand of the service including details of heating equipment, air conditioning and electrical equipment / appliances that demand a high consumption of electrical energy.
- Estimated maximum seasonal demands and anticipated future electrical load increases.
- Site drawings indicating the proposed service entrance location.
- Electrical schematic drawings indicating the proposed electrical service characteristics.
- Proposed future building expansion capabilities and associated increase in electrical demand.
- Any other details listed in Section 3 specific to that Customer Class.

These requirements are separate from and in addition to those of the Electrical Safety Authority. Niagara Peninsula Energy will confirm, in writing, the characteristics of the electric supply. The Customer is required to provide Niagara Peninsula Energy with sufficient lead-time in order to ensure:

- (a) The timely provision of supply to new and upgraded premises.
- (b) The availability of adequate capacity for additional loads to be connected.
- (c) The required documentation is completed by Niagara Peninsula Energy for each proposed meter installation and/or upgraded service.
- (d) All Niagara Peninsula Energy service conditions are met.

Niagara Peninsula Energy will make every reasonable effort to comply with the service connection requirements outlined in the OEB Distribution Supply Code.

Connections or disconnections of Niagara Peninsula Energy supply services shall not be performed by anyone other than Niagara Peninsula Energy staff or agents, except by special authorization from Niagara Peninsula Energy.

Any service, which requires a disconnection for the purpose of repairs, panel change or relocation, shall be initiated with a request for a Service Location Report.

A Service Location Report will be completed stating the reason for the disconnection and any necessary changes or modifications required to be performed to the service. All disconnected services require a connection authorization by The Electrical Safety Authority before reconnection.

All low voltage services <750 volts shall be connected within 5 working days subject to all Niagara Peninsula Energy servicing conditions being met.

All high voltage services >750 volts shall be connected within 10 working days subject to all Niagara Peninsula Energy servicing conditions being met.

All new Customers or existing Customers relocating to a new service address in Niagara Peninsula Energy service area must enter into an Application for Service Agreement in the form provided by Niagara Peninsula Energy. The Service Agreement, when signed, forms a binding contract between the Customer and Niagara Peninsula Energy, and will be evidence of the fact that Niagara Peninsula Energy and the Customer have accepted and mutually agreed to the terms of the Application for Service Agreement.

2.1.1 Building That Lies Along

For the purposes of these Conditions of Service, “lies along” means a Customer property or parcel of land that is directly adjacent to or abuts onto the public road allowance where Niagara Peninsula Energy has distribution facilities of the appropriate voltage and capacity.

As provided in Section 28 of the Electricity Act 1998, Niagara Peninsula Energy has the obligation to connect any building that “lies along” its distribution system. A building “lies along” a distribution line if it can be connected to Niagara Peninsula Energy’s distribution system without an expansion or enhancement, and meets the conditions listed in the Conditions of Service of Niagara Peninsula Energy who owns or operates the distribution line.

2.1.2 Expansions / Offer to Connect

If Niagara Peninsula Energy must construct new facilities to its main distribution system or increase the capacity of existing distribution facilities in order to connect a specific Customer or group of Customers, the required work is considered as a system expansion. Under these circumstances, Niagara Peninsula Energy is required to make

an offer to connect to the requesting party. This offer to connect is an estimate of the costs to construct the expansion, not a firm offer.

The final amount owing from the Customer will be based on actual costs incurred. Niagara Peninsula Energy will calculate the first estimate and the final payment at no expense to the Customer.

The Offer to Connect must be fair and reasonable and be based on Niagara Peninsula Energy design standards.

The Offer to Connect will be made within a reasonable time from the request for connection. Niagara Peninsula Energy Offer to Connect will include, without limitations, the following components, as applicable:

- A description of the material and labour required by Niagara Peninsula Energy to build the system expansion necessary to connect the Customer.
- An estimate of the amount that will be charged to the Customer in order to construct the required distribution system expansion.
- A description and estimate of the connection charges that would apply to the offer to connect.
- The final payment will reflect actual costs incurred.
- Whether the offer includes work, for which the Customer may obtain an alternative bid, and, if so, the process by which the Customer may obtain the alternative bid.
- Reference to the Conditions of Service and information on how the person requesting the connection may obtain a copy.
- Requirement for any Capital Contribution.
- Requirements for any Security Deposit

Refer to Table 5.3 for a summary of demarcation points and charges for connections and disconnection for Niagara Peninsula Energy Customer classes.

2.1.2.1 Alternative Bid

When the Offer to Connect identifies a capital contribution requirement from the Customer, the Customer may be eligible to acquire alternative bids for parts of the system expansion identified within the offer to connect. Specifically, construction activities that do not involve interaction with the existing utility owned distribution system (i.e. green space development) are eligible for alternative bids.

Where the offer to connect meets the eligible conditions identified in the Distribution System Code, Niagara Peninsula Energy will inform the Customer that he may obtain other bids from contractors and consultants pre-qualified by Niagara Peninsula Energy for the eligible work.

If the Customer chooses to pursue an alternative bid and elects to obtain the services of an alternative pre-qualified contractor for an eligible aspect of the expansion project, the Customer shall:

- Select, hire and pay the contractor's costs for the work and assume full responsibility for the construction of that aspect of the expansion project.
- Administer the contract for that aspect of the expansion work, including but not limited to, all permits, notifications, permissions, inspections and all other activities required to assure worker and public safety and technical conformance to the approved job specifications.

If a Customer chooses to pursue an alternative bid, Niagara Peninsula Energy may charge any costs associated with the expansion project, including but not limited to the following:

- Costs for additional design, engineering, or installation of facilities required to complete the project that were made in addition to the original Offer to Connect
- Costs for inspection, testing or approval of the work performed by the contractor hired by the Customer.

2.1.2.2 Capital Contributions

Niagara Peninsula Energy may perform an economic evaluation to determine whether the future revenue from the Customer will pay for the capital and on-going maintenance costs of the expansion project (refer to Appendix B within the Distribution System Code). Any shortfall identified represents the capital contribution required from the Customer.

At the discretion of Niagara Peninsula Energy, the capital costs for the expansion will include the incremental upstream costs associated with the use of Niagara Peninsula Energy's existing facilities or equipment, which may result in an adverse impact on existing supply capacity and affect future Customers.

2.1.2.3 Construction Security Deposit

To save Niagara Peninsula Energy harmless as a result of Niagara Peninsula Energy investment in system expansion based on future estimated revenue recovery, the Customer shall enter into an Agreement and provide a security deposit to cover for the full cost of the capital expansion. An irrevocable (standby) letter of credit in a form approved by Niagara Peninsula Energy is acceptable in lieu of a cash deposit. This security deposit is in addition to any other charges or deposits that may be required by

Niagara Peninsula Energy and is to be provided prior to constructing the system expansion.

Niagara Peninsula Energy will refund all or a portion of the amount of the construction security deposit equal to the capital obligation of the utility based on the forecast Customer revenue, in a reasonable timely manner as specified in the Agreement.

Developers will be required to enter into the following agreements based on the type of development.

Development	Agreement Type
Residential Subdivision	Single family and semi-detached Residential Servicing Agreement
Industrial/Commercial Subdivision	Commercial / industrial subdivision Servicing Agreement
Row-housing and Condominiums	Row-housing/condominium Servicing Agreement

These individual agreements specify the securities to be posted for each development and the necessary deposits.

2.1.2.4 Capital Contribution Sharing

Connection Charges

Niagara Peninsula Energy shall recover costs associated with the installation of Customer service connections, by Customer Class, via a Basic Connection Charge and a Variable Connection Charge, as applicable.

For residential Customers, the basic connection entitlement for each Customer shall include:

- (a) Supply and installation of overhead distribution transformation capacity or an equivalent credit for transformation equipment and;
- (b) Up to 30 metres of service wire from the point of entry of the Customers property to the Customer's connection point;
- (c) One service-crossing pole located on the road allowance where necessary for maintaining adequate clearance of overhead service conductors over the roadway.

Note: Connection charges and fees for property developments such as subdivisions, row houses or condominiums are outlined within the applicable Niagara Peninsula Energy servicing agreement.

For Non-Residential Customers, Niagara Peninsula Energy may recover the Basic Connection Charge either through Niagara Peninsula Energy rates or through a Basic Connection Fee levied from the Customer requesting the connection.

The Basic Connection Fee is determined for each Customer Class as indicated in Table 5.3 of these Conditions.

Variable connection charges are estimated on an individual basis. Full estimated charges will be collected in advance of connection as a deposit. Actual charges will be invoiced (or refunded) after the connection is made.

2.1.2.5 Related Rebates

If within five years from the connection date, non-forecasted Customers are connected to this new plant without any further capital expansion costs, non-forecasted Customers shall contribute their share and the first Customer will be entitled to a rebate as outlined in Section 3.2.27 of the Distribution Service Code.

2.1.3 Connection Denial

Niagara Peninsula Energy is not obligated to connect a service within its distribution territory where the connection would result in one of the following:

- (a) Contravention of existing laws of Canada or Ontario,
- (b) Violations of Conditions in Niagara Peninsula Energy's License,
- (c) Adverse effect on the reliability and safety of the distribution system,
- (d) Imposition of an unsafe work situation beyond the normal risks inherent in the operation of the distribution system,
- (e) A material decrease in the efficiency of the distribution system,
- (f) A material adverse effect on the quality of distribution services received by an existing connection,
- (g) Any other conditions identified in this document if the Person or Applicant requesting the connection owes Niagara Peninsula Energy money for distribution services,
- (h) Use of the distribution system for a purpose that it does not serve and that Niagara Peninsula Energy does not intend to serve,

- (i) Potential increases in monetary amounts that already are in arrears with Niagara Peninsula Energy,
- (j) If the electrical service does not meet Niagara Peninsula Energy's design requirements,
- (k) Discriminatory access to distribution services.

If connection is denied, Niagara Peninsula Energy will inform the Customer of the reason(s) for denial and, where Niagara Peninsula Energy is able to provide a remedy, make an offer to connect. If Niagara Peninsula Energy is unable to provide a remedy to resolve the issue, it is the responsibility of the Customer to do so before a connection may be made.

If, in the opinion of Niagara Peninsula Energy, unsafe conditions exist on a Customer's property, Niagara Peninsula Energy may make application to the Electrical Safety Authority to inspect the conditions.

2.1.4 Inspections Before Connections

All Customer-owned, new, altered, enlarged or repaired electrical installations shall be in accordance with the Ontario Electrical Safety Code, latest edition. Applicable laws prohibit Niagara Peninsula Energy from energizing installations which have not been approved for connection by the Electrical Safety Authority.

Services, which have been disconnected for six months or longer, must be re-inspected and approved by the Electrical Safety Authority prior to reconnection.

Prior to energization, a field inspection by Niagara Peninsula Energy may be necessary. If deficiencies are noted, Niagara Peninsula Energy will perform a second inspection at its expense to ensure corrections have been completed. Any subsequent costs incurred by Niagara Peninsula Energy due to continuing deficiencies will be at the Customer's expense.

Metering installations shall be inspected and approved by Niagara Peninsula Energy prior to energization.

Duct banks shall be inspected and approved by Niagara Peninsula Energy prior to the pouring of concrete and again before backfilling.

Customer owned substations must be inspected and approved by both the Electrical Safety Authority and Niagara Peninsula Energy prior to energization.

Developer design and installed projects such as row housing, condominiums and subdivisions shall be subject to Niagara Peninsula Energy inspection and approval prior to energization of the primary distribution system.

2.1.5 Relocation of Plant

When requested to relocate distribution plant, Niagara Peninsula Energy will exercise its rights and discharge its obligations in accordance with existing acts, by-laws and regulations including the Public Service Works on Highways Act, formal agreements, easements and law. In the absence of existing agreements, Niagara Peninsula Energy is not obligated to relocate the plant.

However, Niagara Peninsula Energy shall resolve the issue in a fair and reasonable manner. Resolution in a fair and reasonable manner will include a response to the requesting party that explains the feasibility of the relocation and a fair and reasonable charge for relocation based on cost recovery principles.

In the course of maintaining and enhancing Niagara Peninsula Energy owned distribution plant, Niagara Peninsula Energy may need to relocate distribution plant that it owns. Costs associated with such relocation(s) shall be borne by Niagara Peninsula Energy within normal working hours. All costs incurred for customer requested maintenance or construction activities outside of normal working hours shall be paid by the customer.

2.1.6 Easements

To maintain the reliability, integrity and efficiency of the distribution system, Niagara Peninsula Energy has the right to have supply facilities on private property and to have easements registered against title to the property. Easements are required where facilities serve properties other than that property where the facilities are located and/or where Niagara Peninsula Energy deems it necessary.

If a new service request from a Customer requires an easement on that property to be established, the Customer shall grant at no cost to Niagara Peninsula Energy, an easement to permit the installation and maintenance of Niagara Peninsula Energy facilities. All costs pertaining to the creation of the easement including surveying, reference plans, registration costs and Niagara Peninsula Energy legal fees shall be borne by the Customer. The Customer shall contact Niagara Peninsula Energy to obtain the standard easement agreement form as a template for creating a draft of the easement agreement. The reference plan and draft reference plan shall be forwarded to Niagara Peninsula Energy for review. Upon accepting the format of the draft easement agreement and reference plan, the Customer will sign and forward three copies of the easement agreement and reference plan for execution and registration.

Where existing Niagara Peninsula Energy facilities located on private property of an existing Customer are used to service adjacent properties Niagara Peninsula Energy may wish to pursue an easement. In this case Niagara Peninsula Energy will request in writing that the Customer in writing grant an easement. Niagara Peninsula Energy will arrange for a draft reference plan and easement agreement to be forwarded to the

Customer for their review and approval. Niagara Peninsula Energy will pay for the reference plan and easement document preparation, registration and any legal costs associated with the review of the review of the reference plan and proposed easement. Niagara Peninsula Energy will register on title the easement documents upon receipt of the signed easement documents.

2.1.7 Applicable Contracts contributing to Distribution Activities

The following agreements represent those contractual arrangements to be put into place for the purpose of carrying out distribution activities. This is not an inclusive listing.

- Unregistered Easement
- Application for Service Agreement
- Supply Agreement
- Customer Operating Agreement
- Sub-divisions Agreement
- Row/Condominium Agreement

2.2 *Disconnection*

Niagara Peninsula Energy shall not be liable for damage or claim arising as a result of disconnection of service.

2.2.1 Reason for Disconnection

Niagara Peninsula Energy reserves the right to disconnect a Customer's service if continuance of the connection would result in one of the following:

- (a) Adverse effect on the reliability and safety of the distribution system,
- (b) Contravention of the laws of Canada or the Province of Ontario.
- (c) Overdue amounts payable to Niagara Peninsula Energy, including the non-payment of requested security deposit, as permitted by applicable legislation.
- (d) Electrical disturbance propagation caused by Customer equipment that are not corrected in a timely fashion
- (e) Imposition of an unsafe work situation beyond the normal risks inherent in the operation of the distribution system,
- (f) A material decrease in the efficiency of the distribution system,
- (g) A material adverse effect on the quality of distribution services received by an existing connection,
- (h) Inability of Niagara Peninsula Energy to perform planned inspections and maintenance of its distribution equipment, including meter changes,
- (i) A stop work order under the Building Code Act ("Ontario")
- (j) Direct hazard to the public
- (k) Non-compliance with Niagara Peninsula Energy's technical requirements
- (l) Failure to comply with a term of any agreement made between the Customer and Niagara Peninsula Energy including but not limited to a Connection Agreement or a Capital Cost Recovery Agreement
- (m) Any other conditions identified in this document

Upon request, Niagara Peninsula Energy will disconnect and reconnect its supply so that the Customer can perform maintenance or make improvements on their equipment. Niagara Peninsula Energy will provide this service once annually during regular working hours at no cost to the customer.

When the Customer requests the disconnection/reconnection to occur outside normal business hours, the Customer will incur all applicable charges.

2.2.2 Disconnection of Electricity Due to Arrears

Where a Customer's account is in arrears and where policy in compliance with the Retail Settlement Code and/or Distribution System Code permits Niagara Peninsula Energy to disconnect the Customer's service, Niagara Peninsula Energy will make reasonable efforts to establish direct contact with the Consumer. Arrears Management Programs will be made available to residential customers who qualify and are unable to pay their electricity bill.

Niagara Peninsula Energy will issue a Reminder Notice after the due date on the Customer's account where no payment has been received on the account. Unless payment has been received or payment arrangements acceptable to Niagara Peninsula Energy have been made a Disconnect Notice providing a minimum of 10 days notice of the disconnection will be issued. The notice of disconnection date will be provided within the Reminder Notice.

Where any regular resident at a customer's home faces a significant health risk (as documented by a physician's note/letter) a 60 day notice period will be given prior to disconnection.

Prior to disconnecting the service, within 48 hours of the disconnect date; a company representative will make reasonable efforts to establish direct contact with the Customer.

Payments must be received or confirmed with Niagara Peninsula Energy office by 8:30am on or before the scheduled disconnect date. Failure to do so may result in additional disconnection and reconnection charges.

2.2.3 Reconnection of Electrical Service

Where the Customer's service has been disconnected for a condition listed in Item 2.2.1 above, reconnection will only take place once the condition has been remedied to the satisfaction of Niagara Peninsula Energy. The electrical service may also be subject to an inspection by the Electrical Safety Authority prior to reconnection.

Where the Customer's service has been disconnected due to arrears, the Customer must pay to Niagara Peninsula Energy the amount of the Customer's arrears. Niagara Peninsula Energy must receive the agreed payment in full before the service is restored. Applicable Security Deposits may also be required for reconnection of electrical service. If the Customer requests the service to be connected after normal hours of work, full payment must be made to Niagara Peninsula Energy's Service Technician on duty (with money order only) or by credit card via phone or internet (to be

available January 2011) prior to reconnection, and an “after hours” service charge will apply. Customers must be present during reconnection.

2.2.4 Unauthorized Energy Usage Disconnection / Reconnection

Niagara Peninsula Energy reserves the right to disconnect the supply of electricity to a Customer for causes not limited to energy diversion, fraud or abuse on the part of the Customer. Niagara Peninsula Energy shall not assume any responsibility for damages caused by the disconnection.

The Customer shall pay Niagara Peninsula Energy for all costs incurred to Niagara Peninsula Energy including but not limited to investigation, repairs to damaged equipment, disconnect/reconnect, and estimated lost energy as calculated by Niagara Peninsula Energy.

The following conditions must be met before the service will be reconnected:

- Niagara Peninsula Energy must be paid in full all monies owed relating to the service. This may include the above costs relating to the disconnection, outstanding bills, and/or deposits.
- The Customer must provide an authorization to connect issued by the Electrical Safety Authority for all repairs to the service and if requested by Niagara Peninsula Energy the full service.

The Customer must repair any other damage related to the power diversion complete with any other required inspections (i.e. Foundation repairs complete with building inspection.)

Unauthorized use of energy is a criminal offence, and the appropriate authorities will be notified of all occurrences.

2.3 Conveyance of Electricity

2.3.1 Limitations on the Guaranty of Supply

Niagara Peninsula Energy will endeavor to use reasonable diligence in providing a regular and uninterrupted supply but does not guarantee a constant supply or the maintenance of unvaried frequency or voltage and will not be liable in damages to the Customer by reason of any failure in respect thereof.

Customers requiring a higher degree of security than that of normal supply are responsible to provide their own back-up or standby facilities, unless otherwise arranged by Niagara Peninsula Energy. Customers may require special protective equipment at their premises to minimize the effect of momentary power interruptions.

Customers requiring a three-phase supply should install protective apparatus to avoid damage to their equipment, which may be caused by the interruption of one phase, or non-simultaneous switching of phases of *Niagara Peninsula Energy's* supply.

Niagara Peninsula Energy will endeavor to communicate planned outages for maintenance or construction by delivering outage notification bulletins to the affected Customers.

During an emergency, Niagara Peninsula Energy may interrupt supply to a Customer in response to a shortage of supply, or to effect repairs on the distribution system, or while repairs are being made to Customer-owned equipment.

During periods of high load on the bulk transmission system, it may be necessary for the Independent Electricity System Operator to impose rotating load cuts to maintain system stability. Under these conditions, supply will be interrupted to specific feeders within the service territory on a scheduled basis. Niagara Peninsula Energy will endeavor to inform the public of this situation and of the schedule and areas affected by means of bulletins on local radio stations.

Customers who require an uninterrupted source of power for life support equipment must provide their own equipment for these purposes. Customers with life support system are encouraged to inform Niagara Peninsula Energy of their medical needs by means of a medical/doctor notification and their availability of back- up power. These Customers are responsible for ensuring that the information they provide Niagara Peninsula Energy is accurate and up to date. For an interruption of source of power, Niagara Peninsula Energy will endeavor, where possible, to communicate to these Customers but will not be liable in any manner to the Customer for failure to do so.

Niagara Peninsula Energy shall have rights to access to a property in accordance with *section 40* of the Electricity Act, 1998 and any successor acts thereto.

To assist with distribution system outages or emergency response, Niagara Peninsula Energy may require a Customer to provide Niagara Peninsula Energy with emergency access to Customer-owned distribution equipment that normally is operated by Niagara Peninsula Energy or Niagara Peninsula Energy-owned equipment on Customer's property.

2.3.2 Power Quality

2.3.2.1 Power Quality Testing

In response to a Customer power quality concern, where the utilization of electric power adversely affects the performance of electrical equipment, Niagara Peninsula Energy will perform investigative analysis to attempt to identify the underlying cause. Depending on the circumstances, this may include review of relevant power interruption data, trend analysis, and/or use of diagnostic measurement tools.

Upon determination of the cause resulting in the power quality concern, where it is deemed a system delivery issue and where industry standards are not met, Niagara Peninsula Energy will recommend and/or take appropriate mitigation measures. Niagara Peninsula Energy will take appropriate actions to control power disturbances found to be detrimental to the Customers.

If Niagara Peninsula Energy is unable to correct the problem without adversely affecting other Niagara Peninsula Energy Customers, then it is not obligated to make the corrections. Niagara Peninsula Energy will use appropriate industry standards (such as CSA, IEC or IEEE standards) and good utility practice as a guideline. If the problem lies on the Customer side of the system, Niagara Peninsula Energy may seek reimbursement from the Customer for the costs incurred in its investigation.

2.3.2.2 Prevention of Voltage Distortion on Distribution

Customers having non-linear load shall not be connected to Niagara Peninsula Energy's distribution system unless power quality is maintained by implementing proper corrective measures such as installing proper filters, and/or grounding. Further, to ensure the distribution system is not adversely affected, power electronics equipment installed must comply with IEEE Standard 519-1992.

2.3.2.3 Timely Correction of Deficiencies

If an undesirable system disturbance is being caused by customer's equipment, the customer will be required to cease operation of the equipment until satisfactory remedial action has been taken by the customer at the customer's expense. If the Customer does not take such action within a reasonable time, Niagara Peninsula Energy may disconnect the supply of power to the customer.

Niagara Peninsula Energy shall practice reasonable diligence in maintaining acceptable voltage and frequency, but is not responsible for variations caused by external forces such as operating contingencies, exceptionally high loads, and low voltage supply from the transmitter or host distributor.

Niagara Peninsula Energy shall not be liable for any delay or failure in the performance of any of its obligations under this Conditions of Supply due to any events or causes beyond the reasonable control of Niagara Peninsula Energy, including, without limitation, severe weather, flood, fire, lightning, other forces of nature, acts of animals, epidemic, quarantine restriction, war, sabotage, act of a public enemy, earthquake, insurrection, riot, civil disturbance, strike, restraint by court order or public authority, or action or non-action by or inability to obtain authorization or approval from any governmental authority, or any combination of these causes ("Force Majeure").

2.3.2.4 Emergency Service

Niagara Peninsula Energy will exercise reasonable diligence and care to deliver a continuous supply of electrical energy to the Customer. However, Niagara Peninsula Energy cannot guarantee a supply that is free from interruption.

When power is interrupted, the Customer should first ensure that failure is not due to their equipment. If, on examination, it appears that Niagara Peninsula Energy's main source of supply has failed, the Customer should report these conditions to Niagara Peninsula Energy. If it is determined that the power interruption is due to failure of customer owned equipment, Niagara Peninsula Energy will reserve the right to recovery of actual costs.

Niagara Peninsula Energy operations personnel are available 24 hours a day to provide emergency service to Customers. Niagara Peninsula Energy will initiate restoration efforts as quickly as possible.

2.3.3 Standard Voltage Offerings

2.3.3.1 Primary Voltage

The primary voltage to be used will be determined by Niagara Peninsula Energy for both Niagara Peninsula Energy-owned and Customer-owned transformation. The primary voltage is dependent on the voltage of the plant that "lies along" and will be specified within the service location report.

2.3.3.2 Supply Voltage

The standard secondary voltage supplied from Niagara Peninsula Energy's distribution system will be 120/240 V single phase, 120/208 V three phase, and 347/600 V three phase. The limit of supply capacity for any Customer is outlined in Section 3 of this Conditions of Service document and will be specified within the service location report.

When the Customer requires voltages other than at the available supply voltage, transformation requirements will be supplied by the Customer, and approved by Niagara Peninsula Energy.

2.3.4 Back-up Generators

Customers contemplating back up generation equipment shall consult with Niagara Peninsula Energy Engineering during planning and prior to the installation of the back-up generation.

Customers with portable or permanently connected emergency generation capability shall comply with all applicable criteria of the Ontario Electrical Safety Code and in particular, shall ensure that Customer emergency generation does not back feed on Niagara Peninsula Energy's distribution system.

Customers with permanently connected emergency generation equipment shall notify their Niagara Peninsula Energy regarding the presence of such equipment.

2.3.5 Metering

All Customers must acquire a Service Location Report detailing metering requirements prior to the installation of a service. Installations that do not conform to the requirements outlined in the Service Location Report will not be connected.

Niagara Peninsula Energy will supply, install, own, and maintain meters, instrument transformers, ancillary devices, and secondary wiring required for revenue metering.

Customers will allow a properly identified employee or authorized agent of Niagara Peninsula Energy free access at reasonable hours, to remove, inspect, adjust or repair Niagara Peninsula Energy metering equipment. No person, except those authorized by Niagara Peninsula Energy, may remove, connect, or otherwise interfere with meters, wires, or ancillary equipment.

When alterations, including repairs are made to existing services and the meter(s) are inaccessible, keyed access is required. If keyed access is not provided, the meter(s) shall be relocated outdoors at the Customer's expense.

Niagara Peninsula Energy will supply free of charge the first meter installed at that location. The cost of any additional meters will be charged to the Customer. The meters remain the property of Niagara Peninsula Energy.

The remaining subsections outline the general requirements for metering. Detailed metering requirements by customer class are listed in Section 3 of this document.

2.3.5.1 General Requirements

Niagara Peninsula Energy will typically install metering equipment at the Customer supply voltage. The Customer must provide a convenient and safe location satisfactory to Niagara Peninsula Energy, for the installation of meters, wires and ancillary equipment.

The Customer will be responsible for the care and safekeeping of Niagara Peninsula Energy meters, wires and ancillary equipment on the Customer's premises. If any Niagara Peninsula Energy equipment installed on Customer premises is damaged, destroyed, or lost other than by ordinary wear and tear, tempest or lightning, the Customer will be liable to pay to Niagara Peninsula Energy the value of such equipment, or at the option of Niagara Peninsula Energy, the cost of repairing the same.

Where Niagara Peninsula Energy deems meters to be in a hazardous location, Niagara Peninsula Energy will request that the meter(s) be relocated to a non-hazardous location at the Customers expense.

Any compartments, cabinets, boxes, sockets, or other workspace provided for the installation of Niagara Peninsula Energy's metering equipment shall be exclusive to Niagara Peninsula Energy. No other equipment than that provided and installed by Niagara Peninsula Energy, may be located in the Niagara Peninsula Energy metering workspace.

2.3.5.2 Current Transformers

Where instrument transformer cabinets are incorporated, a separate meter socket must be supplied and installed by the Customer, located to the satisfaction of Niagara Peninsula Energy and as close as possible to the instrument transformer compartment.

Niagara Peninsula Energy must approve the final layout and arrangements of components prior to fabrication of equipment.

2.3.5.3 Interval Metering

If the Customer's projected annual average demand qualifies the customer for an interval meter based on the guidelines set out by the Ontario Energy Board's (OEB) Distribution System Code, Section 5.1.3, Niagara Peninsula Energy will supply the Customer's meter.

However, if the Customer's annual average demand is such that it does not qualify for an interval meter but an interval meter is requested, the Customer will be responsible for the cost of the meter as outlined in Section 5.1.5 of the Distribution System Code.

2.3.5.4 Meter Reading

Niagara Peninsula Energy, or its agents, shall have the right to read any Niagara Peninsula Energy electricity meter on the Customer's premises.

Customers will allow a properly identified employee or authorized agent of Niagara Peninsula Energy free access at reasonable hours, to remove, inspect, adjust or repair Niagara Peninsula Energy metering, service entrance equipment.

2.3.5.5 Final Meter Reading

2.3.5.5.1 Service Changeover

When a service is changing over to another Customer, address, or Retailer, the Customer shall provide a minimum of 2 weeks advanced notice of the date so that Niagara Peninsula Energy can schedule and obtain a final meter reading as close as possible to the final reading date. If advanced notification is not made, a final meter reading used for the final bill will be taken as of the date of the notification, not the move in/move out date. The Customer will provide access to Niagara Peninsula Energy or its agents for this purpose.

If a date of service changeover is changed, or cancelled, the customer must provide notification prior to change, for move information to be updated. Please note that the customer will be responsible for consumption up to the date of notification, if notification occurs after the changed date.

2.3.5.5.2 Service No Longer Required

When a service is no longer required, the Customer shall provide sufficient notice in writing of the date the service is to be discontinued so that Niagara Peninsula Energy can obtain a final meter reading as close as possible to the final reading date. The Customer will provide access to Niagara Peninsula Energy or its agents for this purpose. As a matter of public safety Niagara Peninsula Energy may exercise its right to disconnect any service from its distribution system which has been sealed for greater than 6 months. Reconnection of such services to the distribution system will only take place after a service location report is issued and an authorization to connect is issued by Electrical Safety Authority.

2.3.5.6 Faulty Registration of Meters

Metering electricity usage for the purpose of billing is governed by the Federal Electricity and Gas Inspection Act and associated regulations, under the jurisdiction of Industry Canada. Niagara Peninsula Energy revenue meters are required to comply with the accuracy specifications established by the regulations under the above Act.

In the event of incorrect electricity usage registration, Niagara Peninsula Energy will determine the correction factors based on the specific cause of the metering error and the Customer's electricity usage history. For all the energy supplied, the Customer shall pay a sum based on the reading of any meter formerly or subsequently installed on the premises by Niagara Peninsula Energy, with due regard being given to any change in the character of the installation and/or the demand.

If the incorrect measurement is due to reasons other than the accuracy of the meter, such as incorrect meter connection, incorrect connection of auxiliary metering equipment, or incorrect meter multiplier used in the bill calculation, the billing correction will apply in accordance with the regulations under the Act, as well as, Retail Settlement Code, and Distribution System Code.

2.3.5.7 Meter Dispute Testing

All Customer meter disputes are to follow Niagara Peninsula Energy Meter Department Quality Management System manual, Document 226 – Dispute Meters.

2.4 Tariffs and Charges

2.4.1 Service Connections

Charges for distribution services are made as set out in the schedule of rates set forth by the Ontario Energy Board within the approved Distributors Tariff of Rates and Charges. Notice of rate revisions shall be published in major local newspapers and mailed to all Customers with the first billing issued at revised rates.

2.4.1.1 Customers Switching to Retailer

There are no physical service connection differences between Standard Supply Service (SSS) Customers and Customers of third party Retailers. Both Customer energy supplies are delivered through Niagara Peninsula Energy with the same distribution requirements. Therefore, all service connections requirements applicable to the Standard Supply Service Customers are applicable to Customers of third party Retailers Customers.

2.4.1.2 Supply Deposits & Agreements

Where an Owner proposes the development of premises that require Niagara Peninsula Energy to place orders for equipment for a specific project and before actual construction begins, the Owner is required to sign the necessary Supply Agreement and furnish a suitable deposit before such equipment is ordered by Niagara Peninsula Energy.

An irrevocable letter of credit or a letter of guarantee from a chartered bank, trust company or credit union is acceptable in lieu of a cash deposit.

2.4.1.3 Additional Charges

In addition to the monthly service charge for distribution services, the distribution volumetric charge, and competitive electricity charges, miscellaneous charges may include as provided in the Tariff of rates and charges. This is not an inclusive list.

- New Account set-up fee;
- NSF or Returned Cheque;
- Collection visit;
- Reconnection after hours;
- Reconnection during hours;
- Secondary Service installation;
- Temporary Service installation;
- Arrears certificates;
- Credit check fee;
- Interest charges;
- Street lighting;
- Embedded generation charges; and
- Various equipment rentals;

2.4.2 Energy Supply

2.4.2.1 Standard Supply Service (SSS)

All existing and new Niagara Peninsula Energy Customers are Standard Supply Service (SSS) Customers until Niagara Peninsula Energy is informed of their switch to a competitive electricity Retailer. The cost of the commodity will be charged to Customers on a pass-through basis. Customers will pay the regulated price of electricity. The Retailer must make a Service Transfer Request (STR).

2.4.2.2 Retailer Supply

Customers transferring from Standard Supply Service (SSS) to a Retailer shall comply with the Service Transfer Request (STR) requirements as outlined in Sections 10.5 through 10.5.6 of the Retail Settlement Code.

All requests shall be submitted as electronic file and transmitted through EBT Standards. Service Transfer Request (STR) shall contain information as set out in section 10.3 of the Retail Settlement Code.

If the information is incomplete, Niagara Peninsula Energy shall notify the Retailer and/or Customer about the specific deficiencies and await a reply before proceeding to process the transfer.

There are no physical service connection differences between Standard Supply Service (SSS) Customers and Customers of third party Retailers. Both Customer energy supplies are delivered through Niagara Peninsula Energy distribution system with the same distribution and service connection requirements. Therefore, all service connection requirements applicable to the SSS Customers are applicable to third party Retailers' Customers.

2.4.2.3 Wheeling of Energy

All Customers considering delivery of electricity through the Niagara Peninsula Energy distribution system are required to contact Niagara Peninsula Energy for technical requirements and applicable tariffs.

2.4.3 Deposits

2.4.3.1 Account Set-up Charge

Customers will be subject to an account set-up charge as approved by the OEB.

2.4.3.2 Security Deposit

A “customer” is defined in this Deposit Policy as a consumer of electricity that does have or will be requesting an account with the Distributor to commence or continue the supply of electricity. Security Deposits will be required from all customers, to the extent permitted by the OEB’s Retail Settlement Code, and Distribution System Code, regardless of their Customer Class, and regardless of whether they are on Standard Supply Service (SSS) or they have entered into contracts with electricity retailers. The amount of the Security Deposit for each class will be calculated according to the “General Service (<50kW & >50kW Customers)” and “Residential Customers” sections described below.

Where the Customer is a party to a contract with an electricity Retailer, the following policies shall apply according to the billing option selected by the Retailer.

2.4.3.2.1 Distributor-Consolidated Billing and Standard Supply Service

Under this option, Niagara Peninsula Energy will continue to issue a bill to the Customer. Niagara Peninsula Energy is responsible for Customer non-payment risk. Niagara Peninsula Energy will impose a security deposit depending upon its assessment of the Customer's likely risk of nonpayment, according to the requirements set out below.

2.4.3.2.2 Retailer-Consolidated Billing

Under this option, Niagara Peninsula Energy will not issue a bill to a Customer. The Retailer is responsible for issuing the bill to the Customer, and for Customer non-payment risk. Niagara Peninsula Energy will not require a security deposit from the Customer. If Niagara Peninsula Energy is in possession of a Customer's Security Deposit at the time of a switch to Retailer-consolidated billing, the deposit shall be returned to the Customer.

2.4.3.2.3 Split Billing

Under this option Niagara Peninsula Energy and a Retailer shall each be responsible for Customer nonpayment risk for the bills that each issues to the Customer. If a Customer already has a deposit with Niagara Peninsula Energy, Niagara Peninsula Energy will retain a portion of the deposit amount that reflects the non-payment risk associated with the new billing option. Any excess deposit amount will be returned to the Customer. For Customers making new application for service, Niagara Peninsula Energy shall require a Security Deposit in an amount that shall depend upon Niagara Peninsula Energy assessment of the Customer's likely risk of non-payment, according to the requirements set out below.

2.4.3.2.4 Residential Customers

Every Customer requesting the establishment or maintaining delivery of electricity to the Customer's service address with Niagara Peninsula Energy shall be requested to pay a Security Deposit. Good Payment History of 1 year will exempt residential customer from payment of a deposit.

Applicable (Non-exempt) Residential Customers will be required to provide Niagara Peninsula Energy with Security Deposits in the following amounts, as applicable, prior to the commencement of service.

Deposits can be paid in up to 6 monthly installments. At time of establishing of the deposit, a payment arrangement will define the agreed number of deposit installments.

Deposits can be utilized to pay down outstanding arrears.

The maximum amount of security deposit is calculated as follows:

Customers Billed Bi-Monthly:

Billing cycle factor (1.75) x estimated bill based on the customer's average monthly load with the distributor during the most recent 12 consecutive months within the past two years.

Customers Billed Monthly:

Billing cycle factor (2.5) x estimated bill based on the customer's average monthly load with the distributor during the most recent 12 consecutive months within the past two years.

Where relevant usage information is not available for the customer for 12 consecutive months within the past two years or where the distributor does not have systems capable of making the above calculation, the customer's average monthly load shall be based on a reasonable estimate made by the distributor.

Where a customer has a payment history which discloses more than one (1) disconnection notice in a relevant 12 month period, the distributor may use that customer's highest actual or estimated monthly load for the most recent 12 consecutive months within the past 2 years for the purposes of making the calculation of maximum amount of security deposit.

Residential Customers security deposits can be prearranged in the form of cash, certified cheque, money order or Interac.

A Residential Customer will not be required to provide a security deposit to Niagara Peninsula Energy, provided that the Customer has a Good Payment History (GPH), as of the date that this policy comes into force, and provided further that the Customer maintains that Good Payment History.

A Residential Customer with a "Good Payment History" is defined as a Residential Customer that does not have any one of the following:

- (i) More than one (1) Cheque or pre-authorized payment returned for non-sufficient funds or for reasons of nonpayment initiated by the Customer in the preceding 1 year or;
- (ii) More than one (1) Disconnect Notices in the preceding 1 year or;
- (iii) More than one (1) Collection Card in the preceding 1 year;
- (iv) More than one (1) Disconnection of service in the preceding 1 year.

If the customer is a new customer to Niagara Peninsula Energy service area, a security deposit may not be required where:

- a. A customer provides a letter from another distributor or gas distributor in Canada confirming a Good Payment History with that distributor for the most recent relevant time period of 1 year.
- b. A customer, other than a customer in a >5000kW demand rate class, provides a satisfactory credit check made at the customer's expense.

Where a Residential Customer was not required to provide a security deposit, and where that Customer no longer has a Good Payment History as a result of having

exceeded any of the limits set out above, the Customer shall provide a security deposit to Niagara Peninsula Energy, in an amount calculated by the “Customers Billed Bi-monthly/Monthly” above.

Where a security deposit becomes payable by the Residential Customer, Niagara Peninsula Energy will notify the Customer that the security deposit is payable, and will add the amount of the security deposit to the next bill issued to the Customer.

2.4.3.2.5 General Service (<50kW & >50kW Customers)

Every Customer requesting the establishment or maintaining of an account with Niagara Peninsula Energy as a General Service Customer and the delivery of electricity to the Customer’s service address shall pay a security deposit prior to the commencement of service to the Customer. Good Payment History of 5 years will exempt non-residential customer in a <50kW demand rate class from payment of a deposit. Good Payment History of 7 years will exempt non-residential customer in a >50kW demand rate class from payment of a deposit.

The maximum amount of security deposit is calculated as follows:

Customers Billed Monthly:

Billing Cycle Factor (2.5) x estimated bill based on the customers average monthly load with the distributor during the most recent 12 consecutive months within the past two years.

Where relevant usage information is not available for the customer for 12 consecutive months within the past two years or where the distributor does not have systems capable of making the above calculation, the customer’s average monthly load shall be based on a reasonable estimate made by the distributor.

Customers Billed Bi-Monthly:

Billing Cycle Factor (1.75) x estimated bill based on the customers average monthly load with the distributor during the most recent 12 consecutive months within the past two years.

Where relevant usage information is not available for the customer for 12 consecutive months within the past two years or where the distributor does not have systems capable of making the above calculation, the customer’s average monthly load shall be based on a reasonable estimate made by the distributor.

Where a customer has a payment history which discloses more than one (1) disconnection notice in a relevant 12 month period, the distributor may use that customer’s highest actual or estimated monthly load for the most recent 12 consecutive

months within the past 2 years for the purposes of making the calculation of maximum amount of security deposit.

Security deposits may be prearranged in the form of any of the following:

- (i) Cash, certified cheque, money order or Interac;
- (ii) An irrevocable Letter of Credit from a Chartered Bank, Trust Company or Credit Union in a form acceptable to Niagara Peninsula Energy, valid for a minimum of 3 years with a rolling validity of a minimum of 3 months from signing date of service agreement.
- (iii) Surety Bond in a form acceptable to Niagara Peninsula Energy.

2.4.3.2.5.1 Delinquent General Service Accounts

In order to maintain an exemption to the security deposit requirement pursuant to the above, a General Service Customer must maintain its “Good Payment History”. For General Service Customers, “Good Payment History” is defined as a General Service Customer that does not have any of the following:

- (i) More than One (1) Cheque or pre-authorized payment returned for Non-Sufficient Funds or for reasons of non-payment initiated by the Customer during the relevant time period of 5 years for <50kW demand rate class or 7 years for a non-residential customer in any other rate class or;
- (ii) More than One (1) Disconnect Notices during the relevant time period of 5 years for <50kW demand rate class or 7 years for a non-residential customer in any other rate class or;
- (iii) One (1) Disconnection of service during the relevant time period of 5 years for <50kW demand rate class or 7 years for a non-residential customer in any other rate class.

If the customer is a new customer to Niagara Peninsula Energy service area, a security deposit may not be required where of 5 years for <50kW demand rate class or 7 years for a non-residential customer in any other rate class:

- a. A customer provides a letter from another distributor or gas distributor in Canada confirming a Good Payment History with that distributor for the most recent relevant time period.
- b. A customer, other than a customer in a >5000kW demand rate class, provides a satisfactory credit check made at the customer's expense.

If a General Service Customer's deposit is waived and then loses its “Good Payment History” status by exceeding any of the limits set out in above, the Customer shall provide to Niagara Peninsula Energy a security deposit from the Customer as calculated in the “General Service (<50kW & >50kW Customers)” section above.

Where a security deposit becomes payable by the General Service Customer, Niagara Peninsula Energy will notify the Customer that the security deposit is payable, and will add the amount of the security deposit to the next bill issued to the Customer.

2.4.3.2.6 Collection of Security Deposit

Security deposits are required to be paid in full when the Customer is making application for service, or prior to connection or provision of service i.e., before move-in, and in certain circumstances, as a condition of continued service. Niagara Peninsula Energy may extend special payment arrangements to those Customers unable to make full payment of the deposit, which shall not exceed equal installments paid over a six-month period.

Non-payment of the deposit will result in disconnection of the service as detailed in Section 2.2 of this Conditions of Service Agreement.

2.4.3.2.7 Security Deposit Adjustments

Security deposits will be reviewed annually and may be adjusted accordingly. The distributor will determine whether a portion or all of the security deposit will be returned or requested by the distributor on the customer's account following the adjustment. Where the maximum amount of the security deposit is to be adjusted upward, the distributor may require the customer to pay this additional amount at the same time as that customer's next regular bill comes due.

2.4.3.2.8 Retention/Refund of Deposit

Security deposits will only be refunded to a Customer, in whole or in part according to the circumstances giving rise to the refund, upon an application for a refund, and only where:

- (i) The Customer terminates its service with Niagara Peninsula Energy. The security deposit will be applied to the balance owing on the Customer's final bill, and any amount not required for this purpose will be refunded to the Customer; or
- (ii) If a Customer switches to Retailer-consolidated or split billing, in which case the security deposit will be reduced to a level set out in the Ontario Energy Board's Retail Settlement Code, after Niagara Peninsula Energy has recovered any outstanding arrears on the Customer's account.
- (iii) Security Deposits will be reviewed at least once in a calendar year to determine whether the entire amount of the security deposit is to be returned to the customer as they have obtained a (GPH) "Good Payment History" as defined above. Adjustments will be credited to the customer's account on the bill following the adjustment.

2.4.3.2.9 Interest on Security Deposit

- (i) Interest shall accrue monthly on security deposits. The interest rate shall be at the Prime Business Rate as published on the Bank of Canada website less 2 percent, updated quarterly.
- (ii) Interest accrued shall be paid out at least once every 12 months or on return or application of the security deposit or closure of the account, whichever comes first, and may be paid by crediting the account of the customer or otherwise.

2.4.4 Billing

Niagara Peninsula Energy may, at its option, render bills to its Customers on a monthly basis. Bills for the use of electrical energy may be based on either a metered Actual read, estimated read or a flat rate in accordance to the rates and charges as provided in the Ontario Energy Board's approved Tariff of rates and charges.

Niagara Peninsula Energy has the ability to accommodate:

Retailer-Consolidated Billing; in which Niagara Peninsula Energy will bill the designated Retailer for all competitive and non-competitive electricity costs incurred on behalf of the Customer;

Distributor-Consolidated Billing/Distributor Consolidated Billing; in which Niagara Peninsula Energy will issue a bill to the Customer that includes the full cost of delivered electricity, with the portion of the bill attributable to competitive electricity costs based on the contract terms between the Customer and the Retailer, or at regulated prices for Standard Supply Service;

Split Billing; in which Niagara Peninsula Energy shall issue one bill to the Customer that covers all non-competitive electricity costs, less any administrative costs paid by the Retailer. The Customer's Retailer is responsible for issuing the bill that covers the cost of competitive electricity services based on the price and other contractual terms agreed to by the Customer and the Retailer.

2.4.4.1 Estimates

In months where no reading is obtained, the Customer will be billed on usage estimated by Niagara Peninsula Energy based on historical usage for the Customer or some other quantity if no historical usage information is available.

2.4.4.2 Billing Errors

While Niagara Peninsula Energy will use its best efforts to ensure that each invoice is an accurate statement of the amount of the Customer's usage and cost of use for that billing period, billing errors can occur and invoices may not always be accurate. Niagara Peninsula Energy reserves the right to re-adjust invoices to correct any under/over billing, however the billing error was caused, whether through meter malfunction, Niagara Peninsula Energy's error or negligence or otherwise.

Billing errors will be resolved in accordance with Section 7.7 of the Ontario Energy Board's Retail Settlement Code.

2.4.4.3 Final Bills

(i) Forwarding Address:

- a) The Security deposit will be applied to reduce the final bill if the security deposit is not being transferred to a new location. If the forwarding address is within Niagara Peninsula Energy's service area and the Customer sets up a new account at new forwarding address within Niagara Peninsula Energy's service area, the Customer will be provided the option to transfer the balance to the new account or use the security deposit to pay the bill and the new security deposit will be calculated accordingly.

(ii) No Forwarding Address:

- a) The Security Deposit will be used to reduce the final bill.
- b) If the amount of the Security Deposit is not sufficient to pay the entire bill amount and the Customer moves out of Niagara Peninsula Energy's service area, Niagara Peninsula Energy staff will make an attempt to locate forwarding address, and may request the assistance of other licensed distributors. If this yields no results, the account will be referred to a collection agency.

2.4.5 Payments and Late Payment Charges

2.4.5.1 Payment of Bills

The Customer must make payment of any outstanding accounts to Niagara Peninsula Energy on the due date as identified on the bill. Where a current payment is made by mail, the payment will be deemed to be three days prior to the date on which the distributor receives the payment. Where a payment is made at a financial institution or electronically, the payment will be deemed to be made when stamped/ acknowledged by the financial institution. A partial payment will be applied to any outstanding deposit amount, second to any outstanding and finally to the current billing amounts.

2.4.5.1.1 Pre-authorized Equal Payment Plan (Budget Billing)

The Pre-authorized Equal Payment Plan is based on a 12-month period, beginning when the Customer signs up for the plan; participation in the Pre-Authorized Payment Plan is a requirement of the Equal Payment Plan.

- An equal amount is withdrawn from the Customer's bank account each month;
- Equal billing variances are reviewed each billing period, and accounts are adjusted when they vary from a pre-determined dollar amount; and
- The Customer's account is reconciled annually, and any debit or credit is rolled into the subsequent year's equal payment amount.

The failure to meet payment arrangements will result in cancellation of an equal payment plan. This includes non-payment of a security deposit.

2.4.5.2 Late Payment Charge

Late payment charges will apply to any arrears unpaid after the due date of the bill. Niagara Peninsula Energy will charge late payment charges at an interest rate approved by the Ontario Energy Board. As of the date of this Conditions of Service document, a late payment charge of 1.5% monthly will apply.

2.4.5.3 Returned Cheques

The Customer shall correct any cheque or pre-authorized payments charged back by the bank for whatever reasons immediately. Any denied payment will be reversed on the Customer's account and a returned cheque fee charged to the Customer.

Niagara Peninsula Energy will attempt to make contact with the Customer to obtain payment for any outstanding amounts owed by the Customer on account of the returned cheque, including all associated Service Charges. Should such an attempt fail, the service will be disconnected immediately (without notice) after receiving returned cheques.

2.4.5.4 Load Limiters

Load limiters may be used as alternatives to disconnecting the Customer's service from the distribution grid. The intent for the use of load limiters is that it may encourage the Customer to pay the utility bill while maintaining a minimum supply of current to operate a furnace for heating the home or providing essential service.

2.4.6 Damaged Electrical Equipment

Customers will be required to pay the cost of repair or replacement of Niagara Peninsula Energy equipment, which has been damaged through the Customer's action, neglect or any other reason.

2.5 Customer Information

A third party may request historical usage information with the written authorization of the Customer to provide their historical usage information.

Niagara Peninsula Energy will provide information appropriate for operational purposes that has been aggregated sufficiently, such that an individual's Customer information cannot reasonably be identified, at any charge to another utility, a transmitter, the IESO or the OEB. Niagara Peninsula Energy may charge a fee that has been approved by the OEB for all other requests for aggregated information.

At the request of a Customer, Niagara Peninsula Energy will provide a list of Retailers who have Service Agreements in effect within its distribution service area. The list will inform the Customer that an alternative Retailer does not have to be chosen in order to ensure that the Customer receives electricity and the terms of service that are available under Standard Supply Service.

Upon receiving an inquiry from a Customer connected to its distribution system, Niagara Peninsula Energy will either respond to the inquiry if it deals with its own distribution services or provide the Customer with contact information for the entity responsible for the item of inquiry, in accordance with chapter 7 of the Retail Settlement Code.

The access to customer information will be provided to the name(s) of the account in accordance to Niagara Peninsula Energy's Privacy Policy in compliance of the provincial and federal Private Policy Act.

2.6 General Information

2.6.1 Pole Attachments

There will be no attachments to Niagara Peninsula Energy poles without the written permission of Niagara Peninsula Energy. Such attachments will usually be limited to street lighting, Bell Canada telephone wires, CATV wires, municipal signage and designated areas as per municipal by-laws.

Notwithstanding this practice, Niagara Peninsula Energy will co-operate with community groups in the temporary installation of signs, posters, banners, etc., to promote community events. Niagara Peninsula Energy reserves the right to refuse attachments to Niagara Peninsula Energy owned utility poles. Any such attachments not approved by Niagara Peninsula Energy will be removed at the Owner's expense.

2.6.2 Service over Swimming Pools

As a safety measure, Niagara Peninsula Energy requires that electrical conductors are not located above swimming pools. Where a new or existing swimming pool is installed, it will be necessary to relocate any electrical conductors that are located directly over the proposed pool location at the Owner's expense.

2.6.3 Moving Oversized Loads

All costs incurred by Niagara Peninsula Energy relating to moving of oversized loads such as houses, tanks etc., and shall be recoverable from the applicant. A deposit based on the estimated costs will be required prior to the load being moved.

Any oversized load move may or may not be approved by Niagara Peninsula Energy. All requests for oversized load moves must be accompanied with proper permits and licenses.

2.6.4 Preventative Programs

Niagara Peninsula Energy has in place a variety of programs to help reduce the number of power interruptions and other system disturbances.

These include the following operational activities.

Tree Trimming

Trees growing near power lines on the public right of way are trimmed by Niagara Peninsula Energy contractors to ensure that the trees remain healthy, and do not grow into the power lines. Customers are asked to call Niagara Peninsula Energy regarding any tree, which appears to be interfering with a power line. Niagara Peninsula Energy staff will investigate and have the tree pruned if necessary.

Ontario One Call One Locate

Niagara Peninsula Energy requires all its excavating Customers to call before they dig. Niagara Peninsula Energy is a member of the One Call One Locate initiative. Requests for locating Niagara Peninsula Energy owned underground cables are made by contacting Ontario One Call at 1 800 400-2255. Ontario One Call passes these requests along to Niagara Peninsula Energy Locate Contractor.

As part of the One Call One Locate service this locate contractor will provide the underground locating service for Niagara Peninsula Energy, Bell Canada, Enbridge Gas, and Cogeco cable TV.

Fault Locates and Repairs

Niagara Peninsula Energy will normally fault locate and repair all utility owned secondary services without charge. In the event of damage to Niagara Peninsula Energy Utility owned underground cables, full cost to locate and repair of the fault will be charged to the responsible party. In the event that structures, pavement or landscaping make cable inaccessible the additional cost will be at the owner's expense.

2.6.5 Customer Owned Primary Lines

Customers owning primary lines are required to ensure adequate tree trimming and preventive maintenance. Where inadequate preventive maintenance or tree trimming affects the integrity of Niagara Peninsula Energy distribution system, Niagara Peninsula Energy reserves the right to disconnect the Customer-owned line, or to affect maintenance and charge the Customer for the required work. To facilitate and encourage the maintenance of Customer-owned lines, Niagara Peninsula Energy will provide a power interruption, at no charge. This no-charge service is provided during normal working hours once annually.

Tree to line clearances typically required are as follows:

Type of Line	Minimum Right of Way Clearance
Primary Voltage - Overhead (over 600 volts)	4 metres on each side of centre Line
Secondary Voltage - Overhead (under 600 volts)	1 metres on each side of centre line

Identified hazardous or high growth trees located outside the minimum right of way clearance may require additional trimming.

Prior to re-energization of a customer owned line, NPEI staff will perform an inspection to confirm that the required clearances have been achieved.

Continued vegetation maintenance on customer owned lines will remain the responsibility of the owner of the property.

2.6.6 Customer Owned Substations

Owners of private substations are required to perform regular maintenance to their electrical equipment.

To facilitate the maintenance of this equipment, Niagara Peninsula Energy will provide one power interruption, at no charge, each year at the Customer's substation. This no-charge service would be provided during normal working hours.

3 SECTION 3 - CUSTOMER CLASS SPECIFIC

3.1 Residential

This Section outlines the Regulations pertaining to customers residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, where energy is supplied single-phase, three wire, 60 hertz, having a normal voltage of 120/240 volts. Large residential services will include all services from 201 amp up to and including 400 amps, 120/240 volt, single phase, three wire.

Refer to Table 5.3 for Point of Demarcation, Standard Allowance and Connection Fees for Residential Services.

3.1.1 Electrical Service Characteristics

Conditions for service:

- a. Energy is supplied single-phase, 3 wire, 60 hertz, having a nominal voltage of 120/240 volts.
- b. Only one secondary voltage supply service (i.e. only one delivery point) will be supplied to any one urban building lot. Accessory buildings including garages do not qualify for a separate service. Where the Customer is upgrading a residential service and more than one service has been provided to a property, the Customer shall upgrade the service to a single supply.
- c. The Customer portion of the service must meet the Ontario Electrical Safety Code.
- d. Connections to new, rebuilt, or increased capacity services will be made only when the Customer has made arrangements with Niagara Peninsula Energy and Niagara Peninsula Energy has received the Electrical Safety Authority connection authorization.
- e. The Customer must obtain a "Service Location Report" (see Table 5.4) detailing meter location and delivery point from Niagara Peninsula Energy before proceeding with the installation of any service. Failure to do so may result in the delivery point having to be relocated at the Customer's expense and possible time delays. Location Reports are guaranteed effective for a period not exceeding six (6) months.

- f. Where Niagara Peninsula Energy's circuits are overhead, Niagara Peninsula Energy installs and maintains their overhead or underground service wires. The decision as to overhead or underground services shall be at the discretion of Niagara Peninsula Energy.

3.1.2 Limitations

This section will define Niagara Peninsula Energy's limitations with respect to Residential services.

3.1.2.1 Maximum Capacities

The maximum overhead service entrance capacity is 200 Amps (A) and maximum underground service capacity is 400A at 120/240V.

3.1.2.2 Minimum Capacities

The minimum service entrance capacity permissible is 100A.

3.1.2.3 Services Exceeding 200 Amp Single Phase

For services exceeding 200A single phase, 120/240 V, the Customer may be required to provide space and facilities for a distribution transformer and a meter socket on the Customer's property at their expense. The transformer is installed and maintained by Niagara Peninsula Energy and must be accessible to Niagara Peninsula Energy vehicles on the Customer's property. Niagara Peninsula Energy must first approve exceptions to this requirement.

Any voltage other than 120/240 V, single phase and any capacity over 400A shall have to be approved by Niagara Peninsula Energy.

3.1.3 Overhead Secondary Services

Niagara Peninsula Energy will install, own and maintain one (1) overhead secondary service from its circuits on the public right-of-way or Niagara Peninsula Energy's easements to the Customer's Delivery point at no charge to the Customer, if the latter is located no more than 30 metres from the Point of entry. When upgrading a service, there is no charge to the Customer.

Any other materials, additional wire or cable over 30 metres will be supplied by Niagara Peninsula Energy and billed to the Customer, including labour.

Any intermediate pole(s) will be supplied and maintained by the Customer.

If a pole line or any other attachments are required on the Customer's property to support the service wires, these will be erected and maintained by the Customer.

If a pole line is required on the Customer's property, it shall be in accordance with Section 3.5 entitled Private Pole Lines, of these Regulations and with Electrical Safety Code, latest edition.

The point of the first attachment and meter shall not be more than 3 metres from the "front" of the building. For this clause, the "front" is defined as the side of the building nearest to Niagara Peninsula Energy's Point of entry for an existing service. For any new service, the "front" is defined as the address side of the building.

The point of the first attachment on the building shall be maintained to give 5.5 metres minimum clearance on the traveled roadway portion including the shoulder when it is necessary for the service wires to cross a thoroughfare. On low buildings, where the Customer cannot provide 5.5 metres of minimum clearance and the service wires are required to cross a thoroughfare, Niagara Peninsula Energy shall provide a service pole located on the public road allowance.

3.1.4 Underground Secondary Services

Niagara Peninsula Energy will supply, install, own and maintain one (1) underground secondary service from its circuits on the public right-of-way or Niagara Peninsula Energy's easements to the Customer's delivery point at no charge to the Customer, if the latter is located no more than 30 metres from the Point of entry.

The Customer shall provide all trenching, backfilling and ducting on the entire distance from the Point of entry to Niagara Peninsula Energy's service pole or transformer, including road crossing, if necessary.

Any additional wire or cable inside the Customer's property over 30 metres will be supplied by Niagara Peninsula Energy and billed to the Customer, including labour to install.

The point of entry and meter shall be at the front of the building, it should not be more than 3 metres from the front. For any new service, the front is defined as the address side of the building.

Underground secondary services shall be buried normally at a depth of 100 cm from finished grade.

Before backfilling any electrical trench, the Customer shall contact Niagara Peninsula Energy and arrange for an inspection. Failure to do so will mean the trench will not be accepted and will have to be reopened for inspection at the Customer's expense.

For underground secondary services over 200A the Customer may have to provide space on his property for a pad mounted transformer. The location of the unit must be approved by Niagara Peninsula Energy to ensure accessibility.

3.1.5 Metering Details

This section outlines the metering details for Residential purposes.

- a. The Customer shall supply and install a meter socket, for both new and enlarged services. The specific meter socket required will be indicated on the Service Location Report issued by Niagara Peninsula Energy.
- b. Meters shall be accessible during normal working hours and in an unlocked location.
- c. When alterations, including repairs, are made to existing services and require a change of stack, conduit, wire, and the meter is indoors, these Regulations shall apply and indoor meters shall be changed to outdoor, at the Customer's expense.
- d. One meter will be provided at no charge. Any additional meters will be billed to the Customer. This charge must be paid in advance of the installation of the meters. The meters remain the property of Niagara Peninsula Energy.
- e. The Customer shall provide facilities for divided metering for multiple tenancies, outside with ganged meter sockets.
- f. A house service meter shall be provided where there are multiple occupancies with individual metering. This includes two (2) occupancies with common area or heat.
- g. All meters shall be grouped for any one building.

3.1.6 Row Type Multiple Dwellings

This Section outlines the Regulations pertaining to the supply of electrical energy to Row-Type Multiple Dwellings.

3.1.6.1 Early Consultation

As detailed regulations cannot be written which would be applicable to all cases, it is the Developer's responsibility to consult with Niagara Peninsula Energy in the early planning stages to ascertain the servicing requirements.

The Developer shall submit well in advance of commencement, the following information to Niagara Peninsula Energy:

- (a) scaled plan of row-type multiple dwellings
- (b) schedule of power requirements at defined stages of present and future development
- (c) two sets of detailed engineering plans, sealed by a Professional Engineer and approved by the municipal authority
- (d) provision to supply other types of building or recreational facilities that may be constructed in addition to the dwellings.

3.1.6.2 Type of Supply and Approval of Layout

Supply shall be provided to an electrical system, which has been designed, constructed and installed by the Owner according to Niagara Peninsula Energy's specifications.

The Owner shall obtain Niagara Peninsula Energy approval, in writing of the electrical system well in advance of construction commencement. Niagara Peninsula Energy will comment on the proposed design and recommend changes, if any, for it to be acceptable. If changes are required, a second submission of the design is mandatory for approval, free of charge. The Owner shall pay for third and subsequent submissions.

3.1.6.3 Agreements and Cost Responsibilities

The Owner is required to enter into a standard Row Type Multiple Dwelling Agreement, specific to the type of supply arranged with Niagara Peninsula Energy.

The Owner shall pay all costs associated with any design, construction, inspection, switching, energization and installation of the electrical supply carried out by Niagara Peninsula Energy. Included are costs associated with preparation and registration of the standard Agreement, License Agreement and necessary easements.

The Owner is responsible for maintenance during an initial period of one year after construction. Thereafter, Niagara Peninsula Energy maintains the installed equipment up to but not including the meter base. The Owner is responsible for all civil and restoration work during any Niagara Peninsula Energy maintenance activity.

If construction has not commenced within twelve (12) months, a new agreement shall have to be signed. The project will be treated then as a brand new project.

3.1.6.4 Supply Voltage

Niagara Peninsula Energy's normal supply voltage is 120/240 V, single phase, 3 wire.

3.1.6.5 Underground Service

The preferred supply configuration to a multiple-family dwelling is an underground service. Niagara Peninsula Energy will determine the specific supply configuration at its discretion.

3.1.6.6 Supply of Equipment by Owner

The Owner shall supply and install at their expense:

- (a) all material as outlined in Niagara Peninsula Energy specification agreement.
- (b) meter bases and service entrance conduits to Niagara Peninsula Energy's specifications.
- (c) site lighting and recreational services on the property, in accordance with the requirements of the Ontario Electrical Safety Code, latest edition. Owner's cables are to be installed and maintained by the Owner and kept separate from Niagara Peninsula Energy's equipment.

3.1.6.7 Short Circuit Interrupting Capability

The Owner shall ensure that his service entrance equipment has an adequate short circuit interrupting capability. Niagara Peninsula Energy will advise, on request, the maximum available short circuit symmetrical current at any specific location in its service territory.

3.1.6.8 Metering and Metering Sockets

Niagara Peninsula Energy owns, installs and maintains meters. Ganged meter bases must be approved by Niagara Peninsula Energy prior to installation. Where practical, all meters shall be grouped for any one building.

The Owner shall supply and install CSA approved meter sockets in accordance with Niagara Peninsula Energy specifications. The specific meter socket required will be indicated on the Service Location Report issued by Niagara Peninsula Energy

Where meters are intended to be screened, concealed, or fencing erected in the vicinity of meters, Niagara Peninsula Energy approval of the method to be used shall be obtained before construction.

In all cases, the Owner shall allow clear working space of not less than 100 centimetres in front of the socket, from grade level to 2 meters above grade.

The Owner shall clearly and permanently mark the dwelling unit numbers on all meter bases prior to energization. Any cost incurred by Niagara Peninsula Energy due to incorrect or incomplete marking shall be borne by the Owner.

The meter bases shall be complete with a security collar and disc as specified by Niagara Peninsula Energy.

One meter will be provided at no charge. If any additional meters are requested a capital contribution must be made to Niagara Peninsula Energy to cover the cost and any related charges to the installation of the same prior to installation. The meters remain the property of Niagara Peninsula Energy.

3.1.6.9 Service Size

The minimum size of service allowed to any dwelling unit shall be in accordance with the Ontario Electrical Safety Code, latest edition. For services larger than 200A, the Owner shall consult with Niagara Peninsula Energy to determine requirements.

3.1.7 Subdivisions

This Section outlines the Regulations pertaining to the supply of electrical energy to Residential Subdivisions. Residential Subdivisions are defined as subdivisions developed on the basis of registered plans with the local municipality.

3.1.7.1 Early Consultation

As detailed regulations cannot be written which would be applicable to all cases, it is the Developer's responsibility to consult with Niagara Peninsula Energy in the early planning stages to ascertain the servicing requirements.

The Developer shall submit well in advance of commencement, the following information to Niagara Peninsula Energy:

- (a) scaled plan of subdivision

(b) schedule of power requirements at defined stages of present and future development

(c) two sets of detailed engineering plans, sealed by a Professional Engineer and approved by the municipal authority

(d) provision to supply other types of building or recreational facilities that may be constructed in addition to the dwellings.

3.1.7.2 Type of Supply and Approval of Layout

Supply shall be provided to an electrical system, which has been designed, constructed and installed by the Owner according to Niagara Peninsula Energy's specifications.

Niagara Peninsula Energy will provide design and layout of the proposed subdivision electrical distribution system at the developer's expense.

All electrical systems for new Residential Subdivisions shall be underground and in PVC ducts.

All transformers shall be pad mounted.

3.1.7.3 Agreements, Cost Responsibilities, and Specifications

The Developer is required to enter into a Standard Residential Subdivision Agreement with Niagara Peninsula Energy. Documentation (specifications) is available upon request from Niagara Peninsula Energy's Engineering Department.

The Developer shall pay to Niagara Peninsula Energy all costs associated with the design, construction, inspection, switching, energization and installation of the Underground Electrical Supply System Services.

The Developer shall pay all costs associated with the preparation and registration of the Standard Residential Subdivision Agreement and necessary easements.

The Developer shall pay Niagara Peninsula Energy its share of the electrical feeder costs in the general planning area, which benefit the Developer's lands, as determined by Niagara Peninsula Energy.

At its discretion, Niagara Peninsula Energy may reimburse the Developer for feeder costs incurred which benefit other lands or developments in the general planning area.

The Developer shall pay a share of the costs for the design of a master electrical plan covering the surrounding area in which his subdivision is located, as determined by Niagara Peninsula Energy.

The Developer is responsible for the maintenance during an initial period after construction, as detailed in the standard agreement.

The Developer shall construct the electrical plant according to design and specifications for the installation of Underground Electrical Distribution Systems in Residential Subdivisions issued by Niagara Peninsula Energy.

3.1.7.4 Acceptance of Electrical Facilities Layout

The Developer shall be required to supply to Niagara Peninsula Energy written acceptance of the electrical facilities layout as designed, well in advance of construction commencement. Following this acceptance, any costs incurred by requested revisions by the Developer shall be borne by the Developer.

3.2 *General Service*

This Section outlines the Regulations pertaining to the supply of electrical energy to General Service Customers. This includes those customers within the customer classifications of General Service Less Than 50kW and General Service 50 to 4999kW.

General Service Less Than 50kW:

This class pertains to a non residential customers taking electricity at 750 volts or less whose monthly average peak demand is less than, or is forecast to be less than, 50 kW.

General Service 50 to 4,999 kW:

This classification refers to a non-residential account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW.

3.2.1 Supply and Maintenance of Transformers and Primary Switchgear

3.2.1.1 Type “A” Customers

Niagara Peninsula Energy supplies, installs and maintains transformers and associated facilities for Customers, designated as Type “A” Customers. This customer type refers to a maximum service entrance capacity of 1600 Amp and whose ultimate maximum demand will not exceed the specifications as outlined in Table 5.3 Demarcation Points.

3.2.1.2 Type “B” Customers

Customers whose maximum demand exceeds those designated as Type “A”, shall be called Type “B”, and shall supply, install and maintain on their property, a substation consisting of transformers and associated switching facilities for receiving power at the available primary voltage, three phase, 4 wire. Generally these Customers will have a service entrance exceeding 1600 Amps and require transformation. Refer to Table 5.3 for further details.

3.2.2 Early Consultation

The following information shall have to be submitted:

- (a) Required in-service date;
- (b) Voltage requirements;
- (c) Estimated initial maximum demand;
- (d) Estimated future maximum demand;
- (e) Specific listing of the types of loads for lighting, motors, welding, heating, air conditioning etc;
- (f) Electrical site plan bearing the seal of a Professional Engineer, to scale, showing the preferred location of the service entrance equipment from the point of entry to the delivery point;

- (g) Architectural site plan showing grading, trees, and other plantings;
- (h) Service Entrance Capacity, voltage rating and interrupting capabilities of the main secondary service switch;
- (i) Drawing of the main secondary distribution system, showing planned or proposed metering facilities;
- (j) Apparent power (in kVA) of the substation transformers;
- (k) Primary and secondary voltages (in Volts) of the substation transformers;
- (l) Site plan showing the proposed locations for the substation and primary voltage distribution line on the Customer's property;

The Customer must obtain a Service Location Report from Niagara Peninsula Energy, before proceeding with the installation of any service. Service Location Reports are guaranteed effective for a period not exceeding six (6) months. Failure to do so may result in the delivery point having to be relocated at the Customer's expense and possible time delays.

3.2.3 Electrical Service Characteristics

3.2.3.1 Type "A" Customers

The Customer shall be supplied at one service voltage at one delivery point to any building. There shall be only one point of entry for each land parcel except where:

- Niagara Peninsula Energy requires that a loop be completed for primary underground designs.
- Niagara Peninsula Energy considers it cost effective to supply a specific development on the property from a different supply point.

Where voltages are required by the Customer other than the standard utility supply voltage, the Customer shall supply, install and maintain its own internal transformers, including spares.

It is the Customer's responsibility to maintain a balanced, 3-phase load. Type "A" Customers requiring 3 phase power or energy, shall be supplied at one of the following nominal utilization voltages:

120/208 V	3 Phase	4 Wire
-----------	---------	--------

347/600 V

3 Phase

4 Wire

Where Niagara Peninsula Energy supplies transformation this supply shall be governed by the following conditions:

- a) The Customer shall obtain prior approval from Niagara Peninsula Energy for the use of any specific voltage at any specific location.
 - The use of 120/208 V and 600/347 V is available for 3 phase pole mounted transformers up to 150 kVA.
 - The use of 120/208 V is available for 3 phase pad mounted transformers up to 225 kVA for 4160/2400 V units and up to 500 kVA for units operating at higher standard utility primary voltages.
 - The use of 600/347 V is available for 3 phase pad mounted transformers up to 225 kVA for 4160/2400 V units and up to 1500 kVA for units operating at higher standard utility primary voltages.
- b) Where a 3 phase pole mounted transformer is supplied by Niagara Peninsula Energy, the transformer size is limited to 150 kVA and is supplied at no charge to the customer.
- c) Where a 3 phase pad mount transformer is supplied by Niagara Peninsula Energy the capital contribution to Niagara Peninsula Energy is the difference in cost between the pad mounted transformer unit cost and the unit cost of a 150kVA 3 phase pole mounted transformer.
- d) It is the Customer's responsibility to ensure that his service entrance equipment has an adequate short circuit interruption capability. Upon request, Niagara Peninsula Energy will advise the maximum available short circuit current at any specific location in its service territory.

Connections or disconnections of Niagara Peninsula Energy supply services shall not be performed by any party other than Niagara Peninsula Energy.

3.2.4 Delivery Point and Point of Entry Locations

Both the Delivery point and Point of entry locations must be approved by Niagara Peninsula Energy before proceeding with the installation of any service. Failure to do so may result in the delivery point and/or point of entry having to be relocated at the Customer's expense and possible time delays.

3.2.5 Overhead Line Construction to Type “A” Customers

3.2.5.1 Overhead Secondary Service Supply

Niagara Peninsula Energy will install, own and maintain one (1) overhead secondary service from its circuits on the public right-of-way or Niagara Peninsula Energy's easements to the Customer's Delivery point at no charge to the Customer, if the latter is located no more than 30 metres from the Point of entry.

Any other materials, additional wire or cable over 30 metres will be supplied by Niagara Peninsula Energy and billed to the Customer, including labour.

If a pole line or any other attachments are required on the Customer's property to support the service wires, these will be erected and maintained by the Customer.

If a pole line is required on the Customer's property, it shall be in accordance with Section 3.5 entitled Private Pole Lines, of these Regulations and with Electrical Safety Code, latest edition.

The point of the first attachment and meter shall not be more than 3 metres from the “front” of the building. For this clause, the “front” is defined as the side of the building nearest to Niagara Peninsula Energy's Point of entry for an existing service. For any new service, the “front” is defined as the address side of the building.

The point of the first attachment on the building shall be maintained to give 5.5 metres minimum clearance on the traveled roadway portion including the shoulder when it is necessary for the service wires to cross a thoroughfare. On low buildings, where the Customer cannot provide 5.5 metres of minimum clearance and the service wires are required to cross a thoroughfare, Niagara Peninsula Energy shall provide a service pole located on the public road allowance.

3.2.5.2 Overhead Primary Service Supply

Single phase 120/240V central metering services mounted on a customer owned pole will be permitted for new farms where the forecasted load exceeds 50kVA. The maximum allowable ampacity of a connected service is not to exceed 600A.

Three-phase central metering type services will not be permitted.

If a primary pole line is required on the Customer's property, it shall be in accordance with Section 3.5 entitled "Private Pole Lines", of these Regulations and with the Ontario Electrical Safety Code, latest edition.

3.2.6 Overhead Line Construction to Type "B" Customers

Niagara Peninsula Energy will facilitate a connection to one (1) overhead primary service from its circuits on the public right-of-way or Niagara Peninsula Energy's easements to the Customer's primary disconnect at no charge to the Customer, if the latter is located no more than one pole span from the Point of entry into the property. Before proceeding with the installation of the service, the location of the customer's primary disconnect must be approved by Niagara Peninsula Energy. Refer to Table 5.3 for further details.

If a pole line is required on the Customer's property, it shall be in accordance with Section 3.5 entitled Private Pole Lines, of these Regulations and with the Ontario Electrical Safety Code, latest edition.

3.2.7 Underground Line Construction to Type A and Type B Customers

Underground services installed by Niagara Peninsula Energy are sized according to the Customer's anticipated kilowatt demand and not necessarily as large as the size of the Customer's Service Entrance Capacity. Should future demand exceed that of Niagara Peninsula Energy's service wires, the Customer shall pay the complete cost of service replacement.

The Customer shall provide all trenching, backfilling and ducting on the entire distance from the delivery point to Niagara Peninsula Energy's service pole or transformer, including road crossing, if necessary. The installation must conform to Niagara Peninsula Energy's specifications.

Before backfilling any electrical trench, the Customer shall contact Niagara Peninsula Energy and arrange for an inspection. Failure to do so will require reopening of the trench to permit the inspection at the Customer's expense.

Niagara Peninsula Energy will supply, install and maintain secondary service cables up to a 400 amp service entrance capacity from a point no more than 3 metres back from the address front of the building to a maximum of 30 metres. Secondary cable in excess of 30 metres will be supplied by Niagara Peninsula Energy and, along with labour to install, shall be charged to the Customer. A pull box may be requested by Niagara Peninsula Energy at the building outside the service entrance to facilitate the cable installation.

Niagara Peninsula Energy will install, supply and maintain one (1) underground primary service from its circuits on the public right-of-way, or Niagara Peninsula Energy's easement to the Customer's delivery point at no charge to the Customer, if the latter is located no more than 30 metres from the point of entry. Primary cable in excess of 30 metres will be supplied by Niagara Peninsula Energy and, along with labour to install, shall be charged to the Customer.

Any outgoing primary cables and associated labour shall be Niagara Peninsula Energy's responsibility except where it is required to close an underground loop. In the case of the closure of an underground loop, the Customer will be assessed those costs.

Where Niagara Peninsula Energy has determined that cables may not be readily pulled through the duct bank, the Customer shall also supply, install and maintain a pulling manhole or pit on his property, in accordance with Niagara Peninsula Energy requirements.

Underground services installed by Niagara Peninsula Energy or its agents are maintained by Niagara Peninsula Energy, unless specifically documented otherwise to the Customer by Niagara Peninsula Energy. Following maintenance, surface restoration by Niagara Peninsula Energy will include only soil, sod, gravel or asphalt. Where damage can be shown to be the Customer's liability, maintenance and repair are at the Customer's expense.

Where Niagara Peninsula Energy supplies, installs and maintains transformers, on the Customer's property, the Customer shall:

(a) Supply, install and maintain the transformer pad and grounding in accordance with Niagara Peninsula Energy's specifications. This includes protective vehicular barriers.

(b) Supply, install and maintain secondary cables and connectors up to the transformer secondary bushings.

Note: Where it is not possible to place transformation on customer property, Niagara Peninsula Energy will supply, install and maintain secondary service cables up to a 400 Amp service entrance capacity. The customer is required to pay the total cost of the secondary service conductor in this circumstance.

(c) The Customer shall allow Niagara Peninsula Energy's vehicles unobstructed traffic rated access to the transformer location.

(d) Provide a transformer vault in lieu of a transformer pad where required by Niagara Peninsula Energy. Some examples of such special situations are:

- schools, private, public or separate

- public buildings
- buildings serviced with total underground distribution systems where there is no property to locate a pad mount transformer.

3.2.8 Equipment Rating in Customer-Owned Substations

The Customer shall supply high voltage fuses or breakers having 3 phase symmetrical short circuit capabilities in accordance with the following:

Supply Voltage (Volts)	Number of Wires	Short Circuit Capability (MVA)
2,400/4,160	4	250
4,800/8,320	4	250
8,000/13,800	4	500
16,000/27,600	4	800

Ultimate supply voltage, fuse characteristics, relay settings and surge arrester application shall be as specified by Niagara Peninsula Energy.

The Basic Impulse Levels (B.I.L.) of Customers' equipment shall be as follows:

Supply Voltage (Volts)	No. Of Wires	B.I.L. (Kilovolts)
2,400/4,160	4	60
4,800/8,320	4	95
8,000/13,800	4	110
16,000/27,600	4	125

3.2.9 Transformer Specifications When Supplied by Customer

Customers shall install transformers that are manufactured in accordance with Specification CAN/CSA C2 or C88, latest edition and Niagara Peninsula Energy's latest specification.

Niagara Peninsula Energy may specify that Customer's transformers be supplied with multiple high voltage windings, suitable for connection to two system voltages, in order

to facilitate voltage conversions. Niagara Peninsula Energy may also specify special tap settings to accommodate system voltage variations.

All customer owned transformers are subject to a transformer loss evaluation by Niagara Peninsula Energy before approved for use on its distribution system.

3.2.10 Plans and Specifications for Customer Owned Sub-Stations

In addition to obtaining the approval of the Electrical Safety Authority for substation equipment, the Customer shall also obtain Niagara Peninsula Energy approval of any components which may affect Niagara Peninsula Energy system, e.g. cables, surge arrestors, terminators, protective and switching devices etc. This approval should be obtained well in advance of tender documents being issued.

Niagara Peninsula Energy will review and approve the original and one corrected proposal for each new substation free of charge. Costs of any additional review will be charged to the Customer.

When modifications are being made to an existing substation without a substantial load increase, all costs of Niagara Peninsula Energy review and approval will be charged to the Customer.

To obtain approval the Customer shall submit to Niagara Peninsula Energy two copies of detailed plans and specifications, certified by a registered Professional Engineer, showing the following:

(a) Single line schematic diagram indicating:

- all voltages of the proposed installation
- transformer bank apparent rating (kVA), reactance, air, oil and other cooling
- protective and switching devices with short-circuit ratings

(b) Working drawings and specifications for the substation installation, including:

- detailed dimensions, in plan and elevation
- working and live parts clearances
- structures and guying for dead ending incoming lines
- material list
- interlocking schemes

(c) Survey plan and site plan indicating the location of the substation with respect to the public right-of-way

- (d) List of the lighting, motor, welding, heating and other loads
- (e) Ampere and voltage ratings of the main secondary service switch
- (f) Location and details of the metering equipment

3.2.11 Pre-Service Inspection and Energization of Customer Owned Substations

The Customer at his expense prior to energization shall submit a certified pre-service inspection report. A Contractor approved by Niagara Peninsula Energy and not by the same or affiliated Contractor responsible for the substation installation shall complete the inspection as specified by Niagara Peninsula Energy.

The report shall include the results of tests and checks as follows:

- (a) transformer oil sample test including PCB content in ppm. (parts per million)
- (b) surge arrester data
- (c) primary disconnect operation check
- (d) transformer ratio test
- (e) high potential test of primary cables
- (f) high voltage fuse test data

Following receipt of a pre-service inspection, Niagara Peninsula Energy will perform an on-site inspection and, if satisfactory, energize the substation. There will be no charge for these services if scheduled in advance, during Niagara Peninsula Energy's normal working hours, and providing it is the first inspection and energization of a new or enlarged substation.

3.2.12 Operation of Primary Disconnect Devices on Customer Owned Sub-Stations

Customers shall permit access by Niagara Peninsula Energy at all times in order to operate primary disconnect devices on Customer owned substations.

Customers may require the operation of primary disconnect devices for purposes of routine maintenance or other reasons. Niagara Peninsula Energy will do so upon receipt of a written request and recovery of all costs for work after normal hours. A minimum of one week's notice is required for planned operation of such devices.

Niagara Peninsula Energy may require Customers to enter into a written agreement pertaining to operation of primary disconnect devices. Under this agreement certain of these devices may be operated by Customers. Otherwise, under no other circumstances are Customers permitted to operate primary disconnect devices.

3.2.13 Maintenance of Customer Owned Sub-Stations

Customers are responsible for performing both regular and emergency maintenance on their substations. Customers should be aware at all times of the availability of materials and labour to perform emergency repairs in the event of a sudden substation failure. Niagara Peninsula Energy will provide advice regarding cause of failure, and will disconnect the supply, but will not repair Customer-owned substations.

3.2.14 Metering

3.2.14.1 General Requirements

Meters located inside electrical rooms must have a separate entrance with an outside door. The electrical room shall not only be accessible through the owner or the tenant's unit. Keys will be supplied and a key box will be installed to allow Niagara Peninsula Energy access at all times. All keys must be supplied before the service is energized. Niagara Peninsula Energy requires advanced notice of any modification to existing electrical rooms.

The Customer's main switch immediately preceding the meter shall be installed so that the top of the switch is 1.83 m or less from the finished floor and shall permit the sealing and padlocking of:

- (a) the handle in the "open" position; and
- (b) the cover or door in the closed position.

When a disconnect device has been locked and tagged in the "OFF" position by Niagara Peninsula Energy, under no circumstances shall anyone remove the lock and tag and energize it without first receiving approval from Niagara Peninsula Energy. All disconnected switches and circuit breakers on the line side of Niagara Peninsula Energy metering shall have provisions for pad locking.

Barriers are required in each section of switchgear or service entrance equipment between metered and unmetered conductors and/or between sections reserved for Niagara Peninsula Energy use and sections for Customer use.

No Customer equipment shall be connected to any part of Niagara Peninsula Energy metering circuit.

3.2.14.2 Single-Point Metering

When only one point of metering is required, the metering will be installed outside at or near the pad mount transformer, or on the primary supply subject to Niagara Peninsula Energy metering standards. The Customer will supply the meter socket and/or any related apparatus as specified on the Service Location Report. Installations that differ from the Service Location Report will not be connected. Any costs incurred by the Customer to correct any installation to match the Service Location Report are the Customer's responsibility.

3.2.14.3 Multi-Point Metering

When multiple points of metering are required, the meters must be located inside an electrical room. The Customer will supply the meter socket and/or any related apparatus as specified on the Service Location Report. The following conditions apply to all new and upgraded installations:

- (a) The owner shall clearly and permanently mark the unit numbers on all switches and meter sockets. A corresponding floor plan showing the unit number and location must be supplied to Niagara Peninsula Energy prior to being energized. All costs associated with correcting errors in unit assignments shall be borne by the owner of the facility.
- (b) Each individual meter located inside a building or premise requires a line side disconnecting device. The disconnecting device must incorporate a hasp that will accommodate a Niagara Peninsula Energy padlock.

3.2.15 Apartment and/or Office Buildings

The purpose of this Section is to outline the Regulations pertaining to the supply of electrical energy to apartment and/or office buildings. Apartment buildings are defined

as having more than three dwelling units with shared entrance and exit facilities above the first storey. Office buildings are defined as having three or more tenants, with no single tenant occupying more than half of the building, and having shared entrance and exit facilities above the first storey.

3.2.15.1 Underground Supply

All Apartments and/or Office Buildings shall have an underground supply through a single point of entry and subject to conditions outlined in Section 3.

The Customer must obtain a service location report from Niagara Peninsula Energy, before proceeding with the installation of any service. Service Location Reports are guaranteed effective for a period not exceeding six (6) months. Failure to do so may result in the delivery point having to be relocated at the Customer's expense and possible time delays.

3.2.15.2 Supply Voltage

An Apartment and/or Office Building are supplied at one service voltage subject to the conditions in Section 3.

3.2.15.3 Supply of Equipment

Niagara Peninsula Energy shall supply, install and maintain the following:

- primary service
- transformers and primary switchgear subject to the requirements of section 3.2.1.
- meters and associated instrument transformers

The Owner shall supply, install and maintain the following:

- transformer pad/vault and associated equipment
- concrete-encased cable duct banks from the Point of entry to the pad/vault, meeting Niagara Peninsula Energy's specifications. Where Niagara Peninsula

Energy has determined that cables may not be readily pulled through the duct bank, the Owner shall also supply, install and maintain a pulling manhole or pit, on his property, to Niagara Peninsula Energy's specifications.

- secondary service entrance equipment. For all service entrance capacities, only one main secondary disconnect device is to be installed per transformer.
- dry type transformers in those cases where special utilization voltages are required.

Niagara Peninsula Energy shall install primary cables from Niagara Peninsula Energy's distribution system to the pad/vault including splicing. Niagara Peninsula Energy shall maintain the primary cables unless specifically documented otherwise to the Owner by Niagara Peninsula Energy. Following maintenance, surface restoration by Niagara Peninsula Energy shall include soil, sod gravel or asphalt only. Where damage to primary cables can be shown to be the Owner's liability, maintenance and repair shall be at the Owner's expense.

3.2.15.4 Short Circuit Interrupting Capability

The Owner shall ensure that his service entrance equipment has an adequate short circuit interrupting capability. Niagara Peninsula Energy will advise, on request, the maximum available short circuit symmetrical current at any specific location in the service territory.

3.2.15.5 Metering

Apartments can be individually or bulk metered provided the installation meets the requirements of the Ontario Energy Board's Distribution System Code. If bulk metering is installed, provisions must be made by the customer for individual metering if required in future. Any cost associated with converting to individual metering is the responsibility of the customer.

Niagara Peninsula Energy will supply and install at the Customer's expense all meters within an apartment building.

Meters must be located inside an electrical room. The Customer will supply the meter socket and/or any related apparatus as specified on the Service Location Report. The following conditions apply to all new and upgraded installations:

- (a) The owner shall clearly and permanently mark the unit numbers on all switches and meter sockets. A corresponding floor plan showing the unit number and location must be supplied to Niagara Peninsula Energy prior to being energized.

All costs associated with correcting errors in unit assignments shall be borne by the owner of the facility.

- (b) Each individual meter located inside a building or premise requires a line side disconnecting device. The disconnecting device must incorporate a hasp that will accommodate a Niagara Peninsula Energy padlock.
- (c) A House meter must be provided where there are multiple occupancies with individual metering. This includes two (2) occupancies with common area or heat.
- (d) The owner shall clearly and permanently mark the unit numbers on all switches and meter sockets. A corresponding floor plan showing the unit number and location must be supplied to Niagara Peninsula Energy prior to being energized. All costs associated with correcting errors in unit assignments shall be borne by the owner of the facility.

3.2.16 Commercial/Industrial Plaza's

The purpose of this Section is to outline the Regulations pertaining to the supply of electrical energy to Commercial and Industrial Plazas. A Commercial or Industrial Plaza is defined as a group of two or more industrial or commercial establishments, which may be combined with dwelling units, developed as a common unit. A Plaza may consist of two or more buildings on one land parcel.

3.2.16.1 Underground Supply

All Plazas shall have an underground supply through a single point of entry.

The Customer must obtain a service location report from Niagara Peninsula Energy before proceeding with the installation of any service. Location Reports are guaranteed effective for a period not exceeding six (6) months. Failure to do so may result in the Delivery point having to be relocated at the Customer's expense and possible time delays.

3.2.16.2 Supply Voltage

A Plaza is supplied at one service voltage only.

3.2.16.3 Supply of Equipment

Niagara Peninsula Energy shall supply, install and maintain the following:

- a. primary service
- b. transformers and primary switchgear subject to the requirements of section 3.2.1.
- c. meters and associated instrument transformers

The Owner shall supply, install and maintain the following:

- a. Transformer pad/vault and associated equipment
- b. Concrete-encased cable duct banks from the Point of entry to the pad/vault, designed by the Owner to Niagara Peninsula Energy's specifications. Where Niagara Peninsula Energy has determined that cables may not be readily pulled through the duct bank, the Owner shall also supply, install and maintain a pulling manhole or pit, on his property, to Niagara Peninsula Energy's specifications.
- c. Secondary service entrance equipment. For all service entrance capacities, only one main secondary disconnect device is to be installed.
- d. dry type transformers in those cases where special utilization voltages are required.

Niagara Peninsula Energy shall install primary cables from Niagara Peninsula Energy's distribution system to the pad/vault, including splicing. Niagara Peninsula Energy shall maintain the primary cables unless specifically documented otherwise to the Owner by Niagara Peninsula Energy. Following maintenance, surface restoration by Niagara Peninsula Energy shall include soil, sod, gravel or asphalt only. Where damage to primary cables can be shown to be the Owner's liability, maintenance and repair shall be at the Owner's expense.

3.2.16.4 Short Circuit Interrupting Capability

The Owner shall ensure that his service entrance equipment has an adequate short circuit interrupting capability. Niagara Peninsula Energy will advise, on request, the maximum available short circuit symmetrical current at any specific location in the service territory.

3.2.16.5 Metering

The metering requirements for a commercial/industrial plaza are stated in Section 3.2.14 of this document.

3.2.17 Commercial/Industrial Sub-divisions

This Section outlines the Regulations pertaining to the supply of electrical energy to Commercial and Industrial Subdivisions.

The supply of distribution facilities is subject to a Power Service Study. Commercial and Industrial Subdivisions are defined as two or more commercial and industrial lots or complete subdivisions for commercial and industrial purposes.

3.2.17.1 Early Consultation

As detailed regulations cannot be written which would be applicable to all cases, it is the Developer's responsibility to consult with Niagara Peninsula Energy in the early planning stages to ascertain Niagara Peninsula Energy's requirements.

The Developer shall submit well in advance of commencement, the following information to Niagara Peninsula Energy:

- (a) firm date when the first building in the Subdivision will require permanent power.
- (b) survey plan of the lands, showing public rights-of-way and all easements required by local municipality and/or the Regional Municipality of Niagara.
- (c) general types of buildings to be constructed.
- (d) anticipated electrical loads
- (e) a written statement from the local municipality, as to whether the lands will require Site Development Plan Approval.

3.2.17.2 Underground Distribution Systems

For underground distribution systems, the following general requirements apply:

Niagara Peninsula Energy's Responsibilities

The following shall be Niagara Peninsula Energy's Responsibilities:

- (a) Design the electrical underground system of the Development.
- (b) Layout and locate all equipment and materials.
- (c) Perform all primary and secondary cable connections and/or terminations.
- (d) Review and approve all test results as submitted by the manufacturers for equipment and materials to be used in the Development.
- (e) Inspect all phases and details of Developer's work. Niagara Peninsula Energy's Inspector has the authority to refuse any work, which, in his opinion, does not conform to Niagara Peninsula Energy's standards and/or practices.

Developer's Responsibilities

The following shall be the Developer's Responsibilities per Niagara Peninsula Energy design, layout and specifications:

- (a) Order and purchase equipment and materials to Niagara Peninsula Energy's specifications.
- (b) Construct all facilities.
- (c) Dig trenches and install ducts for primary feeders.
- (d) Dig trenches and install ducts for individual secondary services from the Customer meter locations to the pad mounted transformers.
- (e) Pull secondary cables for individual locations to the pad mounted transformers.

The Developer shall construct the electrical plant according to "Specifications for the Installation of Underground Electrical Distribution Systems in Commercial and Industrial Subdivisions" issued by Niagara Peninsula Energy upon request.

3.2.17.3 Overhead Distribution Systems

For overhead distribution systems, the following general requirements apply:

Niagara Peninsula Energy's Responsibilities

The following shall be Niagara Peninsula Energy's Responsibilities:

- (a) Design the electrical system of the Development
- (b) Layout and locate all equipment and materials
- (c) Perform all primary and secondary cable connections and/or terminations
- (d) Review and approve all test results as submitted by the manufacturers for equipment and material to be used in the Development
- (e) Inspect all phases and details of Developer's work. Niagara Peninsula Energy's Inspector has the authority to refuse any work, which, in his opinion, does not conform to Niagara Peninsula Energy's standards and/or practices.

Developer's Responsibilities

The following shall be the Developer's Responsibilities per Niagara Peninsula Energy design, layout and specifications:

- (a) Order and purchase equipment and materials to Niagara Peninsula Energy's specifications.
- (b) Construct all facilities.
- (c) Dig trenches and install ducts for individual underground primary / secondary services from the pole mounted or pad mounted transformers to the customer's service entrance.
- (e) Pull secondary cables for individual locations from the pole mounted or pad mounted transformers to the customer's service entrance.

The Developer shall construct the electrical plant according to "Specifications for the Installation of Overhead Electrical Distribution Systems in Commercial and Industrial Subdivisions" issued by Niagara Peninsula Energy upon request.

3.2.17.4 Acceptance of Electrical Facilities Layout

The Developer shall be required to supply to Niagara Peninsula Energy written acceptance of the electrical facilities layout as designed, well in advance of construction commencement. Following this acceptance, any costs incurred by requested revisions by the Developer shall be borne by the Developer.

3.2.17.5 Agreements, Cost Responsibilities and Specifications

The Developer is required to enter into a Standard Commercial and Industrial Subdivision Agreement with Niagara Peninsula Energy. Documentation is available upon request.

The Developer shall pay to Niagara Peninsula Energy all costs associated with the design, construction, inspection, switching, energization and installation of the Electrical Distribution System.

The Developer shall pay all costs associated with the preparation and registration of the Standard Commercial and Industrial Subdivision Agreement and necessary easements.

The Developer shall pay Niagara Peninsula Energy a share of the electrical feeder costs in the general planning area, which benefit the Developer's lands, as determined by Niagara Peninsula Energy.

Niagara Peninsula Energy, at its discretion, may reimburse the Developer for feeder costs incurred which benefit other lands or developments in the general planning area.

The Developer shall pay a share of the costs for the design of a master electrical plan covering the surrounding area in which his subdivision is located, as determined by Niagara Peninsula Energy.

The Developer is responsible for the maintenance during an initial period after construction, as detailed in the standard agreement.

3.2.18 Transformer Vaults

The purpose of this section is to outline the regulations pertaining to Customer owned transformer vaults.

3.2.18.1 Vault Requirements

The Owner shall submit to Niagara Peninsula Energy's, details of all vault requirements for approval well in advance of installation commencement.

The Customer shall supply, install and maintain the vault in accordance with applicable Federal, Provincial, and Municipal codes, as well as this Niagara Peninsula Energy's and the Electrical Safety Authority's installation and safety requirements.

Specific items subject to Niagara Peninsula Energy review and approval shall be:

- Vault location, access and working clearances.
- Vault Ventilation
- Vault drainage
- Lighting and convenience outlets
- Vault Doors.
- Provisions for Niagara Peninsula Energy temporary working grounds

3.2.18.2 Access to Vaults

The Customer shall allow Niagara Peninsula Energy's authorized personnel access to the transformer vault at all times, and shall prevent unauthorized persons from entering.

The Customer shall allow Niagara Peninsula Energy's vehicles unobstructed traffic rated access to the doors of the vault.

3.2.18.3 Maintenance and Costs

Niagara Peninsula Energy shall maintain all Niagara Peninsula Energy owned equipment within the vault.

General maintenance of the vault as well as Customer owned equipment shall be the responsibility of the Customer \ Owner.

3.3 Temporary Services

The purpose of this Section is to outline the Regulations pertaining to the supply of electrical energy on a temporary basis. This supply is used for construction purposes pending permanent installations. The delivery point shall not exceed 10 metres from the point of entry (Property Line). If the delivery point exceeds 10 metres from the point of entry, a private line is required as covered in Section 3.5.

3.3.1 Early Consultation

As detailed regulations cannot be written which would be applicable to all cases, it is the Owner's responsibility to consult with Niagara Peninsula Energy in the early planning stages to ascertain Niagara Peninsula Energy's requirements.

The Owner shall submit the following information to Niagara Peninsula Energy:

- (a) required in-service date
- (b) voltage requirements
- (c) estimated maximum demand
- (d) specific listing of the types of loads for lighting, motor, heating, air conditioning, etc.
- (e) plot plan, to scale, showing the proposed Delivery point location relative to the public right of way and property lot lines.

3.3.2 Service Entrance Location

The delivery point location shall have to be specified by Niagara Peninsula Energy before proceeding with the installation of any service. Failure to acquire a service location report from Niagara Peninsula Energy may result in the delivery point having to be relocated at the Customer's expense and possible time delays.

Service Location Reports shall be valid for a period of six months only, from the date of issue.

3.3.3 Installation and Removal

Niagara Peninsula Energy shall:

(a) install and remove all temporary services, except private pole lines, as covered in Section 3.5.

(b) charge the Owner a fee when a temporary service is supplied from an existing Niagara Peninsula Energy circuit of adequate capacity. The delivery point shall not exceed 10 meters from the Point of entry (Property Line).

(c) supply to the Owner, upon request, estimates for installation and removal charges for all temporary services.

The Owner shall pay, in advance, 100 percent of the estimated installation and removal costs.

Total actual costs will be calculated upon removal of the service.

3.3.4 Supply of Transformers

Niagara Peninsula Energy supplies, installs and maintains transformers up to 100 kVA single phase, and 500 kVA, 3-phase, at the Owner's expense, providing they are available from Niagara Peninsula Energy's normal inventory.

The transformer size actually supplied in any specific situation will be dependent upon the size being available from Niagara Peninsula Energy's normal inventory.

The Owner shall supply, install and maintain transformers larger than 100 kVA single-phase or 500 kVA three-phase, or any transformers required which are not available from Niagara Peninsula Energy's normal inventory.

3.3.5 Metering

The metering requirements for a temporary service are stated in Section 3.2.14 of this document.

3.3.6 Temporary Pole Requirements

Where a temporary service pole is required on the Owner's property, it shall be supplied by the Owner at his/her expense meeting the following requirements:

- (a) Pole heights and classes as per Section 3.5
- (b) The installation must meet the requirements of the Electrical Safety Authority

3.4 Motors

This Section outlines the Regulations pertaining to the starting requirements of induction motors. This is necessary to prevent disturbances that may reflect in Niagara Peninsula Energy's circuits.

Note: Supply voltage refers to the voltage at the Delivery point.

3.4.1 Review of Requirements

A Customer must submit the characteristics of any proposed motor installations to Niagara Peninsula Energy for review. Otherwise, all of the following articles shall apply.

3.4.2 Single Phase Motors

Motors connect at 120/240 V, single phase, shall not draw a maximum inrush current exceeding 75 A. With inrush currents up to these limits, across the line starting of single-phase motors is permitted.

Above this limit, motor characteristics shall have to be submitted to Niagara Peninsula Energy for review.

3.4.3 Three Phase Motors

Three phase induction motors can be started across the line within the limits shown in the following table:

Supply Voltage (Volts)	No. Of Wires	Maximum Horsepower (HP)
120/208	4	10
347/600	4	20
2,400/4,160	4	50
4,800/8,320	4	50
8,000/13,800	4	100
16,000/27,600	4	100

Above these limits, motor characteristics shall have to be submitted to Niagara Peninsula Energy for review.

3.4.4 Information Needed

When proposed motor installations exceed the limits outlined in this section, the Customer shall submit the following details to Niagara Peninsula Energy:

- (a) number and types of motors, including any interlocking schemes
- (b) connected voltage
- (c) method of starting; either across the line, or reduced voltage
- (d) maximum inrush currents at staged and full voltage
- (e) frequency of starts per minute, hour or day, and the duration of the start cycle
- (f) details of any motor installations, which may produce unacceptable voltage dips and/or harmonics in Niagara Peninsula Energy's circuits

3.4.5 Reduced Voltage Starting

The Customer shall provide information to Niagara Peninsula Energy regarding the type of starter and the number and value of voltage increments for review.

3.4.6 Electrical Disturbances

Any undesirable disturbance caused by a customer's connected motor load shall be subject to the requirements of Section 2.3.3.

3.5 *Line Extensions and Private Pole Lines*

3.5.1 Line Extensions

Line extensions are defined as those pole lines constructed on a public right of way. Line extensions are subject to a capital contribution economic evaluation and may require a capital contribution by the requesting party before construction begins. Niagara Peninsula Energy will provide the Customer an estimate of costs for these undertakings. The Customer may have the option of contracting construction of the extension to another suitable party subject to the terms and conditions contained within the Distribution System Code. In this case Niagara Peninsula Energy must approve the design, and a Niagara Peninsula Energy pre-approved contractor must construct the line. Niagara Peninsula Energy will provide a list of pre-approved contractors to the Customer.

3.5.2 Private Pole Lines

The purpose of this Section is to outline the Regulations pertaining to the design and construction of privately owned poles, lines and attachments on private property. These are to be used for the supply of electrical energy and may accommodate Niagara Peninsula Energy-owned transformers, metering units, protective devices and/or other necessary equipment.

3.5.2.1 Owner Responsibility

Where a Private Pole Line is required, the Owner shall supply, install and maintain the line at his expense.

All electrical wiring and equipment apart from those items specifically installed by Niagara Peninsula Energy belong to and are the responsibility of the Customer. Upon request, Niagara Peninsula Energy will disconnect and reconnect its supply so that the Customer can perform maintenance.

Niagara Peninsula Energy does provide emergency service to determine the cause of electrical failure where in the opinion of Niagara Peninsula Energy, or as specifically set out elsewhere in this Regulation, such service is warranted. Where Niagara Peninsula Energy makes temporary or permanent repairs to a Customer's circuits or equipment, Niagara Peninsula Energy will render a charge.

The provision of emergency services does not relieve the Customer of his responsibility to maintain his circuits and equipment in safe and efficient conditions.

Where Niagara Peninsula Energy makes temporary repairs in an emergency to a Customer's circuits or equipment, it is the Customer's responsibility to have permanent repairs made as soon as possible. The repairs are subjected to inspection and approval by the Electrical Safety Authority.

3.5.2.2 Location Approval

The Owner shall contact Niagara Peninsula Energy to obtain a service location report prior to commencement of line construction. Failure to do so may require that the pole line be relocated resulting in additional expense to the Owner and possible time delays.

Service Location Reports shall be valid for a period of six (6) months only, from the date of issue.

3.5.2.3 Submission of Drawings

Drawings bearing the seal of a Professional Engineer, of the proposed installation shall be submitted to Niagara Peninsula Energy during the early planning stages of the project for approval before commencement of the work. These drawings shall indicate the following:

- (a) location of the line on a scaled plot plan, including public rights-of-way, lot lines and adjacent obstructions such as fences, buildings, trees or other equipment
- (b) voltage rating of the proposed line
- (c) pole heights and specifications
- (d) guying arrangements
- (e) clearances between conductors
- (f) conductor sizes and material
- (g) location of transformers
- (h) fusing

3.5.2.4 Pole Lines Specifications

Specifications shall be obtained from Niagara Peninsula Energy for each project before submitting drawings for approval. The following general requirements apply:

- (a) pole lines shall be constructed and guyed at each end independently from Niagara Peninsula Energy's lines. An additional guy wire may be required on the first pole to resist the angular tension from Niagara Peninsula Energy's nearest pole
- (b) All the poles on the line and the transformer pole shall be of a height and class as specified by Niagara Peninsula Energy
- (c) the first pole shall be within 20 metres of the Point of entry (Property line). The first pole shall be located such that conductors from Niagara Peninsula Energy pole shall not trespass aerially over adjacent lands
- (d) maximum span length between poles shall not exceed 60 metres

(e) all clearances and insulation levels must be designed for Niagara Peninsula Energy's line-to line voltage

(f) minimum horizontal clearance of 3 metres shall be required between any lot line and the nearest phase conductor. Clearances between phase conductors and adjacent buildings and structures shall be in accordance with the Ontario Electrical Safety Code, latest edition.

(g) minimum pole classes and dimensions for poles on private property shall be:

- For secondary lines up to and including 600 V; provide Class 4, 11 metre (35 Foot) poles.
- For Single Phase primary lines up to and including 16,000 V; provide minimum Class 4, 12.5 metre (40 foot) poles.
- For Three phase shall be primary lines up to and including 27,600 V; provide minimum Class 4, 14 metre (45 foot) poles.

Note: All transformer poles shall conform to the applicable phase and voltage requirements and additionally shall be minimum Class 3.

(h) The customer installation is subject to inspection and approval by the Electrical Safety Authority.

3.6 *Embedded Generation*

The connection and operation of a Customer's embedded generator must not endanger workers or jeopardize public safety, or adversely affect or compromise equipment owned or operated by Niagara Peninsula Energy, or the security, reliability, efficiency and the quality of electrical supply to other Customers connected to Niagara Peninsula Energy's distribution system.

The generation customer must meet the technical requirements outlined in the document: "Connecting Embedded Generation to Niagara Peninsula Energy's Electrical Distribution System".

An Embedded Generator must enter into a Connection Agreement in a form acceptable to Niagara Peninsula Energy prior to connection of generation facilities to Niagara Peninsula Energy's distribution system.

3.7 *Embedded Market Participant*

Under the “Market Rules for the Independent Electricity System Operator”, Chapter 2, section 1.2.1, “No persons shall participate in the IESO-administered markets or cause or permit electricity to be conveyed into, through or out of IESO-controlled grid unless that person has been authorized by the IESO to do so”.

All Embedded Market Participants, within the service jurisdiction of Niagara Peninsula Energy, once approved by the IESO are required to inform Niagara Peninsula Energy of their approved status in writing, 30 days prior to their participation in the Ontario Electricity Market.

An Embedded Market Participant shall enter into a Connection Agreement in a form acceptable to Niagara Peninsula Energy and agreed to be bound by all of the Connection Agreement Terms and Conditions.

3.8 *Embedded Distributor*

All embedded distributors within the service jurisdiction of Niagara Peninsula Energy are required to inform Niagara Peninsula Energy of their status in writing 30 days prior to the supply of energy from Niagara Peninsula Energy. The terms and conditions applicable to the connection of an embedded distributor shall be included in the Connection Agreement with Niagara Peninsula Energy.

3.9 *Unmetered Connections*

This section refers to the following rate classifications.

Street Lighting:

This classification refers to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting operation, controlled by photocells. Street lighting profile is derived through the use of the Ontario Energy Board’s approved specification consistent with the model type and product manufacturer of devices currently in service in the Applicant’s distribution area, to simulate the exact daily conditions that the typical street light is exposed to. This simulated street light load is captured using an interval metering device, and is

processed as part of the distributor's daily interval meter interrogation, validation and processing procedures.

Unmetered Scattered Load:

This classification refers to an account taking electricity at 750 volts or less whose monthly average peak demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power supplies, bus shelters, telephone booths, traffic lights, railway crossings, etc. The customer will provide detailed manufacturer information/documentation with regard to electrical demand/ consumption of the proposed unmetered load.

Sentinel Lighting:

This classification refers to accounts that are an unmetered lighting load supplied to a sentinel light.

3.9.1 Street Lighting

All services supplied to street lighting equipment owned by or operated for a municipality or the Province of Ontario shall be classified as Street Lighting Service. For rate structure details refer to Niagara Peninsula Energy's approved Tariff of Rates and Charges.

Street Lighting plant, facilities, or equipment owned by the Customer are subject to the Ontario Electrical Safety Code.

Costs related to the Connections of Street Lighting will be charged to the customer consistent with the Ownership Demarcation Point defined in Table 5.3 for various Street Lighting Distribution systems.

3.9.2 Traffic signals, Bus Shelter, and all other Unmetered Scattered Load

Each service is reviewed individually and is connected to Niagara Peninsula Energy's low voltage distribution system. An Electrical Safety Authority "Authorization to Connect" is required prior to connecting the service.

The Ownership Demarcation point is as follows:

- For Overhead - the top of the Customer's service standpipe/mast.
- For Underground – the line side of the fuse in the first hand well, tap box, junction box (as applicable) beyond Niagara Peninsula Energy's plant.

The basic connection entitlement covers the cost of connection from the demarcation point described above to Niagara Peninsula Energy's distribution system. Connection costs above and beyond the basic connection entitlement (e.g. one span of Overhead service lines or Underground conduit and associated service cables) will be charged to the customer.

4 SECTION 4 - GLOSSARY OF TERMS

In general, these definitions have been taken directly from the Distribution System Code.

Sources for Definitions:

A Electricity Act, 1998, Schedule A, Section 2, Definitions

Market Rules for the Ontario Electricity Market, Chapter 11, Definitions

Transitional Distribution License, Part I, Definitions

Transitional Transmission License, Part I, Definitions

Distribution System Code Definitions

Retail Settlement Code Definitions

“Accounting Procedures Handbook” means the handbook approved by the Board and in effect at the relevant time, which specifies the accounting records, accounting principles and accounting separation standards to be followed by the Distributor; (TDL, DSC)

“Affiliate Relationships Code” means the code, approved by the Board and in effect at the relevant time, which among other things establishes the standards and conditions for the interaction between electricity Distributors or transmitters and their respective affiliated companies; (TDL, DSC)

“Ancillary Services” means services necessary to maintain the reliability of the IESO controlled grid; including frequency control, voltage control, reactive power and operating reserve services; (MR, TDL, DSC)

“Apartment Building” means a structure containing four or more dwelling units having access from an interior corridor system or common entrance;

“Apparent Power” means the total power measured in kiloVolt Amperes (kVA);

“Application for Service” means the agreement or contract with Niagara Peninsula Energy under which electrical service is requested;

“Bandwidth” means a Distributor’s defined tolerance used to flag data for further scrutiny at the stage in the VEE (validating, estimating and editing) process where a current reading is compared to a reading from an equivalent historical billing period.

For example, a 30 percent bandwidth means a current reading that is either 30 percent lower or 30 percent higher than the measurement from an equivalent historical billing period is identified by the VEE process as requiring further scrutiny and verification; (DSC)

“Billing Demand” means the metered demand or connected load after necessary adjustments have been made for power factor, intermittent rating, transformer losses and minimum billing. A measurement in kiloWatts (kW) of the maximum rate at which electricity is consumed during a billing period;

“Board” or “OEB” means the Ontario Energy Board; (A, TDL, DSC)

“Building” means a building, portion of a building, structure or facility;

“Canadian Standards Association (“CSA”) with reference to Standard CAN3-C235-87 (latest edition);

“Complex Metering Installation” means a metering installation where instrument transformers, test blocks, recorders, pulse duplicators and multiple meters may be employed; (DSC)

“Conditions of Service” means the document developed by a Distributor in accordance with subsection 2.4 of the Code that describes the operating practices and connection rules for the Distributor; (DSC)

“Connection” means the process of installing and activating connection assets in order to distribute electricity to a Customer; (DSC)

“Connection Agreement” means an agreement entered into between a Distributor and a person connected to its distribution system that delineates the conditions of the connection and delivery of electricity to that connection; (DSC)

“Connection Assets” means that portion of the distribution system used to connect a Customer to the existing main distribution system, and consists of the assets between the point of connection on a Distributor’s main distribution system and the Ownership demarcation point with that Customer; (DSC)

“Consumer” means a person who uses, for the person’s own consumption, electricity that the person did not generate; (A, MR, TDL, DSC)

“Customer” means a person that has contracted for or intends to contract for connection of a building. This includes developers of residential or commercial subdivisions; (DSC) For the purpose of this Agreement, Customer and Owner will be considered as one and the same;

“Delivery Point” the point at which Niagara Peninsula Energy delivers power or energy to the Customer owned equipment (customer service entrance)

“Demand” means the average value of power measured over a specified interval of time, usually expressed in kilowatts (kW). Typical demand intervals are 15, 30 and 60 minutes; (DSC)

“Demand Meter” means a meter that measures a Consumer’s peak usage during a specified period of time; (DSC)

“Developer” means a person or persons owning property for which new or modified electrical services are to be installed;

“Disconnection” means a deactivation of connection assets that result in cessation of distribution services to a Consumer; (DSC)

“Distribute”, with respect to electricity, means to convey electricity at voltages of 50 kilovolts or less; (A, MR, TDL, and DSC)

“Distributor”, otherwise known as Niagara Peninsula Energy Inc.

“Distribution Losses” means energy losses that result from the interaction of intrinsic characteristics of the distribution network such as electrical resistance with network voltages and current flows; (DSC)

“Distribution Loss Factor” means a factor or factors by which metered loads must be multiplied such that when summed equal the total measured load at the supply point(s) to the distribution system; (RSC)

“Distribution Services” means services related to the distribution of electricity and the services the Board has required Distributors to carry out, for which a charge or rate has been approved by the Board under section 78 of the Ontario Energy Board Act; (RSC, DSC)

“Distribution System” means a system for distributing electricity, and includes any structures, equipment or other things used for that purpose. A distribution system is comprised of the main system capable of distributing electricity to many Customers and the connection assets used to connect a Customer to the main distribution system; (A, MR, TDL, and DSC)

“Distribution System Code” means the code, approved by the Board, and in effect at the relevant time, which, among other things, establishes the obligations of the Distributor with respect to the services and terms of service to be offered to Customers and Retailers and provides minimum technical operating standards of distribution systems; (TDL, DSC)

“Duct Bank” means two or more ducts that may be encased in concrete used for the purpose of containing and protecting underground electric cables;

“Early Consultation” means information must be made available Niagara Peninsula Energy prior to any work being processed by the Engineering Department of Niagara Peninsula Energy. Customers (or Customer's Representatives, Architects, Consultants, Electricians) shall consult with Niagara Peninsula Energy in the early planning stages to ascertain what Niagara Peninsula Energy facilities and voltages are available at the specific location;

“Easement” is a legal document signed by the Owner of the Lands, any mortgages and Niagara Peninsula Energy, and registered against the lands. The easement document details all the rights and responsibilities of all parties concerned;

“Electricity Act” means the Electricity Act, 1998, S.O. 1998, c.15, Schedule A; (MR, TDL, DSC)

“Electrical Safety Authority” or “ESA” means the person or body designated under the Electricity Act regulations as the Electrical Safety Authority; (A)

“Electric Service” means the Customer's conductors and equipment for energy from Niagara Peninsula Energy;

“Electronic Metering System” means a computerized tracking system that is used in an apartment or multi-unit complex through Customer supply of a modem and a private phone line to the main computer for the purpose of reading all the customer accounts. (e.g. Carma Solid State)

“Embedded Distributor” means a Distributor who is not a wholesale market participant and that is provided electricity by a host Distributor; (RSC, DSC)

“Embedded Generator” or “Embedded Generation Facility” means a generator whose generation facility is not directly connected to the IESO-controlled grid but instead is connected to a distribution system; (DSC)

“Embedded Retail Generator” means an embedded generator that settles through a Distributor's retail settlements system and is not a wholesale market participant; (DSC)

“Embedded Wholesale Consumer” means a Consumer who is a wholesale market participant whose facility is not directly connected to the IESO-controlled grid but is connected to a distribution system; (DSC)

“Embedded Wholesale Generator” means an embedded generator that is a wholesale market participant; (DSC)

“Emergency” means any abnormal system condition that requires remedial action to prevent or limit loss of a distribution system or supply of electricity that could adversely affect the reliability of the electricity system; (DSC)

“Emergency Backup” means a generation facility that has a transfer switch that isolates it from a distribution system; (DSC)

“Energy” means the product of power multiplied by time, usually expressed in kilowatt-hours (kWh);

“Energy Competition Act” means the Energy Competition Act, 1998, S.O. 1998, c.15; (MR)

“Energy Diversion” (also known as “Power Diversion”) means the electricity consumption unaccounted for but that can be quantified through various measures upon review of the meter mechanism, such as unbilled meter readings, tap off load(s) before revenue meter or meter tampering;

“Enhancement” means a modification to an existing distribution system that is made for purposes of improving system operating characteristics such as reliability or power quality or for relieving system capacity constraints resulting, for example, from general load growth; (DSC)

“Expansion” means an addition to a distribution system in response to a request for additional Customer connections that otherwise could not be made; for example, by increasing the length of the distribution system; (DSC)

“Extreme Operating Conditions” means extreme operating conditions as defined in the Canadian Standards Association (“CSA”) Standard CAN3-C235-87 (latest edition);

“Four-Quadrant Interval Meter” means an interval meter that records power injected into a distribution system and the amount of electricity consumed by the Customer; (DSC)

“General Service” means any service supplied to premises other than those designated as Residential and less than 50kW, Large User, or Municipal Street Lighting. This includes multi-unit residential establishments such as apartments buildings supplied through one service (bulk-metered);

“Generate”, with respect to electricity, means to produce electricity or provide ancillary services, other than ancillary services provided by a transmitter or Distributor through the operation of a transmission or distribution system; (A, TDL, DSC)

“Generation Facility” means a facility for generating electricity or providing ancillary services, other than ancillary services provided by a transmitter or Distributor through the operation of a transmission or distribution system, and includes any structures, equipment or other things used for that purpose; (A, MR, TDL, DSC)

“Generator” means a person who owns or operates a generation facility; (A, MR, TDL, DSC)

“Geographic Distributor,” with respect to a load transfer, means the Distributor that is licensed to service a load transfer Customer and is responsible for connecting and billing the load transfer Customer; (DSC)

“Good Utility Practice” means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in North America during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good practices, reliability, safety and expedition.

Good utility practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in North America; (MR, DSC)

“Holiday” means a Saturday, Sunday, Statutory holiday, or any day that the Board's offices are closed;

“Host Distributor” means the registered wholesale market participant Distributor who provides electricity to an embedded Distributor; (RSC, DSC)

“House Service” means that portion of the electrical service in a multiple occupancy facility which is common to all occupants, (i.e. parking lot lighting, sign service, corridor and walkway lighting, et cetera);

“IEEE” means Institute of Electrical and Electronics Engineers;

“IESO” means the Independent Electricity Market Operator established under the Electricity Act; (A, TDL, DSC)

“IESO-Controlled Grid” means the transmission systems with respect to which, pursuant to agreements, the IESO has authority to direct operation; (A, TDL, DSC)

“Interval Meter” means a meter that measures and records electricity use on an hourly or sub-hourly basis; (RSC, DSC)

“Large User” means a Customer with a monthly peak demand of 5000 kW or greater, regardless the demand occurs in the peak or off-peak periods, averaged over 12 months;

“Load Factor” means the ratio of average demand for a designated time period (usually one month) to the maximum demand occurring in that period;

“Load Transfer” means a network supply point of one Distributor that is supplied through the distribution network of another Distributor and where this supply point is not considered a wholesale supply or bulk sale point; (DSC)

“Load Transfer Customer” means a Customer that is provided distribution services through a load transfer; (DSC)

“Main Service” refers to Niagara Peninsula Energy’s incoming cables, bus duct, and disconnecting and protective equipment for a Building or from which all other metered sub-services are taken;

“Market Participant” has the meaning prescribed in the Market Rules;

“Market Rules” means the rules made under section 32 of the Electricity Act; (MR, TDL, DSC)

“Measurement Canada” means the Special Operating Agency established in August 1996 by the Electricity and Gas Inspection Act, 1980-81-82-83, c. 87, and Electricity and Gas Inspection Regulations SOR/86-131; (DSC)

“Meter Installation” means the meter and, if so equipped, the instrument transformers, wiring, test links, fuses, lamps, loss of potential alarms, meters, data recorders, telecommunication equipment and spin-off data facilities installed to measure power past a meter point, provide remote access to the metered data and monitor the condition of the installed equipment; (RSC, DSC)

“Meter Service Provider” means any entity that performs metering services on behalf of a Distributor; (DSC)

“Meter Socket” means the mounting device for accommodating a socket type revenue meter;

“Metering Services” means installation, testing, reading and maintenance of meters; (DSC)

“MIST Meter” means an interval meter from which data is obtained and validated within a designated settlement timeframe. MIST refers to “Metering Inside the Settlement Timeframe;” (RSC, DSC)

“MOST Meter” means an interval meter from which data is only available outside of the designated settlement timeframe. MOST refers to “Metering Outside the Settlement Timeframe;” (RSC, DSC)

“Multiple Dwelling” means a Building, which contains more than one self-contained dwelling unit;

“Municipal Street Lighting” means all services supplied to street lighting equipment owned and operated for a municipal corporation;

“Niagara Peninsula Energy” shall mean Niagara Peninsula Energy Inc. the local electric distribution company for the City of Niagara Falls, Town of Lincoln, Township of West Lincoln, and Town of Pelham (village of Fonthill) service territory;

“Niagara Peninsula Energy Meter Department Quality Management System Manual” means an accredited manual of service procedures and guidelines formulated for the use and practice of the Meter Department of Niagara Peninsula Energy, approved by Measurement Canada. For the purpose of this Agreement, the referenced section is Document NFHMD 226 - Dispute Meters: to ensure that all disputes on Niagara Peninsula Energy meters and metering installations are resolved in a fair and equitable manner in accordance with the Electricity & Gas Inspection Act, and to provide a service to MSO Clients for testing of their dispute meters;

“Non-Competitive Electricity Costs” means costs for services from the IESO that are not deemed by the Board to be competitive electricity services plus costs for distribution services, other than Standard Supply Service (SSS); (RSC)

“Normal Operating Conditions” means the operating conditions comply with the standards set by the Canadian Standards Association ("CSA") Standard CAN3-C235-87 (latest edition);

“Ontario Energy Board Act” means the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B; (MR, DSC)

“Operational Demarcation Point” means the physical location at which a Distributor’s responsibility for operational control of distribution equipment including connection assets ends at the Customer; (DSC)

“Overhead Distribution System” means all the facilities on overhead improved-appearance pole lines on public rights-of-way, plus all underground road crossings, in ducts, as specified by Niagara Peninsula Energy;

“Overhead Street Lighting System” means all the facilities required to illuminate all public streets, roads and/or other rights-of-way as determined by the City of Niagara Falls and Niagara Peninsula Energy, using the pole line of the Overhead Distribution System;

“Ownership Demarcation Point” means the physical location at which a Distributor’s Ownership of distribution equipment including connection assets ends at the Customer; (DSC)

“Performance Standards” means the performance targets for the distribution and connection activities of the Distributor as established by the Board pursuant to the Ontario Energy Board Act and in the Rate Handbook; (DSC)

“Person” includes an individual, a corporation, sole proprietorship, partnership, unincorporated organization, unincorporated association, body corporate, and any other legal entity;

“Physical Distributor” with respect to a load transfer, means the Distributor that provides physical delivery of electricity to a load transfer Customer, but is not responsible for connecting and billing the load transfers Customer directly; (DSC)

“Plaza” means any Building containing two or more commercial business tenants;

“Point of Entry” means the point at which circuits cross from the public right of way or Niagara Peninsula Energy easements, to private property;

“Point of Supply” with respect to an embedded generator, means the connection point where electricity produced by the generator is injected into a distribution system; (DSC)

“Power Factor” means the ratio between Real Power and Apparent Power (i.e. kW/kVA);

“Power Service Study” means a Power Service Study is a cost recovery analysis that determines the difference in cost between the Customers Basic Entitlement and the investment made by Niagara Peninsula Energy to provide such service. This method of investment recovery is designed to be fair and equitable to both Customers and Niagara Peninsula Energy;

“Pre-registered or Registered Plan” means a plan of development of surveyed lands, prepared by the Developer, and approved by the City of Niagara Falls, the Regional Municipality of Niagara and the Ontario Ministry of Housing and registered at the Registry Offices or Land Titles Division Offices;

“Primary Service” means any service, which is supplied with a nominal voltage greater than 750 volts;

“Private Property” means the property beyond the existing public street allowances;

“Rate” means any rate, charge or other consideration, and includes a penalty for late payment; (TDL, DSC)

“Rate Handbook” means the document approved by the Board that outlines the regulatory mechanisms that will be applied in the setting of Distributor rates; (RSC, DSC)

“Reactive Power” means the power component which does not produce work but is necessary to allow some equipment to operate, and is measured in kiloVolt Amperes Reactive (kVAR);

“Real Power” means the power component required to do real work, which is measured in kiloWatts (kW);

“Regulations” means the regulations made under the *Ontario Energy Board Act* or the *Electricity Act*; (TDL, DSC)

“Residential Service” means a service, which is less than 50kW supplied to single-family dwelling units that is for domestic or household purposes, including seasonal occupancy. At Niagara Peninsula Energy’s discretion, residential rates may be applied to apartment buildings with 6 or less units by simple application of the residential rate or by blocking the residential rate by the number of units;

“Retail” with respect to electricity means,

- a) to sell or offer to sell electricity to a Consumer
- b) to act as agent or broker for a Retailer with respect to the sale or offering for sale of electricity, or
- c) to act or offer to act as an agent or broker for a Consumer with respect to the sale or offering for sale of electricity; (A, MR, TDL, DSC)

“Retail Settlement Code” means the code approved by the Board and in effect at the relevant time, which, among other things, establishes a Distributor’s obligations and responsibilities associated with financial settlement among Retailers and Consumers and provides for tracking and facilitating Consumers transfers among competitive Retailers; (TDL, DSC)

“Retailer” means a person who retails electricity; (A, MR, TDL, and DSC)

“Row-Type Multiple Dwelling” means a type of multiple family dwelling, including triplexes, double duplexes, townhouses, maisonettes etc.

“Secondary Service” means any service, which is supplied with a nominal voltage less than 750 Volts;

“Service Agreement” means the agreement that sets out the relationship between a licensed Retailer and a Distributor, in accordance with the provisions of Chapter 12 of the Retail Settlement Code; (RSC)

“Service Area” with respect to a Distributor, means the area in which the Distributor is authorized by its license to distribute electricity; (A, TDL, DSC)

“Service Date” means the date that the Customer and Niagara Peninsula Energy mutually agree upon to begin the supply of electricity by Niagara Peninsula Energy;

“Service Location Report” is a form used by Niagara Peninsula Energy to illustrate electric servicing details, meter location, service routing and costs. The Customer or Customer’s Contractor as one of the conditions of service prior to any connection being made requires this form;

“Site Development Plan Approval” means a process of the City of Niagara Falls under which Commercial and Industrial Subdivisions are required to have both an Underground Distribution System and an Underground Street Lighting System;

“Standard Supply Service Code” means the code approved by the Board and in effect at the relevant time, which, among other things, establishes the minimum conditions that a Distributor must meet in carrying out its obligations to sell electricity under section 29 of the Electricity Act; (TDL)

“Street Lighting System” means all the facilities required to illuminate all public streets, roads and/or other rights of way as determined by the City of Niagara Falls and Niagara Peninsula Energy Electric Niagara Peninsula Energy;

“Strip Development” is defined as a development along existing road allowance where the Electrical Supply can be provided generally from existing plant along the road allowance. Strip Development is not applicable to new road allowance development where new distribution plant is required;

“Subdivision Agreement” means a legal agreement between the developer, any mortgages and Niagara Peninsula Energy, which is suitable for registration at the Registry offices. The Subdivision Agreement details all the engineering and financial responsibilities of all parties concerned;

“Sub-Service” means a separately metered service that is taken from the main Building service;

“Supply Voltage” means the voltage measured at the Customer's main service entrance equipment (typically below 750 volts). Operating conditions are defined in the Canadian Standards Association ("CSA") Standard CAN3-C235 (latest edition);

“Temporary Service” means an electrical service granted temporarily for such purposes as construction, real estate sales, and trailers.

“Terminal Pole” refers to Niagara Peninsula Energy's distribution pole on which the service supply cables are terminated;

“Total Losses” means the sum of distribution losses and unaccounted for energy; (DSC)

“Transformer Room” means an isolated enclosure built to applicable codes to house transformers and associated electrical equipment;

“Transmission System” means a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose; (A, MR, TDL, DSC)

“Transmission System Code” means the code, approved by the Board that is in force at the relevant time, which regulates the financial and information obligations of the Transmitter with respect to its relationship with Customers, as well as establishing the standards for connection of Customers to, and expansion of a transmission system; (DSC)

“Transmit”, with respect to electricity, means to convey electricity at voltages of more than 50 kilovolts; (A, TDL, DSC)

“Transmitter” means a person who owns or operates a transmission system; (A, MR, TDL, and DSC)

“Unaccounted for Energy” means all energy losses that cannot be attributed to distribution losses. These include measurement error, errors in estimates of distribution losses and unmetered loads, energy theft and non-attributable billing errors; (DSC)

“Underground Distribution System” is referencing subdivisions, which means all the facilities required to supply electrical energy from existing Niagara Peninsula Energy circuits to the subdivision, up to the Point of Entry to each lot;

“Underground Street Lighting System” means all the facilities required to illuminate all public streets, roads and/or other rights- of-way as determined by the City of Niagara Falls and Niagara Peninsula Energy, using underground cables.

“Unmetered Loads” means electricity consumption that is not metered and is billed based on estimated usage; (DSC)

“Upgrade” means replacement of an existing component of a distribution system with a new component for purposes of improving the distribution system's operating characteristics;

“Validating, Estimating and Editing (VEE)” means the process used to validate, estimate and edit raw metering data to produce final metering data or to replicate missing metering data for settlement purposes; (MR, DSC)

“Wholesale Buyer” means a person that purchases electricity or ancillary services in the IESO-administered markets or directly from a generator; (TDL, DSC)

“Wholesale Market Participant”, means a person that sells or purchases electricity or ancillary services through the IESO- administered markets; (RSC, DSC)

“Wholesale Settlement Cost” means costs for both competitive and non-competitive electricity services billed to a Distributor by the IESO or a host Distributor, or provided by an embedded retail generator or by a neighboring Distributor; (RSC, DSC)

“Wholesale Supplier” means a person who sells electricity or ancillary services through the IESO-administered markets or directly to another person, other than a Consumer; (TDL, DSC)

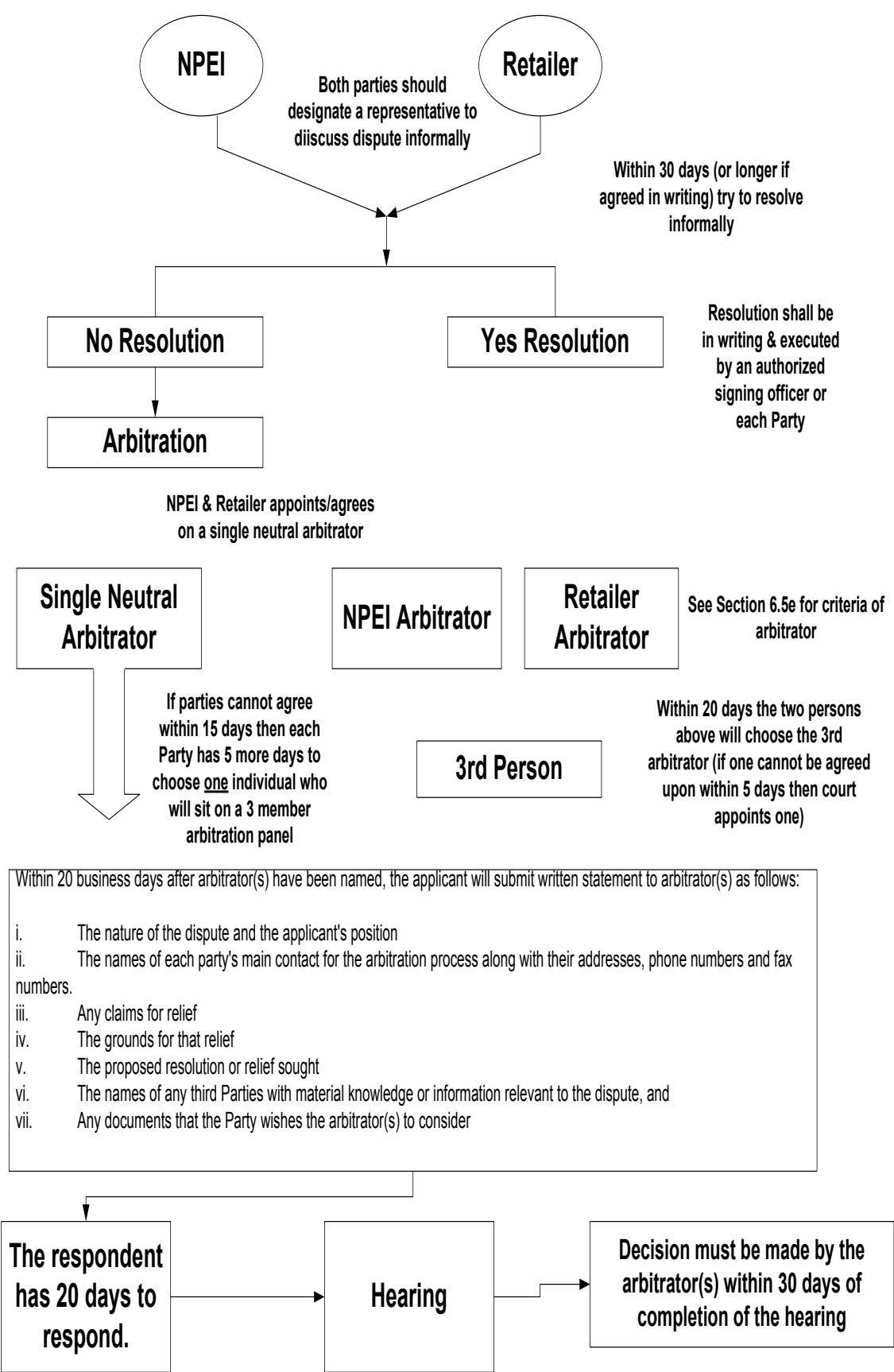
5 SECTION 5 – APPENDICIES

Niagara Peninsula Energy includes in this section, tables and documentation of the following organizational elements:

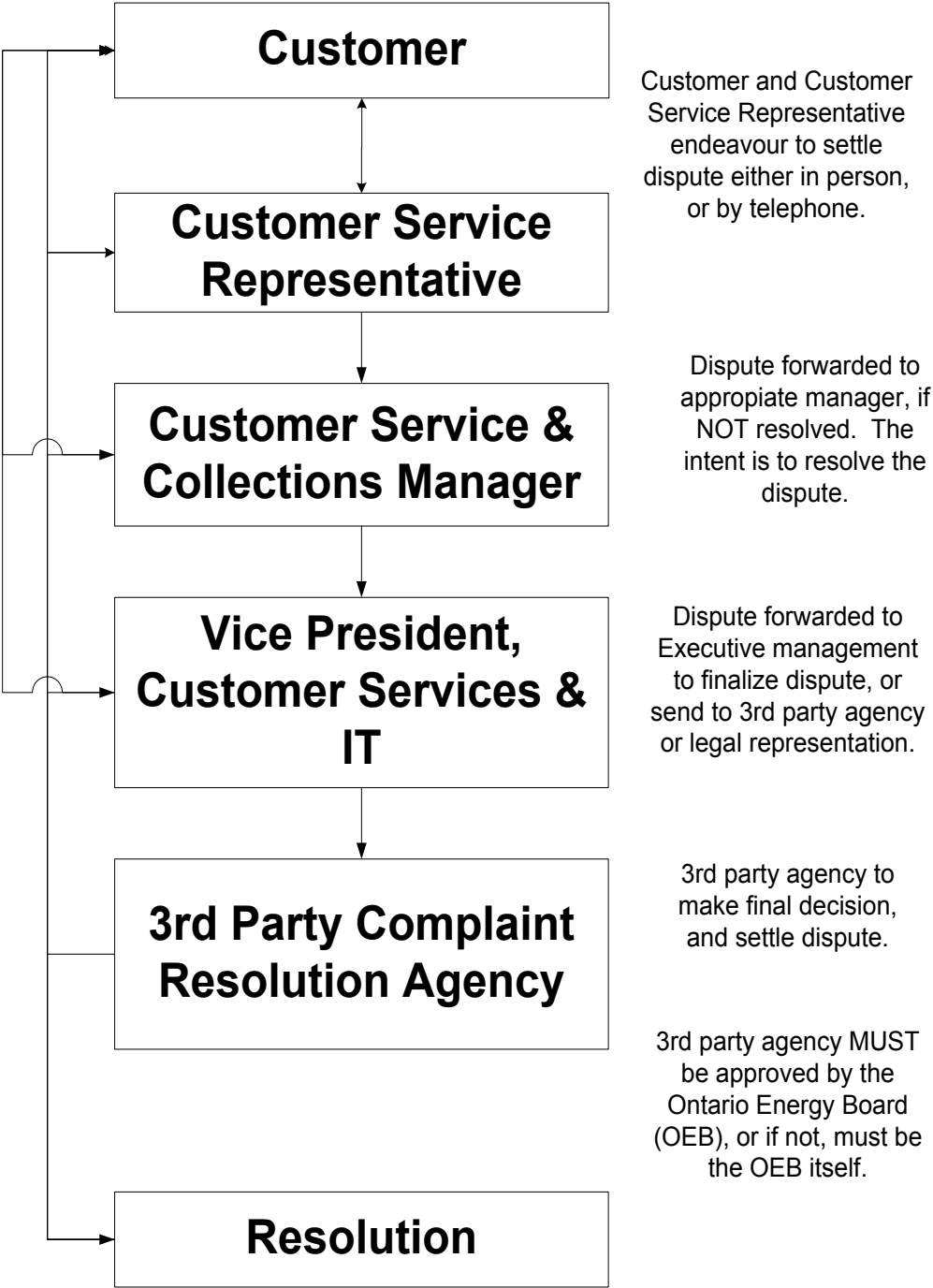
- Retailer Dispute Resolution Procedure
- Customer Dispute Resolution Procedure
- Demarcation Points and Charges For Connection For Customer Classes
- Service Location Report

If further information is required on these procedures, Niagara Peninsula Energy will provide it to the inquiring party on a per request basis.

5.1 Table 5.1 Retailer Dispute Resolution Procedures



5.2 Table 5.2 Customer Dispute Resolution Procedures



5.3 Table 5.3 Demarcation Points and Charges For Connection For Customer Classes

<i>Residential – Single Service</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Additional Fees	Unique Customer Requests/ Requirements
Overhead Service (OH)	Top of Customer's service mast/stack	Up to 30m OH service lines from service point of entry to delivery point including transformation Including connections and crossing pole on road allowance if required	Recovered through local utility charges	Actual costs beyond basic entitlement	N/A
Underground Service (UG)	Line side of Customer's meter base	Up to 30m UG service lines from service point of entry to delivery point Including connections & transformation	Recovered through local utility charges	Actual Costs beyond basic entitlement	Customers will be required to pay 100% of cost of the civil work/ trench
Overhead Service Requiring Transformer on Customer Property	Primary disconnect at the road allowance	Up to 30m of OH primary line from service point of entry, including connections & crossing pole on road allowance and transformer	Recovered through local utility charges	Actual costs beyond basic entitlement	Customer supplies transformer pole, intermediate poles, anchors, and all secondary services from transformer

<i>Residential – Single Service</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Additional Fees	Unique Customer Requests/ Requirements
Underground Service Requiring Pad Mounted Transformer on Customer Property	Secondary bushing of transformer	Up to 30m of UG primary line from point of entry including connections Includes equivalent OH transformer entitlement	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of civil work/trench Also cost difference between an OH & UG transformer.
Underground Service for a lot in a Pre-Serviced Subdivision with Secondary Facilities to the Property Line 120/240 V 200 Amp Max.	Line side connections at Customer's meter base	Lot connection charges included in subdivide charges collected at the time of subdivision electrical servicing	None (Paid previously by subdivider)	Current approved fixed cost for service trench from service lead to meter base location by Niagara Peninsula Energy contractor	N/A

<i>Residential – Multiple Self Contained Dwellings</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements

<i>Residential – Multiple Self Contained Dwellings</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead Supplied by Utility, Secondary Single Phase, 3W 120/240 V 200 Amp Max.	Top of Customer's service mast/stack	Up to 30m of OH service line from service point of entry, including connections & crossing pole on road allowance and transformer ¹	Recovered through local utility charges	Actual costs beyond basic connection All meter costs beyond (1)	Customer to supply/install ganged meter location Total service aggregate not to exceed 240 amp (i.e. 4 units x 60 amp each)
Underground Supplied by Utility Secondary, Single Phase, 3W 120/240 V 400 Amp Max.	Line side of Customer's multi-position (ganged) meter base	Up to 30m UG service lines from service point of entry to delivery point including connections and transformation ²	Recovered through local utility charges	Actual costs beyond basic connection All meter costs beyond (1)	Customer required to pay 100% of the civil work/trench Customer to supply/install ganged meter location Total service aggregate not to exceed 400 amps
Underground Requiring Pad mounted Transformation on Customer's Property, Single Phase 120/240 V, Row Type Structure Multiple Units/Multiple Structures	Line side of Customer's meter base(s)	Subject to cost study/revenue evaluation as per Niagara Peninsula Energy Row Housing/Condominium Agreement and Specifications	Subject to cost study/revenue evaluation as per Niagara Peninsula Energy Row Housing/ Condominium Agreement and Specifications	Subject to cost study/revenue evaluation as per Niagara Peninsula Energy Row Housing/ Condominium Agreement and Specifications	Servicing methodology subject to conformance to Niagara Peninsula Energy Row housing/ condominium specifications

¹ Only one OH supply per registered property

² Only one UG supply per registered property

<i>Residential – Multiple Self Contained Dwellings</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Underground Requiring Pad mounted Transformation on Customer's Property, 3 Phase 120/208 or 600/347 V, Apartment Type Complex	See relative general service consumers – Type “A” or Type “B” applicable to service size/demand requirement				

<i>General Service Consumers – Type “A”</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead Service up to 100 KVA Pole Mounted Transformer, Single Phase 3W 120/240 V	Top of Customer's service mast/stack	Up to 30m OH service lines from service point of entry to delivery point. Including connections and crossing pole on road allowance if required Also includes transformation	Recovered through local utility charges	Actual costs beyond basic entitlement	N/A

General Service Consumers – Type “A”					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Underground Service up to 100 KVA Pole Mounted Transformer, Single Phase 3W 120/240 V	Line side of Customer's meter base	Up to 30m UG service lines from service point of entry to delivery point. Including connections & transformation	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of the civil work/ trench
Overhead Service Requiring Pole Mounted Transformer on Customer Property up to 100 KVA, Single Phase 3W 120/240 V	Primary disconnect at the road allowance	Up to 30m of OH primary line from service point of entry, including connections & crossing pole on road allowance and transformer	Recovered through local utility charges	Actual costs beyond basic entitlement	Customer supplies transformer pole, intermediate poles, anchors, and all secondary services from transformer
Underground Service Requiring Pad Mounted Transformer on Customer property up to 100 KVA, Single Phase 3W 120/240 V	Secondary bushing of transformer	Up to 30m of UG primary line from point of entry including connections Includes equivalent OH transformer entitlement	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of civil work/trench Also cost difference between an OH & UG transformer

General Service Consumers – Type “A”					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead Service up to 150 KVA Pole Mounted Transformer, 3 Phase, 4W 120/208 V or 600/347 V	Top of Customer's service mast/stack	Up to 30m OH service lines from service point of entry to delivery point. Including connections and crossing pole on road allowance if required Also includes transformation	Recovered through local utility charges	Actual costs beyond basic entitlement	N/A
Underground Service up to 150 KVA Pole Mounted Transformer 3 Phase, 4W 120/208 V or 600/347 V	Line side of Customer's meter base	Up to 30m UG service lines from service point of entry to delivery point Including connections & transformation	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of the civil work/ trench
Underground Service Requiring Pad Mounted Transformer on Customer property up to 1500 KVA, Three Phase 4W	Secondary bushings of transformer	Up to 30m of UG primary line from point of entry including connections Includes equivalent OH transformer entitlement	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of the civil work/ trench & transformation cost as outlined in Section 3 Customer supplies and installs secondary services

General Service Commercial Consumers – Type “B”

Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead Primary Supply to Customer Owned Equipment	Line side of the Customer's primary disconnect switch	Up to 30m of OH primary line from service point of entry, including connections & crossing pole on road allowance	Recovered through local utility charges	Actual costs beyond basic entitlement	N/A
Underground Primary Supply to Customer Owned Equipment	Line side of the Customer's primary disconnect switch	Up to 30m of UG primary line from point of entry including connections	Recovered through local utility charges	Actual costs beyond basic entitlement	Customers will be required to pay 100% of cost of the civil work/trench as outlined in Section 3

<i>Flat Rate Unmetered Services</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead - Single Service	Top of Customer's service mast/stack	Up to 30m OH service lines from service point of entry to delivery point, including, connection and transformation	Recovered through local utility charges	Actual costs beyond basic connection	Customer to supply details of connected equipment and load estimate
Customer Owned Underground Service to Niagara Peninsula Energy Riser Pole Not Requiring Transformer Facilities on Customer's Property	Connection at the top of the weather head	Connection and Disconnection	Recovered through local utility charges	Customer charged Actual Costs beyond Basic Connection	Customer to supply details of connected equipment and load estimate

<i>Street Lighting Unmetered Services</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Municipal Owned Lights Photo Controlled Attached to Niagara Peninsula Energy Owned Pole	Connection to Niagara Peninsula Energy owned secondary bus or connection of Municipal street light duplex wire to Niagara Peninsula Energy transformer	Nil	Actual costs	Actual costs	Supply of all facilities Municipality responsible for all streetlight installation
Municipal Owned Lights in an Underground Subdivision	Connection at LV terminals at Niagara Peninsula Energy pad mounted transformer or connections at riser pole to secondary.	Nil	Actual costs	Actual costs	Supply of all facilities Municipality responsible for all streetlight installation

<i>Temporary Service</i>					
Customer Category	Ownership Demarcation Point	Standard Allowance (Basic Entitlement)	Basic Connection Fee (for Std. Allowance)	Cost Beyond Basic Entitlement	Unique Customer Requests/ Requirements
Overhead, Single Phase 120/240 V 200 Amp Max. Existing Transformation	Top of Customer's mast/stack	Up to 10m OH service wire from service point of entry to delivery point, including connection and removal	Current approved rate	Actual costs beyond basic entitlement	Nil

All Others	100% of all costs to Customer. Customer responsibilities and demarcation determined by Niagara Peninsula Energy on a per request basis only
------------	---

Note: Service Disconnection Fee's (Initiated by Customer Request) are recovered through local distribution charges or basic connection fee.

5.4 Table 5.4 Service Location Report

Date: 28-Oct-10
Account Type: New

Residential Service Location Report
08775-10-10

Contact Niagara Peninsula Energy Inc. at: 1-877-270-3938



Location

Street No: 123 Street: ANY ST. City: Niagara Falls Unit / Lot: Plan No:

Customer Information:

Owner: JOHN DOE Account: 12345678
Street No: 123 Street: ANY ST. Unit: Phone: (905) 555-1212
City: ANY TOWN Postal Code: A1A 1A1 Fax:

Consultants, Electricians, etc:

Category	Company	Address	City	Postal Code	Phone	Fax / Cell	Note

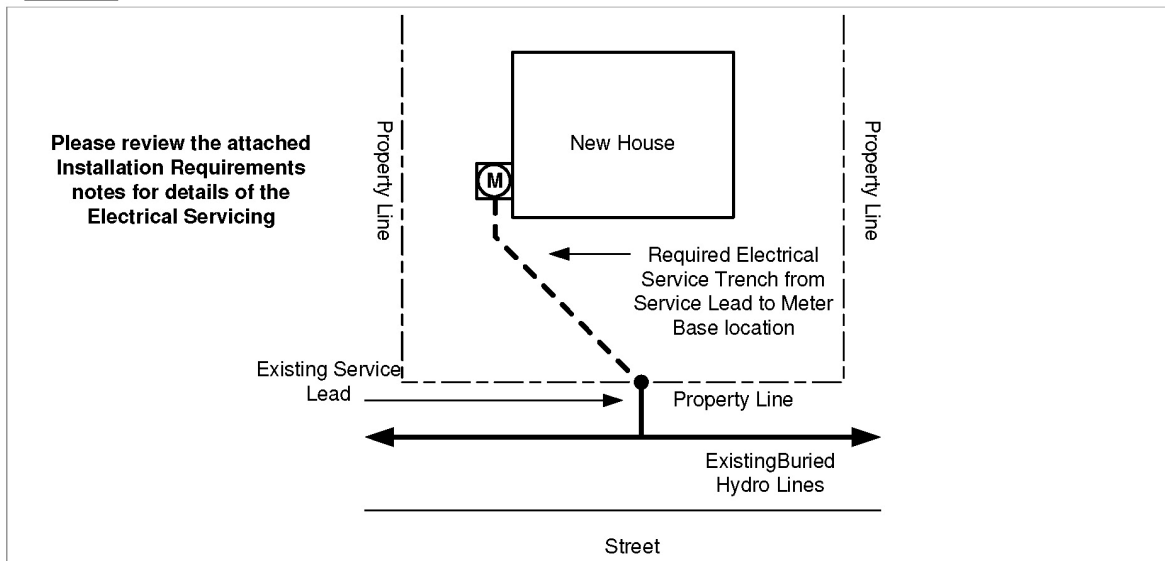
Specifics:

Primary Voltage: Service Size: 100 Category: New ☐ OverHead
Secondary Voltage: 120 / 240 Volt Meterbase Size: 200 Amp No Of Meters: 1
Meter Location: Left Side Meter #: 000001 Trans. #: 1234

Details of Request and Owner's Responsibilities:

THE CUSTOMER'S INSTALLATION IS SUBJECT TO THE APPROVAL OF ESA. AN ESA AUTHORIZATION NUMBER FOR THIS SERVICE IS REQUIRED PRIOR TO NPEI CONNECTING THE CUSTOMER OWNED FACILITIES.

Schematic:



** Contact N.P.E.. service department for disconnect / reconnect scheduling

Spot Sheet Accepted by: _____
Processed by: Customer Service

Date: _____
Expiry Date: Thursday, April 28, 2011

Date: 28-Oct-10
Account Type: New

Service Location Report Installation Requirements

08775-10-10



Contact Niagara Peninsula Energy Inc. at: 1-877-270-3938

Location

Street No: 123 Street: ANY ST. City: Niagara Falls Unit / Lot: Plan No:

Customer Information:

Owner: JOHN DOE Account: 12345678
Street No: 123 Street: ANY ST. Unit: Phone: (905) 555-1212
City: ANY TOWN Postal Code: A1A 1A1 Fax:

Applicable Service Regulations:

Code	Description
A	Any changes to the service location report must be authorized by Niagara Peninsula Energy in writing through revision of the original form or by written addendum.
B	All meter bases must be the rectangular style.
C	All civil excavations for electrical apparatus installation must be inspected by Niagara Peninsula Energy personnel or an authorized designate prior to backfilling. Failure to do so will result in rejection of the installed facility.
D	On new or upgraded underground services the meter base rating must be 200 Amps. Acceptable bases are, Micro Electric M02-V, Hydell MCS400TW, Murray Jenson MSC400TW, Cutler Hammer CL, Steplor SU24-CS. Bases must have 1/2" STUDS.
E	Inspection approval by the Electrical Safety Authority is required prior to the connection of any electrical apparatus by Niagara Peninsula Energy.
F	Meter locations must comply with height restrictions of C/L 1.75 meters +/- 10 centimeters with a maximum 3 meter setback from the wall of the building closest to the designated electrical supply point.
G	All Disconnects and Reconnects including meter removals must be performed by Niagara Peninsula Energy staff only. Pre-approval refers only to the agreement between the Electrical Safety Authority and the electrician for inspection purposes.
K	Under no circumstances will electricians be permitted to work in energized meter bases. If work is required within existing meter bases, isolation of the line side conductors must be performed.
L	Normal disconnection and reconnection services will not be performed by Niagara Peninsula Energy staff during periods of inclement weather.
M	For additional information, contact the Niagara Peninsula Energy Engineering office at 1-877-270-3938. Niagara Peninsula Energy Service Regulation Books are available at the office.

