Hydro Ottawa

Conditions of Services

Effective Date | TBD

Title:	**Electrical Customer Specification**
No:	**ECS0012**
Rev:	**9**
Recommended:	**Conditions of Service Working Group**
Approved:	**G. Paradis and J. Lupinacci**
Rev. Date:	**TBD**

Preface

As a licensed electricity Distributor in Ontario, Hydro Ottawa Limited (Hydro Ottawa) is regulated by the Ontario Energy Board (OEB) and is therefore required to adhere to various regulatory requirements as prescribed by the OEB. The Distribution System Code (DSC) is one such regulatory instrument that defines a code of conduct for electricity distributors in Ontario. The DSC requires that Hydro Ottawa produce its own Conditions of Service that details the types and level of service available to customers within Hydro Ottawa's service territory. The DSC requires that the Conditions of Service be readily available for review by the general public. All updates and changes to the Conditions of Service must be submitted to the OEB. The OEB will retain the most recent version on file to facilitate dispute resolutions in the event that a dispute cannot be resolved between a customer and Hydro Ottawa.

Hydro Ottawa's Conditions of Service follows the form and general content of the template presented in Appendix A to the DSC. However, Hydro Ottawa has also expanded on the template to include local requirements that may be unique to Hydro Ottawa and other specific constraints. It is organized as follows:

Section 1 (Introduction): contains references to relevant pieces of legislation linked to the Conditions of Service, Hydro Ottawa's contact information, the rights and responsibilities of both customers and Hydro Ottawa, and Hydro Ottawa's dispute resolution process.

Section 2 (Distribution Activities Common to all Customer Classes): contains references to services and requirements that are common to all customer classes. These include areas such as Hydro Ottawa's Connection and Disconnection policies, power quality, tariffs and charges, and customer rate classification.

Section 3 (Customer Class Specific): contains references to services and requirements that are specific to individual customer classes. These include areas like common installation and ownership conditions, points of demarcation, Distributed Energy Resources, temporary services, etc.

Other sections in the document include the Glossary of Terms and Appendices.

Changes to the Conditions of Service will be incorporated with each submission to the OEB. A summary of revisions to the latest version of the Conditions of Service will be posted on Hydro Ottawa's website prior to publication. Comments to these revisions can be emailed to conditionsofservice@hydroottawa.com. Hydro Ottawa will file a summary of all public comments received with the OEB upon publication.

Should there be any questions or clarifications related to Hydro Ottawa's services or these Conditions of Service, Customers may contact Hydro Ottawa through one of the channels listed in Section 1.5.

Hydro Ottawa's website (www.hydroottawa.com) includes the current version of its Conditions of Service.

Revision Sheet

Revision	Description	Date	Initial
0	Original Document and Amalgamation	2000-11-01	pjs/lv
1.09a	Major Revision, B of D Approval, and the First OEB Filing	2002-05-30	df/csm
2.0	Major Revisions See ECR0012 for Details	2007-04-26	mdf/csm ra/le/nf
3	Updates See ECR0012 for Details	2010-10-08	mdf/le/ csm/bb/nf
4	General Update See ECR0012 for Details	2013-06-21	coswg/nf
5	Major Revisions	2015-04-01	coswg/nf
6	Updates	2017-04-01	coswg/lj
7	Updates	2019-04-01	coswg/lj/jl
8	Updates	2021-12-01	coswg/gp/jl
9	Updates	TBD	coswg/gp/jl

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SECTION 1

Introduction

A Glossary of Terms found in this document is available in Section 4 and should be referenced to ensure context. For example, the distinction between "Customer" and "Consumer" is detailed below.

A **Customer** is a generator or Consumer whose facilities are connected to or are intended to be connected to a Distributor's System. This includes developers of residential or commercial sub-divisions. *See Section 4 for the official definition.*

A **Consumer** is a person who uses, for the person's own consumption, electricity that the person did not generate. *See Section 4 for the official definition.*

1.1 Identification of Distributor, Service Area and Servicing Obligations

Hydro Ottawa Limited, referred to herein as "Hydro Ottawa," is a corporation under the laws of the Province of Ontario and a Distributor of electricity.

Hydro Ottawa is licensed by the Ontario Energy Board (OEB) to distribute electricity. The licence, Electricity Distribution Licence ED-2002-0556, was issued to Hydro Ottawa on June 9, 2003 by the OEB and will expire on March 31, 2023. A copy of Hydro Ottawa's Distribution Licence can be found on the Ontario Energy Board's website.

In addition to the obligations set out in Hydro Ottawa's Distribution Licence, Hydro Ottawa is governed by various regulations, codes, guidelines, accounting and reporting and

record-keeping requirements prescribed by the OEB and under Acts such as the *Electricity Act, 1998*, and the *Ontario Energy Board Act, 1998*.

Hydro Ottawa has the mandate to operate a distribution system within its Service Area as defined in its Distribution Licence. Hydro Ottawa operates within the City of Ottawa and the Village of Casselman. This Service Area is subject to change with the Ontario Energy Board's approval.

Nothing contained in these Conditions or in any contract for the supply of electricity by Hydro Ottawa shall prejudice or affect any rights, privileges, or powers vested in Hydro Ottawa by law under any Act of the Legislature of Ontario or the Parliament of Canada, or any Regulations thereunder, as may be modified from time to time.

Under the terms of its Distribution Licence, Hydro Ottawa has the obligation to either connect or to make an Offer to Connect any Customer within its distribution Service Area.

Cost and **Fee** are interchangeable. *See Section 4 for the official definition.*

Prior to commencing any Service work, the Customer is advised to consult with Hydro Ottawa to ensure compliance with current requirements.

The Customer or its authorized representative is required to apply for new, upgraded, temporary electrical Services, or additional electrical sources in writing.

Lead times may vary based on:

a. the time required for response once the Customer has identified a need to Hydro Ottawa;
b. the time required to provide electrical supply to new, upgraded, or temporary electrical Services, or additional electrical sources;
c. the availability of adequate capacity for a Distributed Energy Resource or Load to be connected; and
d. the time required to allow Hydro Ottawa to provide an Offer to Connect as per Section 2.1.

The Customer, or its authorized representative, should consult with Hydro Ottawa concerning the capacity availability, the Supply Point voltage and location, and the Service

location to avoid delays and additional costs. The Customer or its authorized representative shall consult with Hydro Ottawa to determine the location of the revenue metering equipment and other details. These requirements are separate from and additional to those of the Electrical Safety Authority (ESA). Hydro Ottawa will confirm, in writing, the characteristics of electrical supply available at a specific site.

Supply Point means the point of Connection for the Customer or the Connection point where the electricity from a Distributed Energy Resource is delivered to the Distribution System. *See Section 4 for the official definition.*

Hydro Ottawa may require that the Customer provide payment in order for Hydro Ottawa to implement a new or altered electrical Service. Hydro Ottawa will assess Costs for new or altered electrical Services.

1.2 Related Acts, Licences and Codes

The supply of electricity or related Services by Hydro Ottawa to any Customer and/or Consumer is subject to the various laws, Regulations and codes including, but not limited to, the provisions of the following as they may be amended or replaced from time to time:

1. *Electricity Act, 1998,* S.O. 1998, c. 15, Schedule A
2. *Electricity and Gas Inspection Act,* R.S.C., 1985, c. E-4
3. *Ontario Energy Board Act, 1998,* S.O. 1998, c. 15, Schedule B
4. *Ontario Fair Hydro Plan Act, 2017,* S.O. 2017, c. 16, Schedule 1
5. *Ontario Rebate for Electricity Consumers Act,* 2016, S.O. 2016, c. 19
6. *Energy Consumer Protection Act,* S.O. 2010, c. 8
7. *Consumer Protection Act, 2002,* S.O. 2002, c. 30, Sched. A
8. *Occupational Health and Safety Act,* R.S.O. 1990, c. O.1 (OHSA)
9. *Public Service Works on Highways Act,* R.S.O. 1990, c. P.49

10. *Building Code Act, 1992,* S.O. 1992, c. 23
11. *Public Utilities Act,* R.S.O. 1990, c. P.52
12. *Municipal Freedom of Information and Protection of Privacy Act,* 1990, R.S.O. 1990, c. M.56 (MFIPPA)
13. *Personal Information Protection and Electronic Documents Act, 2000,* S.C. 2000, c. 5 (PIPEDA)
14. *Accessibility for Ontarians with Disabilities Act, 2005,* S.O. 2005, c. 11
15. *Municipal Act, 2001,* S.O. 2001, c. 25
16. *Ontario Underground Infrastructure Notification System Act,* 2012, S.O. 2012, c. 4
17. Electricity Distribution Licence ED-2002-0556
18. Affiliate Relationships Code
19. Distribution System Code
20. Transmission System Code
21. Retail Settlement Code
22. Standard Service Supply Code
23. Smart Sub-Metering Code
24. Ontario Electrical Safety Code, O.Reg. 164/99
25. Independent Electricity System Operator's Market Rules
26. *Ontario Environmental Protection Act,* R.S.O. 1990, c. E. 19
27. *Canadian Environmental Protection Act, 1999*

When planning and designing for electricity Service, Customers and their agents should refer to Hydro Ottawa's Conditions of Service, all applicable electrical codes in Ontario, Canada, and all other applicable federal, provincial, and municipal laws, regulations, codes and by-laws to ensure compliance with their requirements. The work shall be conducted in accordance with the *Occupational Health and Safety Act* (OHSA), Construction Projects, O.

Reg. 213/91, the Infrastructure Health and Safety Association (IHSA) Electrical Utility Safety Rules and traffic protection requirements.

1.3 Interpretation

In these Conditions of Service, unless directly stated or the context requires otherwise:

- headings, paragraph numbers and underlining are for convenience only and do not affect the interpretation of these Conditions of Service;
- words referring to the singular may include the plural and vice versa;
- capitalized terms shall have the meaning set forth in Section 4; and
- a reference to a document or a provision of a document includes any amendment or supplement to, or any replacement of that document or provision thereof.

1.4 Amendments and Changes

Except where there is an executed written agreement between Hydro Ottawa (or any predecessor municipal electric utility) and the Customer, the most recent Conditions of Service will be applicable for Service references. In the event the terms and conditions of a written agreement between Hydro Ottawa and the Customer do not comply with Applicable Law, the Applicable Law shall govern.

The most recent version of the Conditions of Service is available on the Hydro Ottawa website at www.hydroottawa.com/conditionsofservice. A current copy of the Conditions of Service document can be provided to each Person upon request. For additional copies Hydro Ottawa may charge a reasonable fee. The Conditions of Service is available in both English and French.

Hydro Ottawa's review of the Customer's Plans, equipment, or installation shall not be considered an endorsement that any, or all, requirements of all Applicable Laws, codes, or good practices have been met or followed. Further, such review shall not be construed as confirming, or endorsing, the safety, durability, or reliability of the Customer's facilities.

In the event of changes to these Conditions of Service, Hydro Ottawa shall issue a notice on and/or included with the Customer's bill. Should customers wish to provide comments, they shall do so within a predetermined period of time and in a way as identified in any such notice.

1.5 Contact Information

Hydro Ottawa's Regular Business Hours are 8:00 a.m. to 4:00 p.m., Monday to Friday, some exceptions apply. See below for details.

Customers may contact Hydro Ottawa using one of the following methods:

Customer Service	**Telephone**: 613-738-6400 Monday to Friday, 8 a.m. to 8 p.m. Saturdays, 9 a.m. to 3 p.m. (excluding statutory holidays) **Fax:** 613-738-6403 **Email**: customerservice@hydroottawa.com **Online**: hydroottawa.com/contact **Live Chat**: hydroottawa.com/myaccount (login required) Monday to Friday, 8 a.m. to 4 p.m. (excluding statutory holidays)
Service Desk (for inquiries related to electrical work for a residential or commercial premise, such as; new connection, meter installation, service upgrade, electrical safety, DERs install	**Telephone:** 613-738-6418 Monday to Friday, 8 a.m. to 4 p.m. (excluding statutory holidays) **Email:** servicedesk@hydroottawa.com

or upgrade, and emergency services)	
Power Outages	Power outages may be reported by: **Telephone:** 613-738-0188 **Online** through MyAccount: hydroottawa.com/outages/info/report (login required) Hydro Ottawa's **Mobile App**: hydroottawa.com/app (login required) Power outage information is available by: **Telephone:** 613-738-0188 **Online outage map**: hydroottawa.com/outages Hydro Ottawa's **Mobile App**: hydroottawa.com/app (login required) Hydro Ottawa's **Smart Speaker Skill**: hydroottawa.com/smart-speakers
Vault Maintenance Requests	**Telephone:** 613-738-5499, ext. 7185 **Email:** vaultmaintenance2@hydroottawa.com **Online:** hydroottawa.com/vault-maintenance-request
Metering Requests	See Service Desk
Conservation Programs	**Telephone:** 613-738-5474 **Email:** CDM@hydroottawa.com

Ontario One Call (multi-utility service available 24-hours-a-day, 7 days a week for cable locates as required by law under the *Ontario Occupational Health and Safety Act*)	**Telephone:** 1-800-400-2255 **Online:** on1call.com
Street Lighting (City of Ottawa)	**Telephone:** 311 **Online:** serviceottawa.ca
Social Media	**Twitter:** twitter.com/hydroottawa **Facebook:** facebook.com/hydroottawa **YouTube:** youtube.com/hydroottawa **LinkedIn:** linkedin.com/company/hydro-ottawa **Instagram:** instagram.com/hydroottawa
Mail	Hydro Ottawa Limited, 2711 Hunt Club Road, P.O. Box 8700, Ottawa, Ontario K1G 3S4
Courier and Deliveries	Hydro Ottawa Limited, 2711 Hunt Club Road Ottawa, Ontario K1G 5Z9

Hydro Ottawa is committed to preventing, identifying and removing barriers that impede accessibility. Our goal is to provide customer service in a manner that respects the principles of dignity, independence, integration and equal opportunity.

1.6 Customer Rights and Responsibilities

The Customer has the right to request a Connection to Hydro Ottawa's Distribution System where the Connection is for a Distributed Energy Resource or Load which Lies Along Hydro Ottawa's Distribution System. The request must be submitted online.

Where the Distributed Energy Resource or Load does not Lie Along any of the lines of Hydro Ottawa's Distribution System, the Customer shall first obtain an Offer to Connect from Hydro Ottawa in accordance with Section 2.1.

The Customer has a right to an Isolation of their electrical Service. If requested by the Customer, Hydro Ottawa shall isolate the Customer's electrical Service in order for the Customer to perform Maintenance on their electrical equipment and associated Support Structures. The Customer's request shall be submitted through Hydro Ottawa's website using the Electrical Service Request form.

Upon receiving the completed form and any required accompanying documents, the Customer shall pay any Costs if applicable, before contacting the Service Desk to request the isolation. The Customer and the Service Desk shall work together to book a date for the Isolation. The request for Isolation must be received at least ten (10) business days in advance of the Customer's required date in order for Hydro Ottawa to provide the Isolation service as requested. (see Appendix G 3.2 and 3.3).

The Customer is responsible for compliance with these Conditions of Service and for paying any applicable Rates, charges and fees. Where applicable, Services will not be provided in advance of payment.

Rate means any financial Rate, charge or other consideration, and includes a penalty for a late payment. *See Section 4 for the official definition.*

The Customer is responsible to ensure that its electrical equipment does not have an adverse effect on the Grid. Once a Customer's Distributed Energy Resource or Load is connected, the Customer shall ensure that their electrical Load, Distributed Energy Resource equipment, or Support Structures, as the case may be, are adequately inspected, tested, maintained, repaired, and calibrated so as not to have an adverse effect on the Grid, Hydro Ottawa's equipment, employees, or other Customers. It is the Customer's responsibility to oversee a Maintenance program for its electrical equipment and facilities with its Maintenance Agent. For Customers with a common revenue metering point, such as in free hold units, the Customer shall be responsible for maintaining the common revenue metering equipment (e.g., common meter base, wiring trough, and Isolation switches) as part of a Common Elements agreement or a similar undertaking.

The Customer is responsible to seek approval for alteration to their electrical service. The Customer shall obtain Hydro Ottawa's written approval prior to the installation or alteration of an electrical Service, Distributed Energy Resource, or Support Structure, whether connected directly or indirectly to Hydro Ottawa's Distribution System. Any installation or alteration of electrical Service components by the Customer shall be compliant with Applicable Law, and Hydro Ottawa's current specifications.

The Customer is responsible to provide Hydro Ottawa safe and unobstructed access to their equipment. Subject to the terms and conditions of any access agreement between Hydro Ottawa and the Customer, the Customer shall provide unimpeded, safe and secure access to Hydro Ottawa's employees, contractors, and agents to Hydro Ottawa's distribution assets at all times (see Section 3.0).

The Customer is responsible to provide Hydro Ottawa with documentation from a physician in order to be designated as Critical Care. Critical Care Customers are provided with a longer notice period when facing disconnection for non-payment. This does not apply in emergency service situations that include an unplanned power outage. Critical Care status will be valid for two (2) years and Customers will be required to submit new documentation once the two (2) year period has ended.

1.7 Distributor Rights and Responsibilities

Hydro Ottawa is responsible for the safe Connection of Customers to its distribution system and for providing Customers with safe and reliable service.

Hydro Ottawa is responsible for issuing accurate and timely bills to its customers.

Protecting Customer privacy and personal information is of paramount importance to Hydro Ottawa. Hydro Ottawa is responsible for protecting Customer information and not disclose it to any third party without the explicit written consent of the Customer, except where such information is required to be disclosed:

- to comply with any legislative or regulatory requirements;
- for billing, settlement or market operations purposes;
- for law enforcement purposes; or
- to a debt collection agency for the processing of past due accounts of a customer.

Hydro Ottawa is responsible for providing Customers access to valid meter information upon request, as outlined in sections 11.1.1 and 11.1.2 of the Retail Settlement Code.

Hydro Ottawa has the sole right to set standards, specifications and designs for its Distribution System.

Hydro Ottawa has the right to enforce this Conditions of Service document and amend it as required.

Hydro Ottawa is permitted to secure and lock electrical rooms, electrical equipment, and revenue metering cabinets where it owns or is the Controlling Authority of the electrical equipment.

Unless otherwise agreed to in writing, Hydro Ottawa is the Controlling Authority and Operating Agent at the following Operational Demarcation Points:

1. the Customer-owned Integral operable device(s);
2. the Customer-owned switching devices that separate and control the Distributed Energy Resource from Hydro Ottawa's Distribution System; and

3. the Customer-owned isolating devices connected to Hydro Ottawa owned transformer facilities.

1.7.1 Access

Hydro Ottawa has the right to safe, unobstructed access to the Property and building at no cost to Hydro Ottawa, in accordance with Section 40 of the *Electricity Act, 1998,* and any successor Acts thereto. When required, a Customer, or Property owner shall provide Hydro Ottawa with non-exclusive rights to access their Property and building for the operation of Distribution System equipment under Hydro Ottawa's control for the following purposes (collectively, the "Use"):

a. to install and service its equipment to conduct collections activities commencing at the Property line;

b. to install the equipment in electrical rooms and public spaces;

c. to install equipment and cabling, specifically permitted by the Customer or Property owner, terminating in specific locations on specified floors within the building;

d. to obtain meter readings, perform meter changes or inspections;

e. to maintain the equipment integrity, repair, and replace all equipment installed by Hydro Ottawa;

f. to operate the Customer's electrical equipment as per Section 1.7 in addition to providing the required safe work zone for Hydro Ottawa to work on its Distribution System safely;

g. to access the Property, including but not limited to, access to those portions of the building that are designated by the Customer or Property owner as required for common areas such as driveways, walkways, hallways, exits and entrances, twenty-four hours a day, seven days a week (24/7) to perform any installation, operation or Maintenance of Hydro Ottawa's equipment, subject to the terms of these Conditions of Service;

h. to use the Property for the purpose of providing electrical Services to the Customers at their respective Premises in the building;

i. to protect the equipment and other Hydro Ottawa improvements permitted under these Conditions of Service against damage;

j. to ensure compliance with electrical Service agreements, including requirements that allow Connection to the Grid; and

k. any other right of access permitted by Applicable Law.

Hydro Ottawa shall not block access to, or in any way obstruct, interfere with or hinder the use of the building's operations including the entranceways, loading docks, elevators, halls, stairs, sidewalks around the building, or the safety, security, utility, mechanical, or other systems or structural elements of the building, unless there is an Emergency or the Customer otherwise agrees.

Where access is by way of a locking mechanism, the Customer shall provide access keys and/or codes to Hydro Ottawa. Furthermore, Hydro Ottawa reserves the right to install a metal key box at the Premise in order to facilitate access to its equipment. Where Hydro Ottawa installs a metal key box, the Customer hereby authorizes Hydro Ottawa to enter the Premises, at any time and without notice, and use the Customer's key contained therein. The Customer also indemnifies Hydro Ottawa from all losses, damages, injuries, or claims in any way relating to the installation of a metal key box and use of the key(s) contained therein, except where caused by the gross negligence of Hydro Ottawa or its employees, contractors, or agents.

Hydro Ottawa shall provide a means to identify Hydro Ottawa's employees, its contractors and contractors' employees (the "Authorized Individual") who require access to the Property and building. Hydro Ottawa shall ensure that each Authorized Individual wears or displays visible identification while on the Property.

Where Hydro Ottawa requires access for Distribution System switching or general equipment status check, the Customer shall provide access to the equipment within sixty (60) minutes when requested by Hydro Ottawa.

1.7.2 System Planning Information

Where system planning information has been, or is made available by Hydro Ottawa to third parties, on a non-confidential basis, such information may be shared with an Affiliate

that is an energy service provider in the same form and on the same terms and conditions as it was made available to such third parties (see Section 2.6.5 of the Affiliate Relationships Code).

1.8 Disputes or Complaints

Any dispute that arises between Consumers, Customers, or Retailers and Hydro Ottawa shall be resolved in accordance with Section 10 of the OEB's Distribution System Code.

Hydro Ottawa will keep records of all complaints, including the complainant's name, the nature of the dispute, the resolution or escalation date and the dispute resolution result or status.

1.8.1 Dispute Resolution Process

The Customer, Consumer, Retailer, or Distributed Energy Resource Facilitator or their agents may submit disputes to Hydro Ottawa in writing by email or mail (See Section 1.5).

Each inquiry will be date stamped, investigated and monitored by Hydro Ottawa. Every reasonable effort will be made to address disputes within ten (10) business days of receipt. Disputes that are expected to exceed ten (10) business days will normally be resolved within thirty (30) business days of receipt. Customers will be advised of any delay and reasons thereof by email or phone within ten (10) business days of receipt.

Upon mutual agreement and under exceptional circumstances, the resolution period may be extended.

Any disputes that lead to legal action against Hydro Ottawa shall be referred to Hydro Ottawa's legal department.

Unresolved disputes shall be referred to a third-party (the Ontario Energy Board or an Ontario Energy Board approved agency) for final resolution.

1.8.2 Retailer

Disputes between Hydro Ottawa and Retailers shall be settled in accordance with the Ontario Energy Board Retail Settlement Code, Appendix C – Service Agreement, Article 6.

SECTION 2

Distribution Activities
(Common to all Customer Classes)

2.1 Connection

Under the terms of its Distribution Licence, Hydro Ottawa has the obligation to connect a Customer that Lies Along its Distribution System or, make an Offer to Connect a Customer within its Service Area.

In addition to any other requirements under these conditions, the supply of electricity is conditional upon Hydro Ottawa being permitted and able to provide the requested connection. Hydro Ottawa may collect a Design Prepayment in order to initiate and perform a design review in the preparation of an Offer to Connect. The collection of a Design Prepayment will be at the sole discretion of Hydro Ottawa.

If the Customer does not accept Hydro Ottawa's Offer to Connect, if the application is withdrawn, or if Hydro Ottawa is unable to provide an Offer to Connect, then Hydro Ottawa will refund the Design Prepayment, if any, less any Costs incurred by Hydro Ottawa.

Hydro Ottawa shall notify the Customer if there is a possibility of extended lead times with the Connection. Extended lead times may arise if special equipment is needed, or equipment delivery problems occur. Hydro Ottawa may request a Material Prepayment ("material deposit") for special equipment or those Connections having a long lead delivery.

All remaining deposits are required from the Customer before Hydro Ottawa performs any planned field work.

Municipalities, universities, schools, and hospitals (MUSH) entities (as defined in Section 4) are exempt from providing design, material, and construction prepayment if a purchase order or contractual commitment is received by Hydro Ottawa prior to the commencement of any work or ordering material.

Service work identified under Appendix G are exempt from a construction deposit. For Appendix G service work, Customers with demonstrated creditworthiness can provide a purchase order, otherwise, a prepayment of the quoted amount prior to commencement of any work.

Hydro Ottawa shall provide reasons if it refuses to connect. In such an event, Hydro Ottawa shall not be held liable for any losses incurred by the Customer as a result of Hydro Ottawa's refusal to connect.

2.1.1 Supply Point

Normally Hydro Ottawa permits only one Supply Point per Property. Where it is not technically feasible or creates excessive costs to the customer to have only one Supply Point and sufficient capacity is available to supply this addition and future growth, Hydro Ottawa may, in its sole discretion connect additional Supply Points. Each Supply Point must be separately metered and billed under the appropriate rate classification. The customer will be responsible for all Costs of the new Supply Point.

Where a Property is electrically connected to an adjacent Property by conductors, Hydro Ottawa will not provide another Supply Point for the adjacent Property unless the initial electrical Connection is removed.

Additionally, Hydro Ottawa will not provide additional Supply Points on a Property for infill developments such as coach houses.

In all cases, the final Supply Point is the sole and exclusive decision of Hydro Ottawa.

2.1.2 Property that Lies Along

For the purpose of these Conditions, “Lies Along” takes the meaning provided in the Glossary of Terms.

Lies Along means a Property or parcel of land that is directly adjacent to public road allowance where Hydro Ottawa has equipment. *See Section 4 for the official definition.*

Under the terms of Section 28 of the *Electricity Act, 1998,* Hydro Ottawa has the obligation to connect a Property or facility that Lies Along its distribution lines provided:

- the Property or facility can be connected without expanding the Grid; and
- the Customer or delegate requests a Connection in writing.

The Service installation must also meet the terms and conditions listed in Hydro Ottawa’s Conditions of Service.

Hydro Ottawa may refuse a Connection to a line that services a Property or facility that Lies Along a distribution line if there is insufficient capacity for the requested connection, access issues, or if Hydro Ottawa considers the Connection to the distribution line to be unsafe. In cases of insufficient capacity, Hydro Ottawa shall provide alternate supply options to the Customer. Where there is an access issue or unsafe conditions, the Customer shall resolve the matter to Hydro Ottawa’s satisfaction before a Connection is provided.

2.1.3 Expansions and Offer to Connect

In accordance with Section 3.2 of the Distribution System Code, Customers within Hydro Ottawa’s Service Area that do not Lie Along a distribution line which has sufficient capacity shall be provided an initial Offer to Connect. Hydro Ottawa shall make every reasonable effort to respond promptly to a Customer’s request for connection, and shall comply with the timelines stipulated in Section 6.1.1 of the Distribution System Code.

Once the Customer has submitted the Design and/or Material Deposit, if any, and a detailed loading schedule, Hydro Ottawa shall hold the required system capacity available for up to one year for the Customer’s specific project, unless otherwise required by legislation, codes, or Hydro Ottawa’s written approval. If the Customer delays their project, the Customer shall pay for any additional Costs to Hydro Ottawa due to the delay.

2.1.3.1 Load Customers and Non-renewable Distributed Energy Resources

Hydro Ottawa shall prepare an initial Economic Evaluation of the estimated Costs and forecasted revenues, as outlined in Appendix B, for Load Customers and non-renewable Distributed Energy Resources upon accepting an Offer to Connect.

The Economic Evaluation offsets the Customer's share of the estimated capital and ongoing Maintenance Costs, including general Enhancement work that may be required to supply increases in Load or connect their non-renewable Distributed Energy Resource, against the forecasted revenue from the associated distribution Services.

The Customer shall pay Hydro Ottawa the initial Capital Contribution Amount as determined in the initial Economic Evaluation less any Design Prepayment and Material Prepayment that have been received.

Once the facilities have been energized and all expansion costs are received, Hydro Ottawa will provide a final Economic Evaluation at or before the Connection horizon. Where the Offer to Connect was not firm, and if the required Capital Contribution Amount from the final Economic Evaluation (final Capital Contribution Amount) differs from the required Capital Contribution Amount from the initial Economic Evaluation, the Customer will be responsible for the final Capital Contribution Amount and not the initial Capital Contribution Amount.

2.1.3.2 Renewable Distributed Energy Resources

For projects qualifying as Renewable Distributed Energy Resources under the *Electricity Act, 1998*, Hydro Ottawa shall apply Costs or credits as prescribed by the Ontario Energy Board, through the Distribution System Code.

Should the Customer or Hydro Ottawa disagree on the qualification of a "Renewable Distributed Energy Resource" under the Act, the Customer may bring resolution by providing a written ruling from the Independent Electricity System Operator (IESO), the Ontario Energy Board, or, the appropriate provincial Ministry authorizing the qualification.

2.1.3.3 Offer to Connect

Notwithstanding other fees or deposits requirements of Section 2.1 that may apply, if an Expansion is required in order for Hydro Ottawa to connect the Customer, the cost to

prepare the initial Offer to Connect shall be provided at no cost to the Customer and include:

a. a statement as to whether the Offer to Connect is firm or is an estimate of the Costs that will be revised in the future to reflect actual Costs incurred;

b. a reference to Hydro Ottawa's Conditions of Service and information on how the Customer requesting the Connection may obtain a copy;

c. a statement as to whether a capital contribution is required from the Customer. Where a Capital Contribution is required, details shall be provided as outlined in Section 3.2.9 of the Distribution System Code;

d. a statement as to whether an Expansion Deposit (or "Economic Evaluation Credit") is required from the Customer and, if Hydro Ottawa does require an Expansion Deposit, the amount of the Expansion Deposit to be provided.

   If an Expansion Deposit is required it must be in the form of:

   i. an automatically renewing, irrevocable letter of credit from a bank, as defined in the *Bank Act*, S.C. 1991, c.46;
   ii. cash;
   iii. a surety bonds; or
   iv. a third-party guarantee, provided that the guarantor has a Standard and Poor's Rating of A- (or equivalent) or better and executes a guarantee in a form satisfactory to Hydro Ottawa.

   A letter of guarantee issued by a MUSH Customer may be acceptable contingent upon a satisfactory credit appraisal by Hydro Ottawa. If the credit standing of any Customer issuing a letter guarantee in support of its obligations ceases to meet Hydro Ottawa's credit appraisal at any time during the period of service, then Hydro Ottawa has the right to require the Customer to provide replacement security that satisfies the requirements of this section.

   For Expansions that require a capital contribution, Hydro Ottawa may also require the Customer to provide an Expansion Deposit (e.g., a Letter of Credit) for up to one hundred percent (100%) of the present value of the forecasted revenues. For Expansions that do not require a capital contribution, Hydro Ottawa may still

require the Customer to provide an Expansion Deposit for up to one hundred percent (100%) of the present value of the projected capital Costs and on-going Maintenance Costs of the Expansion project as described in Appendix B.

If the Expansion Deposit is in the form of cash, Hydro Ottawa will pay interest on the portion being returned at the Prime Business Rate set by the Bank of Canada less two percent (2%). Hydro Ottawa may realize some or all of any Expansion Deposit from the Customer for the purposes of covering any amounts that the Customer owes to Hydro Ottawa pursuant to the Offer to Connect.

e. a statement as to whether the Connection charges, per Sections 3.1.5 and 3.1.6 of the Distribution System Code, shall be charged separately from the capital contribution referred to in Section 3.2.8(c) of the Distribution System Code and a description of the amount of those Connection charges, if known; and

f. a statement as to whether a security deposit for the Costs to connect/upgrade the Customer shall be provided.

2.1.3.4 Alternate Bid

When Hydro Ottawa requires a capital contribution from a Customer, the Customer may obtain and use alternative bids from Hydro Ottawa Qualified Contractors. If this option is chosen, the Customer agrees that any assets constructed under the alternative bid option shall be transferred to the ownership of Hydro Ottawa, as part of its distribution assets.

In the Offer to Connect, Hydro Ottawa shall detail the scope of work, the portion eligible for alternative bid and the responsibilities of the Customer who proceeds with an alternate bid, as outlined below:

Work excluded from the alternative bid option include:

i. the planning and development of specifications for the materials, design, engineering, inspection, and layout of the Distribution System Expansion and Connection;
ii. the construction work on existing Hydro Ottawa facilities and equipment;
iii. the work involving existing Hydro Ottawa Distribution System assets;
iv. the work that involves third-party Support Structures; and

v. the work that involves specifying, procuring, and installing revenue metrology equipment with the exception of Multiple Customer Metering System (MCMS).

Hydro Ottawa Responsibilities under the alternative bid option include:

i. design verification, inspection, testing and authorization of the energized line; and
ii. Distributed Energy Resource transfer trip schema and Supervisory Control and Data Acquisition (SCADA) interface with Hydro Ottawa's system and Hydro Ottawa's revenue metering interface.

Customer responsibilities under the alternative bid option include:

i. the Customer shall select, hire and pay a Hydro Ottawa Qualified Contractor to do the work;
ii. the Customer shall be responsible for the supply of material and the Expansion construction work; and
iii. the Customer shall be responsible for all construction aspects of the Expansion, including but not limited to: meeting Hydro Ottawa's technical and material standards, the health and safety of workers and the public, environmental laws, land rights, required access and installation permits, financial obligations associated with the alternate bid work and warranty of work.

When requested by the alternate bid proponent, Hydro Ottawa will review the skills and qualifications of the alternate bid proponent's proposed contractor for consideration as a Hydro Ottawa Qualified Contractor.

2.1.3.5 Warranty of Alternative Bid or Similar Works Undertaken by the Customer

For any works undertaken by the Customer for which Hydro Ottawa will take ownership or responsibility of these works (e.g., alternate bid work), the Customer shall provide Hydro Ottawa a warranty once the installation is accepted by Hydro Ottawa.

Upon completion and acceptance of the Customer's work by Hydro Ottawa, Hydro Ottawa shall assume ownership of the installed distribution plant and responsibility for the reliability of the system.

Unless otherwise specified, the normal warranty period for the works is two (2) years but may be extended up to the maximum of five (5) years depending on specific conditions at

the determination of Hydro Ottawa. During this warranty period the Customer shall cover all Costs for repairs to the Customer's work according to the Hydro Ottawa standard for deficiencies. Should the repair Cost exceed the security deposit held for alternate bid or similar works, the Customer shall be responsible to pay any outstanding amount.

2.1.4 Planned and Emergency Service Work

If and when any Customer service equipment work is undertaken that requires an Electrical Safety Authority permit and an isolation by Hydro Ottawa, the following non-standard Service equipment configurations must be brought to Hydro Ottawa's current technical servicing standards:

a. Service using obsolete metering equipment:
    i. 200A transformer rated metering;
    ii. 2.5 element metering;
b. Services that are not part of Hydro Ottawa standards offerings:
    i. central metering;
    ii. overhead secondary Services greater than 200A;
    iii. 120V or 240V, single phase, 2 wires metered Services;
    iv. 600V, 3 phase, 3 wires delta Services;
    v. 102/208V, 3 phase, 4 wires services from overhead pole mounted transformers;
    vi. transformer pole structures;
    vii. residential premise with an indoor metering installation;
    viii. building with multiple electrical Services;
    ix. mixed distribution system ownerships (e.g. mobile home parks and other complex sites and/or campuses);
c. Service installations with one or more of the following deficiencies:
    i. inadequate safe operating area around to Service and/or metering equipment;
    ii. major structural failure of the electrical vault or room;
    iii. problems caused by water infiltration affecting the integrity of the Service equipment;
    iv. does not permit safe, unimpeded access to Hydro Ottawa power distribution system at all times;
    v. DER installations without protections up to standards.

To assist the Customer in meeting Hydro Ottawa's current standards, a financial credit equivalent to one isolation/re-energization request shall be provided to the Customer.

The Customer, with an electrical upgrade plan, may be provided sufficient time to meet the current standards requirement as deemed appropriate by Hydro Ottawa.

Exceptions to meeting the current technical standard, provided that there are no hazards, the service entrance equipment has good access, and the electrical equipment and transformer(s) are not overloaded, are:

- If an existing Customer is only retrofitting for sub-metering, the Customer is exempt from bringing the indoor primary electrical vault to current technical standards.
- Customer service equipment work undertaken as a result of a significant event/storm designated by Hydro Ottawa on its Distribution System and has required the activation of Hydro Ottawa's Electricity Emergency Response Plan. This exception shall be provided for the repairs completed within five (5) business days after the start of the event unless Hydro Ottawa provides extended repair duration for that specific event.
- Defective customer-owned direct buried service wires that run directly back to the Hydro Ottawa designated Supply Point for which the Electrical Safety Authority authorizes repairs rather than replacement.
- Work being undertaken is a minor Upgrade, see Appendix G-1.5 for further details.

2.1.5 Inspections before Connections

All Customer electrical installations (i.e., Service entrance equipment, Distributed Energy Resource and revenue metering provisions), are required to meet Hydro Ottawa's specifications (see GCS0008 (Revenue Metering Specification)) and be inspected and approved by the Electrical Safety Authority (ESA) and Hydro Ottawa. Hydro Ottawa requires notification from the ESA of its completed inspection and subsequent approval, in the form of a Connection Authorization Certificate, prior to energizing a Customer's Connection to the Distribution System.

All **electrical installations** must be inspected and approved.

Federal government departments and agencies that want a specific Connection to the Distribution System without ESA authorization shall provide a written request for the connection, stating the specific legislation that exempts it from ESA's inspection and its acceptance of any liability for damages caused by its electrical installation.

Hydro Ottawa requires an ESA Connection Authorization Certificate as a condition for energizing an electrical Service under the following circumstances:

i. if the electrical Service has been isolated for the purpose of Upgrade, change, or repair to a Service that required an ESA work permit and subsequent ESA inspection and approval; or
ii. if the electrical Service has been disconnected or isolated for a period of six months or more.

An ESA Connection Authorization Certificate shall be accurate in describing the Service to be energized, including the Service address (as it appears in Hydro Ottawa's records), voltage, nominal ampacity, and any additional restrictions or conditions from the ESA, on the equipment or Service to be energized.

Customer owned substations are to be inspected and approved by both the ESA and Hydro Ottawa before Hydro Ottawa makes a Connection to the Distribution System.

Duct banks will be inspected and approved by Hydro Ottawa prior to the pouring of concrete and again before backfilling. The site contractor, in the presence of a Hydro Ottawa inspector, shall pass a Hydro Ottawa approved mandrel, for the nominal diameter of duct, through each duct. The Customer shall be responsible for ensuring that each duct is clear of any extraneous material and for any duct repair prior to cable installation. Only Hydro Ottawa will complete the Connection to existing concrete duct banks or underground Cable Chambers. All work on the existing Distribution System equipment will be conducted solely by Hydro Ottawa.

Transformer vaults and pad-mounted equipment bases will be inspected and approved by Hydro Ottawa prior to the installation of equipment.

2.1.6 Easements

Hydro Ottawa is committed to keeping electricity costs affordable to every customer. Requests for easements by Hydro Ottawa should be granted at no Cost to Hydro Ottawa.

An easement allows Hydro Ottawa to undertake the installation, operation, relocation, and maintenance of its Distribution System.

Where there are existing Hydro Ottawa structures and equipment on a Premises, Hydro Ottawa takes the position that it has the necessary rights to conduct its activities by virtue of the rights it holds either from a registered easement, an unregistered easement or rights that it has acquired prescriptively through the passage of time.

Hydro Ottawa will also request an easement when Hydro Ottawa requires additional space for its Distribution System equipment or when alterations to or on a Premise inhibit Hydro Ottawa's access to its Distribution System equipment. In the latter case, the Premise owner shall provide to Hydro Ottawa the appropriate land rights in order to ensure that Hydro Ottawa has access, to Hydro Ottawa's satisfaction, to its Distribution System equipment. If the Premise owner is unable to provide the appropriate land rights, then the Premise owner shall be responsible for all Costs associated with the relocation of the affected Hydro Ottawa Distribution System equipment. Alterations to Premises that may affect Hydro Ottawa's access to its Distribution System include changes in property lines due to severance and additions or changes to structures on or in the Property.

Customers who consider changes to existing structures on their Property may be required to file an application with the municipal Committee of Adjustments ("Committee"). The Committee will, in turn, advise stakeholders, including Hydro Ottawa, of the proposed plans. If the Committee notifies Hydro Ottawa of the proposed changes, Hydro Ottawa may file a response with the Committee. It is the Customer's responsibility to follow-up with the Committee to determine if any issues have been identified by Hydro Ottawa, before proceeding further.

Where Hydro Ottawa requires access to adjacent Properties (e.g., mutual drives or narrow side set-backs) in order to provide service to a Premise, the Customer shall obtain an easement in favour of Hydro Ottawa from the affected adjacent Property owner(s).

Where an easement in favour of Hydro Ottawa is silent with respect to outdoor surface reinstatement, Hydro Ottawa will only reinstate with sand, gravel, soil and/or grass seed after entry.

When a radial electrical line only supplies one Customer on a Property, Hydro Ottawa may remove its easements on the Customer's Property and transfer the line ownership to the

Customer in accordance with O.Reg. 22/04. Where the line ownership is transferred from Hydro Ottawa to the Customer, the demarcation point will be in accordance with Section 3.1, 3.2 or 3.3.

2.1.7 Contracts

2.1.7.1 Contract for New or Upgraded Service

Hydro Ottawa requires all Primary Service Customers and developers to sign an Installation and Service Agreement (I&SA) upon application for the provision of Connection to the Grid. Upon the completion of a signed Installation and Service Agreement and receipt of payment for any applicable Connection charges, the project may proceed through to the Connection stage. Once approval by the Electrical Safety Authority (ESA) is received, Hydro Ottawa shall connect the new or upgraded Service (see Appendix C for sample agreement). For site conditions that are beyond the norm within the Conditions of Service (e.g., site personnel, special access arrangement, primary facility equipment, demarcation points, operating control, high voltage worker competency, multiple primary supply circuits, auto-transfer scheme, Distributed Energy Resources greater than 10 kW), the Customer or developer shall sign an Operating and Maintenance Agreement (O&MA) upon application for the provision of Connection to the Grid.

Where the tenant Distributed Energy Resource does not connect directly to Hydro Ottawa's Distribution System but connects to the main electrical Service of the owner or another occupant of the Property, the owner or other occupant shall execute a Distributed Energy Resource Access Agreement as a condition for the Connection and continued Service to the tenant Distributed Energy Resource.

Where a Customer does not execute a standard application for electrical Service, these Conditions of Service, as amended from time to time, shall form the terms and conditions of an implied contract between Hydro Ottawa and the Customer in accordance with the Distribution System Code. However, Hydro Ottawa reserves the right to require any Customer, regardless of Rate class, to sign a standard application and contract for electrical Service, prior to any Connection or delivery thereof.

2.1.7.2 Implied Contract

Notwithstanding the absence of a written contract, there is an implied contract with any metered Customer that is connected to Hydro Ottawa's Distribution System and receives distribution Services or uses electricity supplied to Hydro Ottawa. The terms and conditions of the implied contract are the latest version of:

1. Hydro Ottawa's Conditions of Service (this document) (hydroottawa.com/conditionsofservice);
2. Hydro Ottawa's Rates and Conditions (Tariff of Rates and Charges) (https://hydroottawa.com/en/accounts-services/accounts/rates-conditions);
3. Hydro Ottawa's Distribution Licence (ontarioenergyboard.ca); and
4. the Distribution System Code (ontarioenergyboard.ca).

The use of Hydro Ottawa's Distribution System by any Person or Persons constitutes acceptance of a binding contract with Hydro Ottawa. The Person who accepts the supply of electricity or related Services shall be liable for and such contract shall be binding upon such Person's heirs, administrators, executors, successors or assignees.

The implied contract shall continue in force until termination is given by either Hydro Ottawa or the Customer with thirty (30) days notice in writing in advance of termination.

If a Micro-embedded Distributed Energy Resource does not have a signed contract with Hydro Ottawa, the contract is implied upon Connection to the Grid. The implied contract terms are embedded in the OEB's Distribution System Code and apply along with Hydro Ottawa's Conditions of Service taking preference regardless of the Customer participating in any Distributed Energy Resource program. Hydro Ottawa reserves the right to request execution of a special contract, if circumstances warrant.

Pursuant to Section 6.5.1 of the Distribution System Code, Load Transfer Customers within Hydro Ottawa's Service Area which are physically supplied by another distributor are deemed to have an implied contract with Hydro Ottawa, the geographic distributor.

2.1.7.3 Special Contracts

Special contracts that are customized in accordance with the Service requested by the Customer normally include, but are not necessarily limited to, the following examples:

- Operating, Maintenance and Administration (O&MA) – executed before energization;
- Distributed Energy Resource;
- Distributed Energy Resource access;
- Support Structure access (e.g., poles);
- unmetered services;
- transfer of equipment ownership from Hydro Ottawa to the Customer; and
- work for other Services and Maintenance.

2.1.7.4 Payment by Premise Owner

The Premise owner, known as the Customer, is responsible for all electricity Costs not specifically metered to individual Customers within the Premise, for example, the most common of which are dry core transformer losses and Common Element electrical Loads.

2.1.7.5 Opening and Closing of Accounts

A Customer shall provide a minimum notice of ten (10) business days when opening a new account or closing an existing account to ensure the request is processed in a timely manner.

Third-party requests to open or close an account must be agreed to by the Person(s) responsible for the account and related payments. Requests made in writing by a Person's solicitor or Person holding a valid Power of Attorney are exempt.

A Customer who wishes to open or close an account for Hydro Ottawa services may contact Customer service by phone, by written request, online or other means acceptable to Hydro Ottawa (see Section 1.5).

In order to establish an account with Hydro Ottawa as a result of new residential/commercial construction or a Distributed Energy Resource, the Customer shall provide the information set out in Appendix D. For move in or move out requests, visit hydroottawa.com/moving or contact Customer Service (see Section 1.5).

In the event that the account closure is received without sufficient notice, the Customer shall be responsible for payment to Hydro Ottawa for the supply of electricity to the Property up to the date Hydro Ottawa is notified of the termination of the account.

If Hydro Ottawa has not received a request to open an account in the name of the Premise's occupant, a Person(s) un-identified to Hydro Ottawa uses the electricity, or the identity of the owner is not known, Hydro Ottawa may proceed to Disconnect the Service per Section 2.2 until a Person contacts Hydro Ottawa to assume responsibility for the electricity account.

Hydro Ottawa may refuse to provide electrical Service to any Customer with outstanding arrears from a previous Premise within its Service territory until the outstanding arrears are paid.

2.1.7.6 Landlord Reversion Agreement

The Landlord and Property Manager Agreement form can be found on the Landlord and Property Manager page at hydroottawa.com/llr. Landlords may submit the Landlord and Property Manager Agreement form to accept financial responsibility for electrical Service when a tenant closes their account and the identity of the new tenant is unknown.

This agreement helps ensure electrical Service is not disconnected during a change of occupancy. Hydro Ottawa will waive the account setup charge when the Landlord Reversion is active.

Landlords will receive an automated notification when the responsibility for electrical Service is to be transferred to them when a tenant moves out.

2.2 Disconnection

2.2.1 Refusal to Connect or Right to Disconnect

Hydro Ottawa reserves the right to Disconnect, refuse to Connect, or, re-establish power to a Customer at any time, year round, for the following reasons per the Distribution System Code, Sections 3.1.1 and 4.1.8, yet, not limited to:

1. Contravention of existing laws of Canada, the Province of Ontario, or Electrical Safety Authority Code, and Orders;
2. Hazardous conditions or an adverse effect on the reliability or safety of Hydro Ottawa's Distribution System, or, the public as determined by Hydro Ottawa

and/or in accordance with Section 31.1 of the *Electricity Act, 1998*, or as amended from time-to-time;

3. A material decrease in the efficiency of Hydro Ottawa's Distribution System, or in the quality of distribution Services received;
4. Public safety reasons or imposition of an unsafe work situation beyond normal risks inherent in the operation of Hydro Ottawa's Distribution System, as determined by Hydro Ottawa;
5. Unauthorized usage of electricity;
6. Not providing Hydro Ottawa written notification of its Embedded Distributed Energy Resource before it is operational. Customers that fail to notify and meet Hydro Ottawa Conditions of Service requirements shall have their Distributed Energy Resource Disconnected;
7. Failure of the Customer to comply with Hydro Ottawa's Conditions of Service;
8. Overdue amounts for regulated Services to the premises or amounts owing in part or in full related to an account security deposit;
9. When the identification and pertinent account information of the Customers responsible for electricity usage at the Premise have not been confirmed to Hydro Ottawa;
10. Electrical disturbance propagation caused by Customer equipment that is not corrected in a timely fashion;
11. Energy Diversion, fraud, or abuse on the part of the Customer;
12. Inaccessibility to Hydro Ottawa equipment for installation, inspection, or system integrity, including reading the meter;
13. Electrical Connection to Hydro Ottawa's Distribution System does not meet Hydro Ottawa's design requirements; or
14. Hydro Ottawa does not have clear land rights (e.g., public Road Allowance or easements) to service the Property.

Hydro Ottawa may also refuse to connect or reconnect a service to a premise, where the customer owes any amount for regulated Services under any other Hydro Ottawa account.

Hydro Ottawa may also Disconnect the supply of electricity to a Customer, without notice, in accordance with a court order, in an Emergency, or, for safety or system reliability reasons.

In the case of fire or other casualty occurring in the Customer's Premise and rendering the Premise unfit for occupancy, the electrical Service shall be suspended until such time as the wiring shall be approved by the Electrical Safety Authority. If the Premise cannot be repaired due to damage(s), the electrical Service shall be terminated.

When a Premise Service is permanently discontinued in a facility with multiple Services, the discontinued customer service wires may be removed from the Service entrance point to ensure internal electrical safety and that there is no inadvertent Energy usage.

When a Distributed Energy Resource is connected in parallel to the host Customer Load at the Service entrance that is subject to a Disconnection, only the Connection associated with the non-compliance may be Disconnected. However, if no means of Disconnection is available, or the Distributed Energy Resource is located behind the host Customer Load, then the non-compliant Customer shall be responsible for notifying the other party, and shall take full responsibility for any consequences or implications related to Disconnection.

2.2.2 Customer Initiated

The Customer has a right to an isolation of their electrical service (see Section 1.6). Customer initiated requests for Disconnection for the purpose of performing work on or near electrical apparatus and the subsequent Reconnection is referred to as "Isolation/Re-energization." To encourage electrical safety, Hydro Ottawa shall give each Customer one electrical service isolation/re-energization free-of-charge for doing non-electrical maintenance (see Appendix G-1).

Permanent Removal of 120/240V 200A or less Services for residential single family/duplex homes shall be provided to the Customer free of charge at the request of the homeowner. All other Customer requested service removals will be charged on a Cost recovery basis.

Before isolating, Hydro Ottawa may request evidence of prior occupant notification (including, if applicable, a Distributed Energy Resource) outlining, as a minimum, the date and time of Isolation, alternate date of Isolation should the need arise, intent of the Isolation and expected date and time of Re-energization. Hydro Ottawa may refuse to

isolate an owner's Premise until the owner has served notice of the pending Isolation to Hydro Ottawa Customers located within the subject Premise. The owner, before Isolation, shall also pay for the Cost of the Isolation and Re-energization, depending on the work required by the owner, as outlined in Appendix G.

2.2.3 Disconnection for Non-Payment of Overdue Amounts

Hydro Ottawa follows the Disconnection and Reconnection process prescribed by the Distribution System Code (DSC).

Hydro Ottawa may take action to collect the full amount of the electricity bill when it becomes overdue. Hydro Ottawa shall provide the following notice prior to Disconnecting for non-payment:

- Residential – no less than fourteen (14) calendar days;
- Commercial – no less than fourteen (14) calendar days; or
- Critical Care Customers – no less than sixty (60) calendar days

Disconnection notices shall be issued by mail or other electronic means, and shall be deemed to have been received on the fifth calendar day after issue. The electrical Service may not be restored until payment arrangements, satisfactory to Hydro Ottawa, have been made including the Cost of Reconnection, per Section 31 of the *Electricity Act, 1998*.

If, during the Disconnection notice period, a Low-income Energy Assistance Program (LEAP) intake agency advises Hydro Ottawa that they are assessing whether an Eligible Low-Income Customer is eligible for bill payment assistance, Hydro Ottawa will suspend Disconnection action for a period of twenty-one (21) days after receiving notification from the agency, per Section 4.2.2.6 of the Distribution System Code.

Before or at the time of Disconnection, all related safety notices issued by public safety authorities shall be included with any notice of Disconnection provided to the Customer, according to Section 4.2.1.2 of the Distribution System Code. Discontinuance of Service for non-payment does not relieve the Customer of the liability for arrears or other applicable charges for the balance of the term of contract, nor shall Hydro Ottawa be liable for any damage to the Consumer's or Customer's Premises resulting from such discontinuance of Service.

In adherence with the Disconnection Ban provision in Section 4.8 of the OEB's Distribution System Code, Hydro Ottawa will not disconnect a residential customer for non-payment or install a Load Control Device from November 15th of one calendar year through to April 30th of the following calendar year. During this period, unpaid amounts will continue to accrue late payment charges and may be subject to collection agency activity. Hydro Ottawa will ensure previously disconnected properties are reconnected at no charge by December 1st. Load control devices installed as an alternative to disconnection will be removed and full service restored to the property by December 1st.

Residential customers can request to be designated as Critical Care. Customers shall be responsible to provide Hydro Ottawa with documentation from a physician confirming that disconnection could pose a significant risk to their physical health or the health of the customers' spouse, dependent family member or other person that resides regularly with the customer. Critical Care customers are provided with a longer notice period when facing disconnection for non-payment. Critical care status will be valid for two (2) years. Customers will be required to submit new documentation once the two (2) year period has ended.

2.2.4 Service Expiry

Services that are Disconnected for non-payment or where account responsibility for electricity usage at the Premise have not been confirmed and which remain Disconnected for six (6) months or longer may have the associated distribution Services physically removed, in the absence of notification from the Customer stating otherwise. Subsequent requests for Service shall be provided according to Section 2.1 of the most current Conditions of Service.

2.3 Relocation of Distribution System Equipment

Hydro Ottawa's standard construction for Distribution System equipment on/or crossing public arterial roads, major collector roads, highways, rivers, railways, open fields, rural areas, flood plains and business parks, excluding Greenfield residential, is overhead distribution.

When requested to relocate "like-for-like" Distribution System equipment, Hydro Ottawa 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* for public road authorities, formal agreements, easements and law.

If a Customer or an affected party requests the relocation of Hydro Ottawa Distribution System equipment, Hydro Ottawa will, if feasible, accommodate such a request if it does not pose a risk to public or worker safety, or result in degradation of system Integrity. In the absence of existing agreements or legislation, Hydro Ottawa is not obligated to relocate its Distribution System equipment; however, if relocation is feasible, the Customer or affected party shall be responsible for the Costs of relocation.

Underground electrical system installation is an option, provided sufficient utility space is available, associated land rights are granted and the requestor pays the associated Costs.

Where new residential developments are undertaken, the developer may distribute the associated underground Costs between each Premise created (e.g., unit Cost per door) at the time of the specific development installation with Hydro Ottawa's agreement. Once the development has been determined to be installed underground, the remainder of the development will also be installed underground. This initial determination will impact the future of adjacent development phases independent of the developer.

The Design Prepayment may be requested to complete engineering reviews and investigations for customers, and to prepare design and estimates for service requests such as infrastructure relocations.

All Costs associated with the relocation, or conversion from overhead to underground are to be borne by the requestor unless an existing agreement is in place. Where such relocation of Hydro Ottawa Distribution System equipment requires replacement facilities on lands not owned by the requestor, it shall be the responsibility of the requestor to complete negotiations with the landowner over whose lands the new facilities are proposed to reside, to the satisfaction of, and at no Cost to Hydro Ottawa.

2.4 Conveyance of Electricity

2.4.1 Limitations on the Guarantee of Grid Availability or Quality

Hydro Ottawa will endeavour to provide a Distribution System to its Customers that can deliver or receive electricity at the Customer Supply Point with consistent reliability. Hydro Ottawa will connect a Customer at one of the standard voltage offerings within Hydro Ottawa's voltage guidelines (see Sections 2.4.5 and 2.4.6).

Customers requiring higher reliability or security of supply other than that of standard electricity supply in that location shall be responsible to provide their own back-up, standby facilities, or payment for additional Hydro Ottawa infrastructure and on-going Costs (see Appendix B). The Customer or Consumer shall assess their need for special protective equipment for their electrical apparatus to minimize the effect of, for example, momentary power interruptions, loss of a phase(s), transients or harmonics.

Customers requiring a three-phase Connection are permitted to install protective apparatus to avoid damage to the electrical equipment, which may be caused by the interruption of one phase, or non-simultaneous switching of phases of the electricity supply.

Hydro Ottawa may occasionally need to interrupt the power supply to a Customer or Consumer during an Emergency, or to repair, construct, or maintain its Distribution System, or repair customer-owned equipment. Power interruptions initiated by Hydro Ottawa will be based on practical and Cost effective considerations, plus the extent of inconvenience to a Customer. Except in Emergency cases, or as required by law, Hydro Ottawa will aim to provide the Customer with reasonable advance notice of planned power interruptions.

2.4.1.1 Indemnity and Liability

Hydro Ottawa does not guarantee a constant power supply or give assurance that voltages and frequency will be unvaried. Furthermore, Hydro Ottawa shall not be liable for damages to the Customer's or Consumer's equipment by reason of any failure in respect thereof.

Hydro Ottawa is not responsible for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for 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.

Hydro Ottawa will practise reasonable diligence in maintaining power levels, but shall not be responsible for any variations caused by external forces, such as operating contingencies, exceptionally high Loads, or low voltage supply from the transmitter or Energy Resource Facilitator. Hydro Ottawa shall not be held responsible for failure of any of its obligations as outlined in these Conditions of Service due to any events beyond the reasonable control of Hydro Ottawa, including, without limitation, severe weather, flood, fire, lightning, other forces of nature, acts of animals, pandemic, epidemic, quarantine restriction, war, sabotage, act of a public enemy, earthquake, insurrection, riot, civil disturbance, strike, third-party accident, restraint by court or public authority, or action or non-action by or inability to obtain authorization or approval from any Government Authority, or any combination of these causes.

When access to its electrical equipment is impeded, Hydro Ottawa shall not be held liable for damages to the Consumer's or Customer's Property or building incurred while obtaining safe access to its distribution equipment.

Where Hydro Ottawa's equipment is damaged or lost by the wilful misconduct or negligence of the Customer or its employees, officers, directors, contractors, agents, invitees, tenants, licensees, or trespassers, the Customer shall pay the Cost of repair or replacement, and any associated Cost (including but not limited to the Cost of remediation and professional fees), of the equipment.

Where any Proceeding is brought by someone other than the Customer against Hydro Ottawa arising out of Hydro Ottawa's inability to: (i) provide a constant power supply; (ii) provide unvaried voltages and frequency; or (iii) gain safe access to its distribution equipment (each, a "Non-party Claim"), the Customer shall indemnify Hydro Ottawa against all Indemnifiable Losses arising therefrom, except to the extent those Indemnifiable Losses are caused by Hydro Ottawa's gross negligence or willful misconduct.

Where Customers own common electrical facilities on or across their adjoining Properties, Hydro Ottawa requires these Customers to establish a common elements agreement to share in the access, maintenance, and costs of their electrical facilities to ensure safe and

secure servicing. Hydro Ottawa will not be responsible for disputes arising from such common electrical facilities between Customers.

2.4.2 Power Interruptions

2.4.2.1 Interruption Notification

Hydro Ottawa will provide metered Customers with reasonable notice of any planned power interruptions. For those Customers that are Energy Resource Facilitators of electricity, Hydro Ottawa will follow the Ontario Energy Board regulatory provisions in the Distribution System Code.

Immediately prior to doing meter work that would result in a Service interruption, Hydro Ottawa will attempt to notify the residential or small Commercial Customer in person at the affected Premise.

Interruption times may change due to inclement weather or other unforeseen circumstances. Hydro Ottawa shall not be liable to Customers or Consumers for failure to provide notice of planned power interruptions or for changes to the schedule for planned power interruptions.

During an Emergency, Hydro Ottawa may interrupt the supply of electricity to a Property without notice in response to a shortage of supply of electricity, to effect repair on Hydro Ottawa's Distribution System, to facilitate repairs to customer-owned equipment, or to conduct work of an Emergency nature to address possible injury to a Person or damage to Property or equipment. Service interruption, without prior notice, may take place if an unsafe or hazardous condition is found to exist at a Customer's or Consumer's Premise.

2.4.2.2 Critical Care Customer Responsibility

Customers who require an uninterrupted source of power for medical equipment must provide their own equipment for these purposes.

2.4.2.3 Emergency Trouble Service (Trouble Calls)

When power is interrupted, the Customer should first verify that the problem is not a result of blown fuses or opened breakers within their internal power system. If upon investigation it appears that Hydro Ottawa's Service supply has failed, the Customer should immediately

report these conditions through Hydro Ottawa's Power Outage telephone number (see Section 1.5). Please note this section does not apply to Service that has been Disconnected for non-payment. Customers can contact Customer service (see Section 1.5) to discuss their account if their Service has been Disconnected for non-payment.

Hydro Ottawa is accessible by telephone twenty-four hours a day to provide Emergency services to Customers. A twenty-four hours a day, seven days a week (24/7) Emergency response team is also available for Emergency repairs. Please note that charges may be applicable in certain instances or for parts of Emergency Service requests.

2.4.2.4 Outage Reporting

Customers can report power outages by calling our 24/7 outage line at 613-738-0188, or online using MyAccount (login required). In addition, residential customers may report an outage through Hydro Ottawa's mobile app (login required).

Information on current power outages is available to Customers on Hydro Ottawa's power outage telephone line, on Hydro Ottawa's online outage map located at hydroottawa.com/outages and using the Smart Speaker Skill hydroottawa.com/smart-speakers. In addition, residential customers may access outage information through Hydro Ottawa's Mobile App hydroottawa.com/app (login required).

Depending on the size and duration of an outage, Hydro Ottawa may issue a news release to advise the public of the outage. Access to outage information is available to the media through established processes on a 24/7 basis. Visit hydroottawa.com/media for details.

Hydro Ottawa also tweets power outage information during Regular Business Hours and on an after-hours basis depending on the scale and duration of a power outage.

To report a power outage and for information on current outages, Customers may call our 24/7 power outage line at 613-738-0188 or at hydroottawa.com/outages/info/report (login required). Using Hydro Ottawa's Smart Speaker Skill, Customers can ask Google Home and Amazon Alexa if there are power outages in Ottawa. Residential customers can also use Hydro Ottawa's Mobile App to report an outage through the "Report an outage feature" (login required) as well as access outage information.

2.4.3 Power Quality

2.4.3.1 Power Quality Investigations

Hydro Ottawa or its agents will respond to all power quality concerns and verify the power supply at the Service entrance. There is no fee for this initial review, and it shall be carried out when resources are available.

If the source of the power quality problem is from Hydro Ottawa's power supply and where industry standards are not met, Hydro Ottawa will rectify the problem at no Cost to the Customers affected. Hydro Ottawa will use appropriate industry standards (e.g. International Electrical Commission (IEC), Institute of Electrical and Electronics Engineers (IEEE, CAN3-C235-83) and Good Utility Practice, as per its Power Quality Guideline (see ECG0008), while maintaining power quality on the Distribution System.

If the power quality problem lies on the Customer side of the system, the Customer shall be responsible for rectifying the problem. Should a power quality issue negatively impact Hydro Ottawa's Distribution System, the Service may be Disconnected until the power quality issue is resolved, in accordance with Section 4.1.8 of the Distribution System Code.

The Customer will not be charged for the initial verification; however, Customers shall be charged for subsequent site visits when the problem is on the Customer side or the Customer claims adverse health effects from Hydro Ottawa's Distribution System. Where power quality issues arise from the Customer's connection, Hydro Ottawa can require the Customer to pay for installation of power quality monitoring functions as part of the revenue metering installation.

2.4.3.2 Farm Stray Voltage

Customers who suspect high levels of stray voltage, also known as "tingle voltage" on farms, may request an investigation. Further details are available at www.hydroottawa.com/farms.

2.4.3.3 Prevention of Voltage Distortion on Distribution

The Customer is to ensure that their electrical usage or Distributed Energy Resource does not adversely affect the Distribution System. Customers with large non-linear Loads or a Distributed Energy Resource must maintain acceptable power quality by implementing

proper corrective measures, such as installing proper filtering and/or grounding or protection (see Hydro Ottawa's Power Quality Guideline ECG0008).

2.4.3.4 Motor Starting

The Customer is to ensure that the starting current of any motor does not exceed their associated distribution supply circuit limitations (see ECG0008). Reduced voltage starting may be needed if satisfactory transformer fusing cannot be obtained, due to excessive starting current or a relatively long starting cycle. It should be noted that objectionable voltage flicker on the Customer's secondary system may be experienced if the motor(s) are supplied from a transformer bank which also supplies lighting or other sensitive equipment in the Premise.

2.4.3.5 Phase Balance

Three-phase Customers shall ensure that their Load and/or Distributed Energy Resource is balanced between the three phases as per Hydro Ottawa's technical specification ECG0008.

2.4.3.6 Ground Fault Detection on Delta Services

With respect to older grandfathered Services without ground fault detection for three-phase, three-wire, delta connected Services: ground fault detection, (phase indication lights) is required on the Load side of the revenue metering for each individual Service. If more than one individual meter is required, off a splitter trough, then ground fault detection is required on the Load side of each revenue meter. In cases of bulk consumption revenue metering, ground fault detection would be required on the Load side of the bulk consumption revenue metering (see Appendix G-0).

2.4.3.7 Timely Correction of Deficiencies

If Hydro Ottawa determines that customer equipment is causing an undesirable Distribution System disturbance, the Customer shall cease operation of the equipment until satisfactory remedial action, as determined by Hydro Ottawa, has been taken by the Customer at their Cost. If the Customer does not take action within a reasonable time, Hydro Ottawa may Disconnect the Customer's power supply.

2.4.3.8 Obligation to Assist in the Investigation

During the course of the initial power quality investigation being performed by Hydro Ottawa, the Customer or Consumer is obligated to assist Hydro Ottawa, for example, by providing required equipment information, relevant data and necessary access for the monitoring of equipment. If, after the initial investigation, it is determined that the power quality issues lie within the Customer's demarcation point, then the Customer is responsible to correct these issues.

2.4.4 Electrical Disturbances

Hydro Ottawa will practise reasonable diligence in maintaining voltage levels, but, Hydro Ottawa shall not be held liable for the failure to maintain supply voltages, as described in Hydro Ottawa's Power Quality Guideline (see ECG0008). Typical voltage excursions that can be expected on Distribution Systems are capacitor-switching transients, voltage sags caused by faults on adjacent feeders and auto re-closure operations.

Hydro Ottawa will not be liable for any losses whatsoever, incurred by a Customer or Consumer, due to electrical disturbances or failures, whether caused by Hydro Ottawa or a third party.

Customers or Consumers are to ensure that their equipment does not cause any disturbances such as harmonics, transients, or voltage swing outside acceptable standards that might interfere with the operation of adjacent Customer or Consumer equipment. Equipment that may cause disturbances includes large motors, welders, variable speed drives, and inverters. In planning the installation of such equipment, the Customer or Consumer must consult with Hydro Ottawa. Where a system disturbance is caused by a Customer or Consumer, the Customer or Consumer shall be responsible for resolution at the Customer's or Consumer's expense. Failure to do so may result in a Disconnection from Hydro Ottawa's Distribution System.

Customers or Consumers who require an uninterrupted supply of electricity or a supply free from disturbances must provide and maintain their own power conditioning equipment for these purposes.

2.4.4.1 Radio/TV Interference

Occasionally Customer's equipment may be affected by electrical noise interference generated by various sources, including power lines.

Hydro Ottawa has information available on how to determine if interference is the result of the Customer's equipment. If, after following the prescribed steps, the Customer believes that the interference is due to the Distribution System, Hydro Ottawa will assist the Customer to find the cause. Hydro Ottawa will determine whether the source of the interference is from utility-owned equipment and, if this is the case, will reduce or eliminate the problem. If the problem is with the Customer's equipment, a service charge may apply.

2.4.4.2 Electromagnetic Fields (EMF)

Some types of electronic equipment and devices, such as Video Display Terminals, may be affected by electrical fields that are produced by conductors that carry large currents, and which are part of the Distribution System within close proximity. In such cases, Hydro Ottawa, at its determination, may provide an initial investigation and may attempt to identify the source of the interference.

2.4.5 Standard Voltage Offerings

a. Depending on the type of existing distribution plant, the preferred secondary voltage may include:

   i. 120/240 V, 1-phase, 3-wire,
   ii. 120/208 V, 3-phase, 4-wire, grounded wye connected,
   iii. 120/208 V, 2-phase, 3-wire, grounded wye connected ++, or
   iv. 347/600 V, 3-phase, 4-wire, grounded wye connected.

b. Depending on location, the following Primary Services may be made available:

   i. 4,160/2,400 V grounded wye connected; or
   ii. 8,320/4,800 V grounded wye connected; or
   iii. 7,200/12,400 V grounded wye connected; or
   iv. 13,200/7,600 V (transformer rating at 12,800/7400 V) grounded wye or delta connected depending on location; or
   v. 27,600/16,000 V grounded wye connected; or

vi. 44,000 V delta connected.

++ For large residential buildings only as a sub-service.

Provided that a Primary Service is installed, the Primary Service Connection will be in accordance with Appendix F.

2.4.6 Voltage Guidelines

Hydro Ottawa maintains Service voltage, as per its Power Quality Guideline (see ECG0008), at the Customer's Supply Point within the guidelines of C.S.A. Standard CAN3-C235 (latest edition).

When voltages lie outside the acceptable limits for normal operating conditions, but within the acceptable limits for extreme operating conditions, improvement or corrective action may be taken on a planned and programmed basis, yet, not necessarily on an Emergency basis. When voltages lie outside the acceptable limits for Extreme Operating Conditions, improvement or corrective action will be taken on an Emergency basis. The urgency for such action will depend on factors such as the location, nature of the Load or circuit involved and the extent to which limits are exceeded.

Customers shall be responsible to ensure that the voltage rating for equipment installed in their facility is compatible with the Service voltage supplied by Hydro Ottawa.

2.4.7 Backup Distributed Energy Resources

Any Customer with a portable or permanently connected Distributed Energy Resource used for Emergency backup is required to comply with all applicable criteria of Hydro Ottawa and the Ontario Electrical Safety Code. In particular, the Customer is to ensure that the Emergency Distributed Energy Resource does not back feed on Hydro Ottawa's Distribution System (see ECG0002).

Customers with permanently connected Emergency Distributed Energy Resource equipment shall notify Hydro Ottawa regarding the presence of such equipment and of any alterations to the Emergency Distributed Energy Resource equipment.

Refer to the Distribution System Code for further details.

2.4.8 Revenue Metering

2.4.8.1 General

Refer to Hydro Ottawa's Revenue Metering Specification, GCS0008.

2.4.8.2 Interval Revenue Metering

Refer to Hydro Ottawa's Revenue Metering Specification, GCS0008

Where an interval Smart Meter is required for a general Service, a dedicated communication link(s) shall be installed for remote interrogation of each revenue meter as assessed by Hydro Ottawa. Where available the dedicated communication link(s), shall be a Hydro Ottawa wireless communication system, the Customer shall compensate Hydro Ottawa for the cost of the wireless communication system, and facilitate its installation.

Where the wireless communication system is not available or a non-wireless meter has been requested by the Customer, the Customer shall provide the dedicated communication link(s), typically a dedicated telephone line, shall be direct dial, data quality and operational 24 hours a day for the exclusive use of Hydro Ottawa. At Hydro Ottawa's determination, a device may be installed that permits the sharing of a single telephone line by all interval style meters installed in one location for a single Customer. The Customer shall be responsible for the ongoing monthly Costs of operating the dedicated communication link(s) and shall maintain its availability while the Service exists, unless other arrangements have been explicitly agreed to by Hydro Ottawa. Defects in the dedicated communications link(s) (including, but not limited to, low availability) identified by Hydro Ottawa, shall be repaired by the Customer within seven (7) business days of being notified of the defect (see Revenue Metering Specification, GCS0008). Should the communications link(s) not be repaired within the required timeframe, Hydro Ottawa may visit the site to manually read the meter(s) concerned. A fee shall be charged to the Customer for each required visit, in accordance with Hydro Ottawa's Tariff of Rates and Charges.

2.4.8.3 Revenue Meter Costs

Hydro Ottawa shall provide a single residential Smart Meter (i.e., for either a 120/240 V, 1-phase, 3-wire Service or a 120/208 V, 2-phase, 3-wire network Service) at no additional

Cost to the Customer or Consumer. This shall include labour, transportation, and materials. Any additional equipment required for the smart or conventional revenue metering installation shall be paid by the Customer. Where meters are installed for Interval revenue metering or small commercial accounts, the Customer shall cover the Cost of the new Meter Installation and the associated dedicated communication link.

Where meters are installed for purposes other than direct Energy billing (i.e., for check metering, power quality, customer SCADA functionality, Load studies), the Customer shall be responsible for the Costs of the labour, transportation, and material Costs associated with the installation.

Should a Customer's Rate class change to where an Interval meter is the standard or the Customer requests a revenue metering Upgrade to an Interval meter or to a non-standard revenue metering configuration, the Customer shall be responsible for the dedicated communication link(s) and the Cost of the metering provisions upgrade as per the requirements set out in Section 2.4.8.2.

Hydro Ottawa shall be solely responsible for the ownership, Maintenance, and repair of the revenue meter, instrument transformers and metering switch only.

Refer to Hydro Ottawa's Revenue Metering Specification, GCS0008 for more information.

2.4.8.4 Individual Suite Metering for Newly Constructed, Multiple Unit Buildings

For proposed new multiple unit residential buildings that are to be individually metered by Hydro Ottawa, Hydro Ottawa recommends the installation of individual, self-contained Smart Meters for each metered suite. Alternatively, a developer has the option of implementing a Hydro Ottawa Multiple Customer Metering System (MCMS). The proposed meter shall comply with Hydro Ottawa Revenue Metering Specification document GCS0008 and MCMS installation requirements for a new building document MCS0055, as applicable. The Customer shall be responsible for the dedicated communication link(s) as per the requirements set out in Section 2.4.8.2. For more information contact Hydro Ottawa.

2.4.8.5 Existing Multiple Unit Sites and Condominium Buildings

In an effort to foster Energy conservation and when requested by the Customer/building owner, Hydro Ottawa may offer options using self-contained Smart Meters and/or MCMS where practical and feasible. Hydro Ottawa reserves the right to decline the installation of

meters if the proposed meter installation does not meet Hydro Ottawa's Revenue Metering Specifications (document GCS0008) and/or Hydro Ottawa's MCMS installation requirements for existing buildings. The Customer may be required to adjust, modify, repair, replace and/or upgrade their equipment and cover the associated Cost, as required by Hydro Ottawa to support a Smart Meter and/or MCMS system. The Customer shall be responsible for the dedicated communication link(s) as per the requirements set out in Section 2.4.8.2 For more information contact Hydro Ottawa.

2.4.8.6 Single Site and Bulk Revenue Metering

In certain situations, a bulk meter may be requested under the terms and conditions of the Smart Sub-Metering Code and Ontario Regulation 161/99.

The Customer shall supply and install a Meter Socket, Connection arrangements and supporting electrical equipment and ancillary devices in accordance with Hydro Ottawa's Revenue Metering Specifications (see document GCS0008) at the Customer's expense. The Customer shall be responsible for the dedicated communication link(s) as per the requirements set out in Section 2.4.8.2.

2.4.8.7 Revenue Meter Reading

Meter readings for Smart Meters and other electronic Interval Meters, are performed through Hydro Ottawa's remote revenue metering communications system. In the event that a reading cannot be obtained, the consumption amount will be estimated using historical consumption values.

Meter readings for meters that do not yet have a remote communication system are typically scheduled on a monthly basis. When Premises are inaccessible during Hydro Ottawa's Regular Business Hours, the Customer shall, upon reasonable notice, arrange such access at a mutually convenient time. In the event that a reading cannot be obtained, consumption will be estimated using historical consumption values. At each monthly billing cycle Hydro Ottawa will make one attempt to read the meter. If unsuccessful, a meter-reading card will be left at the door. To avoid an estimated bill, it is the Customer's responsibility to provide Hydro Ottawa with an accurate meter reading within two (2) business days from the date the meter reading notice was left.

2.4.8.8 Revenue Meter Reading Access

Where a revenue metering issue has been identified, the Customer must grant Hydro Ottawa access to the meter to investigate and obtain an actual reading, provided reasonable notice is given (see the *Electricity Act, 1998*, Section 40(1)(b)). This includes the installation and on-going verification of a Smart Meter.

Hydro Ottawa will not read Customer owned Sub-metering.

2.4.8.9 Final Revenue Meter Reading

When Service is no longer required, the Customer shall provide Hydro Ottawa a minimum of ten (10) business days notice, prior to the final date of responsibility. When required by Hydro Ottawa, the Customer shall provide revenue metering access to Hydro Ottawa or its agents. If a final meter reading is not obtained, the Customer shall be required to pay an estimated Demand and/or Energy amount for electricity based on the last meter reading, as determined by Hydro Ottawa.

2.4.8.10 Faulty Registration of Revenue Meters

Revenue 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 Measurement Canada, a division of Industry Canada. Hydro Ottawa's revenue meters are required to comply with the accuracy specifications established by the Regulations under the said Act. When a measurement dispute arises, the Customer and/or Hydro Ottawa may request intervention by Measurement Canada.

In the event of incorrect electricity usage registration, Hydro Ottawa will determine the correction factors based on the specific cause of the revenue metering error and the Customer’s electricity usage history. The Customer shall then pay a reasonable sum for all of the Energy supplied, based on the reading of any meter formerly or subsequently installed on the Premises by Hydro Ottawa. Due regard will be given to any change in the characteristics of the installation and/or the demand.

2.4.8.11 Crossed Meters or Billing Errors

When a billing error has resulted in overbilling and Measurement Canada is not involved, the Customer shall be credited with the erroneously paid amount for a period not

exceeding two (2) years, starting from the date that can be reasonably proven when the problem/condition began. If the billing error is not a result of Hydro Ottawa's standard documented billing practices, Hydro Ottawa shall pay interest on the amount credited to the Customer, equal to the prime rate charged by Hydro Ottawa's financial institution.

The Customer shall be refunded the overbilled amount by either a credit to their account or by cheque, in accordance with Sections 7.7.1 and 7.7.2 of the Retail Settlement Code. If there are outstanding arrears on the account, Hydro Ottawa will apply the refund to the account first.

When a billing error has resulted in under billing and Measurement Canada is not involved, the Customer will normally be charged with the amount erroneously under billed for a period not exceeding two (2) years, in the case of a Customer who was not responsible for the error, or the duration of the defect for any proven cases of wilful damage or Energy Diversion.

In the case of under billing, the Customer, upon request, may be permitted to re-pay the amount over a period of time mutually agreed by both Hydro Ottawa and the Customer, but, no longer than the duration of the error and no less than ten (10) months for Eligible Low-Income Customers (see the Distribution System Code, Section 7.7.4.1). In cases of overbilling, Hydro Ottawa shall refund the amount owed to the Customer upon the completion of the investigation and over a period of time mutually agreed to by both Hydro Ottawa and the Customer, but, no longer than the duration of the error.

Hydro Ottawa will not charge interest on amounts owing due to billing errors, provided that the Customer was not aware of the defect or has not tampered with or damaged Hydro Ottawa revenue metering installations. In such cases, the interest charge will be at the discretion of Hydro Ottawa, in accordance with Section 7.7.9 of the Retail Settlement Code.

In cases in which Measurement Canada is involved, Measurement Canada will act as an arbitrator and determine the appropriate adjustment.

Billing corrections shall be calculated using the actual Rates in place at the time of the error.

2.4.8.12 Revenue Meter Dispute Testing

Revenue metering inaccuracy is an extremely rare occurrence. Most billing inquiries can be resolved between the Customer and Hydro Ottawa without resorting to the meter dispute process. Hydro Ottawa will conduct a thorough review of the account to look for possible meter reading or billing errors.

If the outcome of this review confirms that no meter reading or billing errors exist and the Customer remains unsatisfied, Hydro Ottawa will complete a site visit, with an associated charge applied to the Customer's account if the meter and billing amounts are within acceptable limits. If the accuracy is acceptable and the Customer remains unsatisfied, they may wish to begin a meter dispute process.

2.5 Tariffs And Charges

2.5.1 Service Connection

Customers are to pay for Service Connections, Service Upgrades, and Emergency Services based on the average Cost of providing these Services, as set out in Section 3 and Appendix G.

For customer cancellation and site not ready for Hydro Ottawa work charges, refer to Appendix G-3.7

2.5.2 Energy Supply

Customers purchase their supply of electricity from Hydro Ottawa under the Standard Supply Service Code (SSS). Consumers purchase their supply of electricity from an electricity Retailer under the Retail Settlement Code. Hydro Ottawa shall supply electricity to all connected Customers, and bill Customers according to its current Ontario Energy Board approved Rates (see Appendix H).

2.5.3 Security Deposits

As a condition for supplying or continuing to supply distribution Services, Hydro Ottawa will request security deposits from Customers, based on the Customer classification and the Customer's billing history or expected loading for new constructions. Security deposits shall

be determined and managed in accordance with the Distribution System Code (DSC). Hydro Ottawa shall not discriminate among Customers with similar risk profiles or risk related factors, except where expressly permitted under the DSC.

Security deposits will be considered as advanced payments on accounts and become the property of Hydro Ottawa until refunded. They are not considered security, as defined in the *Bankruptcy and Insolvency Act*, R.S.C., 1985, c. B-3, s. 69(1).

2.5.3.1 Non-Residential Customers Security Deposit Calculation

The security deposit amount for non-Residential Customers is based upon the average monthly Load at the subject Service location during the most recent twelve (12) month period, where some of the consumption history has been established in the previous twenty-four (24) months. Where usage history is available, the deposit amount shall be calculated as 2.5 times an average monthly bill for a non-Residential Customer. Where usage history is not available, Hydro Ottawa shall reasonably estimate electricity consumption, based upon the expected loading to be used in the customer's first twelve (12) months. In accordance with Section 2.4.14 of the Distribution System Code, the pricing estimate for electricity Costs shall be the same as the price used by the Independent Electricity System Operator (IESO) for the purpose of determining prudential support obligations of distributors. Where a non-Residential Customer has a poor payment history, Hydro Ottawa may use the highest actual or estimated Load to calculate the required deposit.

If requested, a non-Residential Customer may pay their security deposit in four (4) equal monthly installments.

2.5.3.2 Non-Residential Security Deposit Waiver or Reduction Conditions

Non-Residential Customers opening an account may qualify for a deposit waiver, based on the following criteria:

a. The Customer has previously established a satisfactory payment history with Hydro Ottawa as an account holder in the same name, where some of that satisfactory payment history has occurred within the previous twenty-four (24) months, or

b. The Customer provides a letter from another electricity or gas Distributor in Canada, confirming a satisfactory payment history for the relevant time period, as outlined in Section 2.4.9 of the Distribution System Code, and which has occurred within the previous twenty-four (24) months and is in the same account holder name, or

c. The Customer, other than a customer in a greater than 5,000 kW demand rate class, provides a satisfactory credit check at their expense. Hydro Ottawa is not responsible for the data integrity of external credit rating agencies.

d. Where a non-Residential Customer greater than 50kW demand and less than 5,000 kW demand rate class is required to provide a security deposit as determined in Section 2.5.3.1, and has a credit rating from a recognized agency, the amount of security deposit required shall be adjusted according to the following credit ratings:

Credit Rating *(Using Standard and Poor's Rating Terminology)*	**Allowable Reduction**
AAA- equivalent and above	100%
AA-, AA, AA+ or equivalent	95%
A-, From A, A+ to below AA or equivalent	85%
BBB-, From BBB, BBB+ to below A or Equivalent	75%
Below BBB-, or equivalent	0%

e. Hydro Ottawa may reduce the security deposit held by Customers greater than 5,000 kW, by a maximum of fifty percent (50%), after seven (7) years of good payment history has been achieved. The remaining balance of the security deposit will be refunded only when the account is closed.

2.5.3.3 Non-Residential Customer Satisfactory Payment History

a. The minimum time frame for establishing satisfactory payment history, provided some payment history has occurred within the past twenty-four (24) months, varies by Customer class as follows:

- Commercial less than 50 kW demand: three (3) years
- Commercial greater than 50 kW demand: seven (7) years

b. Non-Residential Customer Payment history is deemed unsatisfactory if more than one of the following events occur, during the relevant time period, as set out in Section 2.4.3.3(a):

- a Disconnection Notice is issued;
- a payment cannot be processed due to non-sufficient funds (NSF); or
- a field visit by Hydro Ottawa is made to Disconnect Service or collect overdue charges.

c. A security deposit may be required if a non-Residential Customer fails to maintain a good payment history, as outlined in Sections 2.5.3.3.a and 2.5.3.3.b.

d. If any of the events set out in Section 2.5.3.3.b occur due to an error on the part of Hydro Ottawa, the Customer's payment history shall not be negatively affected.

e. If a non-Residential Customer is required to increase their existing security deposit amount, that increase shall be included in their next regular bill and associated due date.

2.5.3.4 Forms of Acceptable Security

Non-Residential Customers may provide a security deposit to Hydro Ottawa in the form of:

- cash;
- automatically renewing, irrevocable letter of credit from a bank, as defined in the *Bank Act,* S.C. 1991, c.46;
- surety bonds; or
- a third-party guarantee, provided that the guarantor has a Standard and Poor's Rating of A- (or equivalent) or better and executes a guarantee in a form satisfactory to Hydro Ottawa.

2.5.3.5 Security Deposit Management and Refund

At a minimum of once per calendar year, Hydro Ottawa will complete a security deposit review to assess deposit requirements, amounts and refund eligibility, for non-Residential Customers. A Customer's billing and payment history will determine if a security deposit is required, due for an adjustment or refundable, in accordance with Section 2.4.3.1.

Customers with active accounts that are eligible for a partial or full deposit refund shall have their cash deposit, plus accrued interest, applied to their account. Upon closure of an account, Hydro Ottawa shall automatically transfer the balance to the Customer's new Hydro Ottawa account, as required or, where no such requirement or account exists, apply the deposit and accrued interest to the final bill. Any residual credits shall be returned by cheque, within six (6) weeks of account closure. Balances of less than $5.00 will not be returned by cheque.

Deposit interest on cash deposits shall accrue monthly and be applied to the customer's account at least annually, commencing from the date the deposit was paid in full. The interest rate shall be at the Prime Business Rate, as published on the Bank of Canada website, less two percent (2%), updated quarterly.

2.5.3.6 Failure to Comply with Security Deposit Request

Payment of a requested security deposit is a condition of service and continuing service, which shall be enforced through standard collection practices for amounts overdue.

Hydro Ottawa may enforce payment of the required security deposit by withholding or withdrawing electrical Service provided a minimum of ten (10) calendar days' written notice is provided (see Section 31 of the *Electricity Act, 1998*).

2.5.3.7 Residential Customers' Security Deposit

For the purpose of security deposit requirements, the following Customers shall be deemed Residential Customers:

a. A Customer that is a corporation within the meaning of the *Condominium Act, 1998*, who has an account with Hydro Ottawa, shall be deemed a Residential Customer, if, the following conditions apply:

i. the account relates to a Property defined in the *Condominium Act, 1998*, and is comprised predominantly of units that are used for residential purposes, and

ii. the account relates to more than one unit of Property, provided that the Customer files a Declaration Form with Hydro Ottawa attesting to the Customer's status as a corporation within the meaning of the *Condominium Act, 1998,* S.O. 1998, c.19.

2.5.3.8 Security Deposit Requirement

Security deposits may be required from Residential Customers who have demonstrated an unsatisfactory payment history over the past twelve (12) months, if one or more of the following events occurs:

- a Disconnection Notice is issued;
- a payment cannot be processed due to non-sufficient funds (NSF);
- a field visit by Hydro Ottawa is made to Disconnect Service or collect overdue charges; or
- a full or partial security deposit was applied to a Customer's arrears and that Customer was required to repay the security deposit.

Residential Customers, who have not been a Hydro Ottawa customer in the past twenty four (24) months, will be offered an equal monthly payment plan, a pre-authorized payment plan, or both. If the customer elects to enroll in either plan, a security deposit will not be required.

2.5.3.9 Security Deposit Payment

The requested deposit amount shall be applied to the Customer's bill. A message on the bill will advise Customers that a security deposit has been applied to their account. Customers may pay their deposits in six (6) equal installments. Monthly deposit amounts shall be included on the Customer's electricity bill and total amount owing, over a six (6) month period.

2.5.4 Security Deposit Calculation

A Residential Customer's security deposit amount is calculated according to the average bill of that account over the most recent consecutive twelve (12) month span within the past

twenty-four (24) months. Where billing history is available, the deposit amount shall be calculated as 2.5 times the average monthly bill. If less than twelve (12) months of billing history exists, Hydro Ottawa will base the Residential Customer's security deposit upon a reasonable estimate.

2.5.4.1 Security Deposit Exemption

i. A Customer who has been qualified as an Eligible Low-Income Customer is not required to provide or maintain a deposit, in accordance with Section 2.4.11.1 of the Distribution System Code (DSC).

ii. Customers who apply for eligibility as a Low-Income Customer shall be provided twenty-one (21) calendar days to confirm eligibility, in accordance with Section 2.4.11.2 of the Distribution System Code.

iii. Customers who have a deposit on their account and subsequently qualify as an Eligible Low-Income Customer will be advised within ten (10) calendar days of their deposit balance, after applying the deposit to any outstanding arrears that may exist. The deposit or residual amount shall be applied to the Customer's account, if that amount is less than an average of one-month's billing. If the amount is equal to or greater than one month's average billing, the customer may elect to receive the funds by cheque, which shall be issued within eleven (11) calendar days of request.

2.5.4.2 Security Deposit Management and Refund

Residential Customers with a security deposit on their account which falls into arrears shall have their deposit applied to their outstanding balance, in advance of further potential collection action, including Disconnection. As noted in Section 2.4.26B of the Distribution System Code a replacement security deposit shall be required.

In accordance with Section 2.4.23A of the Distribution System Code, Residential Customers may request, in writing or by phone, a review of their deposit level or requirement, once twelve (12) months have elapsed from the date the first deposit installment was paid. In accordance with Section 2.4.22A of the Distribution System Code, Hydro Ottawa shall review deposit amounts and requirements in the calendar year in which the anniversary of the first installment occurs and thereafter at the next review as required by the Distribution System Code.

Should a review result in an upward adjustment of the security deposit held, the Customer shall be provided at least six (6) months to pay the additional amount owed, in equal monthly installments, per Section 2.4.25A of the Distribution System Code.

Deposits shall be automatically refunded to the customer's account once twelve (12) months of satisfactory payment history is established, commencing from the date the deposit was paid in full, or the customer's account is closed, whichever comes first.

Deposit interest on cash deposits shall accrue monthly and be applied to the customer's account at least annually, commencing from the date the deposit is paid in full. The interest rate shall be at the Prime Interest rate as published on the Bank of Canada website, less two percent (2%), updated monthly.

2.5.4.3 Failure to Comply with Security Deposit Request

Payment of a requested security deposit is a condition of service and continuing service, which shall be enforced through standard collection practices for amounts overdue.

Hydro Ottawa may enforce payment of the required security deposit by withholding or withdrawing electrical Service provided a minimum of ten (10) calendar days' written notice is provided (see Section 31 of the *Electricity Act, 1998*).

2.5.5 Billing

Hydro Ottawa bills Customers on a monthly basis.

Distributed Energy Resource accounts will be billed in accordance with the associated regulatory codes and, if not specified in these codes, then in a manner consistent with billing of Hydro Ottawa Customer account practices.

2.5.5.1 Prorating Bills and Service Charges

Service and Demand charges may be prorated for the first bill, final bill, and over a Rate change. For first and final bills, service charges are based on a straight ratio calculation of the number of days the premise is occupied by the Customer to a standard thirty (30) day month.

2.5.5.2 Estimating Bills

Reasonable attempts will be made to obtain a meter reading for all regular electricity bills. Bills shall only be estimated when Hydro Ottawa has been unsuccessful in obtaining a meter reading. If a bill is estimated, it will be based on the Customer's consumption history whenever possible.

Demand shall only be estimated after current practices for retrieving a reading have been exhausted. When a Demand reading cannot be obtained, it may be estimated after reviewing the Demand history and considering, for example, seasonality and change in use. This does not apply to interval metering.

2.5.5.3 Account Set-Up Charge

When a Customer establishes a new account, an account set-up charge is applied to their first bill. This charge applies to both those Customers who are new to Hydro Ottawa's Distribution System Service Area and those who have moved locations within Hydro Ottawa's Distribution System Service Area.

2.5.5.4 Transformer Ownership Credit

Where a Load Customer owns all distribution transformers at the same Premise for the purpose of altering Hydro Ottawa's primary distribution voltage (i.e., not at the secondary distribution voltage) to the Customer's utilization voltage, Hydro Ottawa shall apply a Transformer Ownership Credit to one electricity account of the Customer serviced from those transformers as approved by the Ontario Energy Board (OEB). In order to receive this credit, the Customer must have a meter that registers Demand usage to that electricity account.

Where a mix of Customer and Hydro Ottawa owned distribution transformers exist at the same Premise, Hydro Ottawa shall not apply the Transformer Ownership Credit to any energy account for new or upgraded installations.

Unmetered, standby, Distributed Energy Resources, and temporary Services will not receive a Transformer Ownership Credit.

Effective April 1, 2015, Hydro Ottawa shall discontinue the Transformer Ownership Credit for Customer-owned transformers installed after November 1, 2000. For Customer-owned transformers installed prior to November 1, 2000, Hydro Ottawa shall discontinue the

Transformer Ownership Credit when the transformer is replaced, or after November 1, 2025, whichever comes first. With these Customers, there will be no reconciliation of any debits or credits with previous Transformer Ownership Credits.

2.5.5.5 Transformer Loss Charge

The Customer shall pay for all unmetered transformer losses where:

i. a Load Customer owns a transformer at the same Premise for the purpose of altering Hydro Ottawa's primary distribution voltage (i.e., not at the secondary distribution voltage) to the Customer's utilization voltage with secondary revenue metering; or

ii. a Load Customer owns a transformer for the purpose of altering the Customer's secondary distribution voltage (i.e., secondary voltage to secondary voltage type) with individual revenue metering for billing purposes on the secondary side of the transformer.

If the Load Customer's transformer is a non dry core transformer, the Customer shall pay upfront for unmetered transformer operational losses above an equivalent transformer(s) that Hydro Ottawa would normally provide the Customer.

If the load Customer's transformer is a dry core transformer, transformer losses will be applied to the on-going Energy bill. The charge will be determined from a schedule based on the size and type of the dry core transformer(s). If a check consumption verification meter exists on the central Service, this meter may be used to determine the losses on the dry core transformer(s).

2.5.5.6 Power Factor Adjustment

A Customer shall be billed for Demand based on the measured kilowatts or ninty percent (90%) of the measured kilovolt-amperes, whichever is greater. This provides an adjustment for a Customer with a power factor that is less than ninety percent (90%) leading or lagging.

2.5.5.7 Site Specific Losses

Where practical, revenue metering for a Load Customer or Distributed Energy Resource may be installed at the Supply Point. If this revenue metering arrangement is not practical at the Supply Point, Hydro Ottawa will apply site specific loss factors to the Customer's

Energy account in addition to the distribution loss factor in accordance with the Ontario Energy Board Distribution System Code and Retail Settlement Code, as well as, the Independent Electricity System Operator Distributed Energy Resource contract requirements if applicable.

2.5.5.8 Primary Adjustment Factor

If the Load Customer is metered at Hydro Ottawa's primary distribution voltage supplying the Customer and the Customer's utilization voltage is at a different level due to a transformer(s), a Primary Adjustment Factor shall be applied to the Customer's energy account.

If the Load Customer owns the primary distribution transformer and has secondary revenue metering installed, Hydro Ottawa may review the transformer losses. If the customer-owned transformer (non-dry core type) has more fully loaded losses than an equivalent Hydro Ottawa supplied transformer, the Customer shall pay an operating Cost penalty as an upfront contribution to the Connection project. If the customer-owned transformer is a dry core type, a Dry Core Transformer Charge will be applied to the Load Customer's energy account bill rather than an upfront operating Cost penalty.

For Distributed Energy Resource Customers, Hydro Ottawa shall apply a customer-owned transformer loss factor, in accordance with the Distribution System Code and Independent Electricity System Operator contract rules, to capture transformer losses between the meter and Hydro Ottawa's Supply Point distribution voltage.

2.5.5.9 Measurement Error Correction Factors

Where Hydro Ottawa is the Meter Service Provider (MSP), Measurement Error Correction (MEC) factor losses shall not be applied. If the Energy Resource Facilitator chooses another MSP, the Energy Resource Facilitator is responsible for determining the measurement error correction factors and providing them to Hydro Ottawa for approval. The MEC needs to be compliant with the Independent Electricity System Operator (IESO) and Measurement Canada requirements, as well as signed and sealed by a Professional Engineer of Ontario.

2.5.5.10 Standby Charges

When a Customer requests standby or reserved capacity from Hydro Ottawa beyond that which would normally be provided in that location and Hydro Ottawa determines it is

feasible to provide, the Customer shall have Hydro Ottawa's Ontario Energy Board (OEB) approved standby rates applied for the availability to the additional backup capacity and upfront Costs for any Hydro Ottawa system changes or additions to provide the additional capacity. Customers with such supply configurations, prior to the filing of Version 5 (April 1, 2015) of the Conditions of Service with the Ontario Energy Board, are grandfathered from the additional on-going standby charge until that Customer initiates any new Service additions or Upgrades. If the Customer has an auto-transfer scheme, it shall not parallel Hydro Ottawa's distribution circuits together.

2.5.6 Methods of Payment and Payment Plans

2.5.6.1 Methods of Payment

Hydro Ottawa accepts electricity bill payments from Customers in the following methods:

a. Automated payments including Pre-Authorized Payment and Equal Monthly Payment Plan;

b. at most Canadian financial institutions;

c. credit card either online or by telephone through an approved payment provider;

d. debit card online through an approved payment provider;

e. mailing a cheque or money order.

For more information, visit hydroottawa.com/pay.

2.5.6.2 Billing Options

Hydro Ottawa offers the following billing options:

a. Equal Monthly Payment Plan

An Equal Monthly Payment Plan (EMPP) is offered to qualifying residential and small Commercial Customers (General Service <50 kW) who purchase their electricity commodity through Hydro Ottawa's Standard Supply Service (SSS). EMPP is available with and without pre-authorized payments (PAP) withdrawals. The Equal Monthly Payment Plan is not available to:

- Consumers enrolled with a Retailer for the purchase of their electricity commodity;
- Customers who do not have a regular/verified meter reading within the last six (6) months;
- Customers with new services that have less than 12 months of billing history; and
- Small Commercial Customers who have unpredictable consumption usage.

This plan allows Customers to spread their annual electricity costs evenly through the year for easier budgeting and a more predictable monthly bill. With EMPP, the Customer pays the same amount every month. An equal monthly payment will be due or automatically withdrawn from the Customer's bank account on the due date indicated on their bill. Alternatively, Customers may request that the withdrawal occur on the 5th of every month.

The monthly payment amount is based on the Customer's projected annual electricity usage and the price of electricity. If the Customer's Equal Monthly Payment Plan amount exceeds or is insufficient compared to the Customer's actual usage, the amount may be periodically adjusted by Hydro Ottawa, either higher or lower, as applicable. EMPP Customers are encouraged to monitor each bill to determine their scheduled withdrawal amount and date.

Some additional charges may appear on the Customer's statement from time to time. These may include, but are not limited to, fees for account set-up, credit checks, returned payments, or security deposits.

Hydro Ottawa, at its sole discretion, will determine the Equal Monthly Payment Plan amount. While the Equal Monthly Payment Plan is in effect and maintained, interest shall not be charged or credited to account balances.

Customers may register online through MyAccount, Hydro Ottawa's online customer service portal at hydroottawa.com/account. Alternatively, Customers may find an Equal Monthly Payment Plan application online and submit it via mail, email or fax.

If a payment is returned due to non-sufficient funds (NSF), an NSF fee and a late payment charge will be applied to the account. The overdue payment, the NSF fee

and the late payment charge will be withdrawn on the next due date, at the same time as the next monthly payment. If scheduled payments are not maintained, Customers may be removed from the Equal Monthly Payment Plan.

Upon request, Customers may opt out of this Equal Monthly Payment Plan at any time, at which point, standard billing and collection timelines will apply. The requested changes will become effective within fifteen (15) business days of receiving the Customer's request.

b. Pre-Authorized Payment Plan

This plan is available to all Customers, except those billed directly by a Retailer (i.e., Retailer Consolidated Billing).

A pre-authorized bank debit of the net-billed amount will be withdrawn from the Customer's bank account on the due date of the bill.

To enroll, Customers may register online through MyAccount, Hydro Ottawa's online customer service portal at hydroottawa.com/account. Alternatively, Customers may contact Customer service to obtain, complete, sign and submit a Pre-Authorized Payment (PAP) application, along with the required banking information, to Hydro Ottawa. Upon request, a Customer may opt out of the PAP Plan, at any time. The requested changes will become effective within fifteen (15) business days of receiving the Customer's request.

If a payment is returned due to non-sufficient funds (NSF), an NSF fee and a late payment charge will be applied to the account. The overdue payment, the NSF fee and the late payment charge will be due at the same time as the next monthly payment. If payments are not maintained or remain outstanding, the plan may be suspended or the Customer may be removed from the plan within thirty (30) days after the due date.

c. Aggregated Billing

Aggregated Billing is only offered to Customers with Load Facilities with multiple metered services on the same property.

Where a Load Facility on a property is supplied by multiple metered services, the Customer may choose to aggregate their accounts for multiple metered services provided all of the following conditions are met:

- The Load Facility and the meter services are located on the same property;
- All meter services pertain to the same account holder (multiple customers and/or tenant accounts are not considered to be a single Load Facility);
- The meters are of the interval type, allowing logical totalization of the coincident demands. If interval meters are not already in place, the customer shall install the necessary equipment, at their own expense, to Hydro Ottawa's specifications;
- The aggregation of billing is not through subtractive metering;
- The resulting account is not receiving transformer ownership credit(s); and
- The Load Facility has not been previously disaggregated.

Where more than one service connection is provided to a property and/or Load Facility, and there is no electrical tie between the service connections, each connection and associated metered service(s) will be treated separately with regards to an aggregate demand.

2.5.6.3 Payments and Late Payment Charges

A late payment charge of 1.5% per month (19.56% annually) is applied to all accounts not paid by the due date. Once bills are issued, they are due and payable twenty three (23) days from the bill date (i.e., the date upon which the bill is issued). This charge is applied to any overdue amount, excluding final bills and arrears payment arrangements. If the Customer has made a partial payment on or before the due date, the late payment charge shall only apply to the amount of the bill outstanding at the due date, inclusive of arrears from previous billings. Where payment on account of a bill is not sufficient to cover electricity charges, security deposits and billing adjustments, Hydro Ottawa will allocate the payments in the following order: electricity charges as defined in Section 2.6.6.3 of the Distribution System code, payments towards an arrears payment agreement, outstanding security deposit, under-billing adjustments and non-electricity charges.

Credit balances arising from Customer overpayments may be refunded, by cheque, at the request of the Customer. In such instances, no interest shall be applied to the amount. Balances of less than $5.00 will not be returned by cheque.

2.5.6.4 Arrears Payment Agreement

Residential and Small Commercial Customers may qualify for an Arrears Payment Agreement (APA) in order to pay overdue amounts over an extended period of time.

Hydro Ottawa offers Ontario Energy Board-mandated arrears payment agreements in accordance with the Distribution System Code to assist Customers with the payment of billed charges and to avoid disconnection of the electricity supply for non-payment of account. Customers may obtain more details by contacting Customer Service (see Section 1.5).

2.5.6.5 Unprocessed Payment Charge

A non-sufficient funds (NSF) charge is applied for each payment that cannot be processed.

2.5.6.6 Reconnection Charge

A Customer Disconnected for non-payment may be required to pay a Reconnection fee. Hydro Ottawa requires that a Person over the age of eighteen (18) be at the Premise at the time of Reconnection. If a Hydro Ottawa representative arrives at the Premise and is not able to complete the Reconnection because there isn't a Person over the age of eighteen (18) present, the request will be closed, and the Customer will be required to arrange Reconnection again. A Reconnection charge will be applied to the Customer's account when the Service Reconnection is completed.

2.5.6.7 Credit Refunds

A credit refund for a Customer's final account will not be initiated until ten (10) business days have elapsed from the final payment date. Hydro Ottawa may transfer the credit balance to:

i. any other active account held by the Customer; or
ii. any outstanding balance on any previous account held by the Customer.

2.5.6.8 Distributed Energy Resource Payments

A Customer authorized by Hydro Ottawa to supply electrical Energy (i.e., electricity) to or through Hydro Ottawa's Grid will receive payment from Hydro Ottawa in accordance with the Customer's supply contract with:

1. The Independent Electricity System Operator; or
2. Hydro Ottawa, as applicable.

Hydro Ottawa will only make payments to the Person named in the supply contract, unless otherwise agreed to in writing by the parties therein.

The terms and conditions of any supply contract between Hydro Ottawa and the Customer will be in accordance with the provisions of Hydro Ottawa's Conditions of Service where there is no supply contract between the Customer and the Independent Electricity System Operator and:

i. there is no written supply contract between the Customer and Hydro Ottawa; or
ii. the Independent Electricity System Operator supply contract has terminated and the Customer continues to supply electricity to Hydro Ottawa.

In the event that the Customer (Assignor) seeks to assign a supply contract to an Assignee, the Customer shall, prior to Hydro Ottawa accepting the assignment: (i) provide documentation that the Assignee has assumed all of the obligations noted in the supply contract with Hydro Ottawa; (ii) provide written notice to Hydro Ottawa of the assignment three weeks prior to the effective date of the assignment; (iii) confirm that Hydro Ottawa received notice of assignment from IESO and (iv) ensure all outstanding amount(s) under the supply contact owing by the Customer is settled with Hydro Ottawa. The written notice to Hydro Ottawa shall include: (i) a copy of the assignment agreement; (ii) a copy of the supply contract(s) to be assigned; (iii) the anticipated effective date of assignment; and (iv) any other information (e.g., new contact details for payment and operation) required by Hydro Ottawa.

Once the assignment of the supply contract is completed in accordance with the above, payment by Hydro Ottawa to the assignee will be made on the first regular payment date after the later of: (i) the effective date of the notice of consent to the assignment and (ii) the date of receipt by the assignor of the notice of consent to the assignment. Any financial

adjustment between the assignor and assignee as a result of the foregoing remains the responsibility of the assignee and assignor.

Where the Customer is required to collect Harmonized Sales Tax (HST) for their generation under the supply contract, the Customer shall provide Hydro Ottawa a GST/HST account number. A Customer shall notify Hydro Ottawa immediately when they no longer need to collect HST.

In the event that the Customer seeks to redirect the payment from their supply contract to a third-party (Direction to Pay), the Customer shall:

i. provide prior written notice to Hydro Ottawa as per the minimum timing set out in Section 2.1.6.5;
ii. have prior written approval by the Independent Electricity System Operator where there is a provincial supply contract between a Customer and the Independent Electricity System Operator (IESO); and
iii. have no outstanding debts with Hydro Ottawa and be in good standing with Hydro Ottawa technical standards where there is no provincial supply contract between a Customer and the Independent Electricity System Operator. Where there is no legislative or provincial supply contract requirement to provide a Direction to Pay, Hydro Ottawa will not provide this service.

2.5.7 Eligible Low-Income Customers and Low-Income Energy Assistance Programs

2.5.7.1 Assistance Available to Eligible Low-Income Customers

Hydro Ottawa adheres to all provisions related to Eligible Low-Income Customers as set out by the Ontario Energy Board and the Government of Ontario. These provisions are outlined in the Distribution System Code, the Retail Settlement Code, the Standard Supply Service Code and Ontario Regulation 314/315.

Eligible Low-Income Customers may qualify for emergency financial assistance, an ongoing on-bill credit, energy conservation programs and additional customer service offerings for Eligible Low-Income Customers relating to:

- security deposits;
- billing errors; and

- Arrears Payment Agreements.

2.5.7.1.1 Low-Income Energy Assistance Program

The Low-Income Energy Assistance Program Emergency Financial Assistance (LEAP EFA) is a grant program intended to provide emergency relief to Eligible Low-Income Customers who may be experiencing difficulty paying current arrears. It is not intended to provide regular or ongoing bill payment assistance.

Eligibility for a LEAP EFA grant is based on Statistics Canada's Low-Income Measure (LIM), and depends on the number of people living in the household and combined income. Eligibility will be determined by Community Health and Resource Centres.

Customers can apply for LEAP EFA through a Community Health and Resource Centre, in the City of Ottawa. Customers may locate the closest Community Health and Resource Centre online or by contacting Hydro Ottawa (see Section 1.5).

2.5.7.1.2 Ontario Electricity Support Program

The Ontario Electricity Support Program (OESP) is a bill assistance program that provides an on-bill credit for Eligible Low-Income Customers.

Eligibility for OESP is based on Statistics Canada's Low-Income Measure, and depends on the number of people living in the household and combined income. Eligibility is determined by the Central Service Provider and/or a Community Health and Resource Centre in the City of Ottawa. Customers may locate the closest Community Health and Resource Centre online or by contacting Hydro Ottawa (see Section 1.5).

Hydro Ottawa customers can apply for the OESP online at ontarioelectricitysupport.ca or by calling 1-855-831-8151.

2.6 Release of Customer Billing Information to Retailers

Hydro Ottawa will periodically communicate general market and educational information to its Customers and Consumers, as required.

At the Customer's or Consumer's request, Hydro Ottawa shall provide a list of Retailers who have Service agreements in effect within its Service Area. The list shall inform the Customer

or Consumer that an alternative Retailer does not have to be chosen to ensure the Customer or Consumer receives electricity and the terms of Service that are available under Standard Supply Service.

Upon a Customer's written authorization, Hydro Ottawa shall make the Customer's information available to the Customer or third-party, as set out in the Retail Settlement Code.

Upon receiving a billing inquiry from a Customer, Hydro Ottawa shall either respond to the inquiry if it deals with its own Distribution System or provide the Customer with contact information for the entity responsible for the item of inquiry, in accordance with the Retail Settlement Code.

2.7 Customer Rate Classification and Designation

New and existing Customers are classified according to the intended use of the Premise. The new Customer Rate classification for Commercial Customers will be determined based on estimated annual electricity usage or Billing Demand unless the Customer provides specific written direction and supporting documentation for a different Rate classification for consideration by Hydro Ottawa. The Rate classification is independent of the Service construction, potential electricity usage or specific Service Costs discussed in Section 3.0 and Appendix G.

2.7.1 New and Existing Customer Rate Classification and Designation

Initial and existing Customer Rate classes are determined according to the following table.

Class	Context
Residential	This classification includes accounts using electricity at 120/240 V single phase where the electricity is used exclusively in a separately metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triple or quadruplex

	house, with a residential zoning. Separately metered dwellings within a townhouse complex or apartment building also qualify as residential customers.
General Service < 50 kW	This classification refers to non residential accounts using electricity at 750 V or less whose monthly average peak demand is less than, or is forecast to be less than 50 kW.
General Service 50–1,499 kW	This classification refers to non residential accounts 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 1,500 kW. This is 80% of the Service size.
General Service 1,500-5,000 kW	This classification refers to non residential accounts whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than, 1,500 kW but less than 5,000 kW. This is 80% of the Service size.
Large User > 5,000 kW	This classification refers to an account whose monthly average peak demand is equal to or greater than, or is forecast to be equal to or greater than 5,000 kW. This is 80% of the Service size.
MicroFIT Service Classification	This classification applies to an electricity generation facility with a nameplate capacity of 10 kW or less contracted under the Independent Electricity System Operator's MicroFIT program. This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program.
FIT Service Classification	This classification applies to an electricity generation facility with a nameplate capacity of over 10 kW contracted under the Independent Electricity System Operator's FIT program. This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's FIT program.

Net-Metering Service Classification	This classification applies to an eligible electric generation facility as defined in s. 7 of O. Reg. 541/05.
Unmetered Scattered Load	This classification includes accounts taking electricity at 120/240 volts single phase whose monthly average peak demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. These connections include cable TV power packs, 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.
Standby Power Service	This classification refers to an account that has Load Displacement Generation equal to or greater than 500 kW and requires the distributor to provide back-up service.
Sentinel Lighting Service	This classification refers to accounts that are an unmetered lighting load supplied to a sentinel light.
Street Lighting Service	This classification refers to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting controlled by photocells. The consumption for these customers is based on the calculated connected load times the required lighting times established in the approved OEB street lighting load shape template.
Net-Metering Service	This classification applies to an eligible electricity generation facility as defined in O. Reg. 541/05.
HCI, RESOP, Other Energy Resource Service	This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's

	HCI, RESOP and Other Energy Resource programs connected to the distributor's distribution system.

Table 2.7.1-1: Rate Classifications of New and Existing Customers

Some General Service accounts may be eligible for the Regulated Price Plan (RPP). Eligibility for designation is in accordance with the definitions outlined in the *Ontario Energy Board Act, 1998*, and Ontario Regulation 95/05. For further information on eligibility, consult the Rates and Conditions section available at hydroottawa.com/rates.

2.7.2 Existing Customer Rate Reclassification and Re-designation

Once classified, Commercial Customers will remain in their initial category until a full twelve (12) months of Load history is established for the Premise. All Commercial Customer Rate classifications will be reviewed annually, in accordance with Section 2.5 of the Distribution System Code. Hydro Ottawa shall provide Customers written notice of reclassification no less than one billing cycle prior to reclassification. A Customer may request one reclassification review within any calendar year. Alternatively, Hydro Ottawa or the Customer may initiate a review at any time if the Customer's Billing Demand falls outside the upper or lower limits of the current Rate classification for five (5) consecutive months.

Customers that leave the regulated price plan for any reason may be subject to a "Final Regulated Price Plan (RPP) Variance Settlement Factor." This settlement factor may be a credit or a charge based on the current factor issued by the Ontario Energy Board and is to be included in the first bill issued after the Customer is removed from designation status.

All re-classifications occur prospectively (i.e., on a "go forward" basis) from the time the Customer has requested the change, Hydro Ottawa has initiated the change and/or as a result of the yearly review process. Where a Customer is reclassified to a "C2" or higher Rate classification, the Customer may be required to provide a dedicated communication link to the meter(s) at the Customer's expense and the determination by Hydro Ottawa.

Existing Customer Rate classes are reviewed and classified according to the following table.

Class	Context
Residential	Not applicable

General Service < 50 kW	Customer remains in this class if their average Billing Demand for five (5) consecutive months is less than 50 kW or their total consumption is below 150,000 kWh. Customer moves to this class if their Billing Demand for five (5) consecutive months falls below 50 kW or their total consumption is below 150,000 kWh.
General Service 50 kW - 1,499 kW	Customer remains in this class if their average Billing Demand for five (5) consecutive months is between 50 kW and 1,499 kW. Customer moves to this class if their Billing Demand for five (5) consecutive months is between 50 kW and 1,499 kW.
General Service 1,500 kW - 4,999 kW	Customer remains in this class if their average Billing Demand for five (5) consecutive months is between 1,500 kW and 4,999 kW. Customer moves to this class if their Billing Demand for five (5) consecutive months is between 1,500 kW and 4,999 kW.
Large User 5,000 kW or greater	Customer remains in this class if their average Billing Demand for five (5) consecutive months is greater than or equal to 5,000 kW. Customer moves to this class if their Billing Demand for five (5) consecutive months is greater than or equal to 5,000 kW.

Table 2.7.2-1: Rate Reclassifications of Existing Customers

For details on the revenue metering implications, see Section 2.3.7.

SECTION 3

Customer Class Specific

3.0 Common Installation, Maintenance And Ownership Conditions

3.0.1 Referenced Hydro Ottawa Documents

The following are other Hydro Ottawa documents which define technical interfaces between Hydro Ottawa and its Customers and/or Consumers:

ECG0001: *Commercial Secondary Ownership*

ECG0002: *Technical Guideline for Customer Owned Standby Generation*

ECG0003: *Residential Secondary Ownership*

ECG0004: *Unmetered Secondary Ownership*

ECG0005: *Commercial Primary Service Ownership Demarcation, Customer Owned Equipment*

ECG0006: *Embedded Generation Technical Connection Guideline*

ECG0008: *Distribution System Voltage and Power Quality*

ECG0009: *Commercial Primary Service Ownership Demarcation, Hydro Owned Equipment*

ECS0019: *Major Equipment Costing with Customers*

ECS0031: *Digital Base Mapping Requirements for Electrical Servicing.*

GCS0001: *Underground Residential Distribution Installation of Civil Work Construction Detail in Subdivisions*

GCS0002: *Primary Voltage Service General Guideline*

GCS0008: *Revenue Metering Specification*

GCG0003: *Typical Private Residential Road Cross Section*

OLS0002: *Overhead Primary Voltage Line Clearances to Adjacent Buildings; 2.4/4.16 – 44 kV – Clearance Detail*

UTS0038 *Transformer Clearances Transformer and Switchgear Pad*

VIS0001: *Vault Inspection and Maintenance*

Overhead Clearance (hydroottawa.com/overheadclearance)

Pools and Powerlines (hydroottawa.com/pools)

Tree Planting Advice (Planting Trees web page at hydroottawa.com/plantingtrees)

For the latest specifications, refer to Hydro Ottawa's website at hydroottawa.com. Nothing contained in these specifications shall prejudice or supersede any regulation or requirement of the Ontario Electrical Safety Code (OESC) for Customer-owned equipment.

These documents may be occasionally modified. It is the Customer's responsibility to refer to the most recent version.

3.0.2 Distribution System Requirements

Hydro Ottawa has the sole right to set standards, specifications and designs for its Distribution System.

The determination of how to supply a Premise, whether pad-mounted transformer, pole mounted transformer(s) or customer vault, resides with Hydro Ottawa.

Pad-mounted units are not permitted where construction is planned from lot line to lot line in the "Downtown", where insufficient space is available, or in areas where total underground conversion may be planned.

Only standard Hydro Ottawa approved conductors or cables are permitted to be connected on/into Hydro Ottawa owned Support Structures except for approved unmetered utilities that have a Municipal Access Agreement (e.g., metal sheath cables such as "teck," "pyro," and "corflex" shall not be permitted).

When any customer service equipment work, requiring an Electrical Safety Authority permit, is undertaken, non-standard Service equipment configurations must be brought to Hydro Ottawa's current technical servicing standards. Refer to Section 2.1.4 for details.

3.0.3 Public Access to Hydro Ottawa Equipment

A Customer, Consumer or contractor cannot attach equipment, such as satellite dishes, lighting, solar panels, wind turbines, telecommunications, cablevision, security, fencing or signage, to Hydro Ottawa structures or equipment (e.g., poles, underground Cable Chambers, pad-mounted equipment, meters), without prior written approval from Hydro Ottawa. Signs attached to distribution asset structures are by written agreement solely for traffic safety, public, community, non-profit and local improvement events (i.e., not for commercial gain, political messaging, or offensive material). The proposed attachment is required to comply with the technical safety requirements for the public, workers, and equipment. Attachments to Hydro Ottawa poles require an attachment agreement and, where along public roadways, authorization from the Road Authority for encroachment. Metering or metered Service equipment may not be attached to Hydro Ottawa poles.

Safe Limits of Approach as specified in the Electrical Utility Safety Rules shall apply. As such, Hydro Ottawa ducts are stubbed out of their underground chamber so that the Customer's ducts can be connected without entering the Hydro Ottawa underground Cable Chambers.

To comply with the Electrical Utility Safety Rules, only a Hydro Ottawa Approved Contractor is permitted to carry out work on, or in Hydro Ottawa structures. The contractor shall notify Hydro Ottawa of the time and date on which they are proposed to work on, or in a Hydro Ottawa structure. A contractor cannot work on a Hydro Ottawa pole above any live conductor, or install an underground Service on a pole, or in an underground Cable Chamber where there is a Hydro Ottawa cable.

3.0.4 Hydro Ottawa Access to Equipment

Hydro Ottawa is to have access to the Customer's or Consumer's Property in accordance with Section 40 of the *Electricity Act, 1998,* "Powers of Entry."

The Consumer, Customer and the Property owner must provide unimpeded, safe, secure access to Hydro Ottawa employees, or its contractors at all times for the purpose of installing, inspecting, testing, reading, operating, replacing, removing, or maintaining, distribution revenue metering or equipment, including reading the revenue meter.

The Customer or Consumer cannot change or alter a Property or section thereof, which is in proximity to Hydro Ottawa equipment, such as landscaping, planting trees or shrubs, building fences, pools, decks, sheds, or other structures which would impede access to Hydro Ottawa distribution assets. When Hydro Ottawa identifies an obstruction, Hydro Ottawa will then notify and give the Customer or Consumer reasonable time to correct the obstruction, as determined by Hydro Ottawa. Hydro Ottawa reserves the right to Disconnect the electrical Service, remove or relocate the obstruction, or trim vegetation at the Customer's or Consumer's expense when an obstruction exists (see Section 2.2).

3.0.5 Heritage Facilities

Hydro Ottawa works with municipalities regarding heritage conservation programs under the *Ontario Heritage Act*. In keeping with these heritage programs, when an electrical Service is upgraded, Hydro Ottawa will require the electrical Service Entrance facilities (including the meter) to be installed away from the main line of sight for any designated significant heritage resource.

3.0.6 Vegetation Management

3.0.6.1 Customer Owned Electrical Equipment

The owner of electrical equipment must ensure that the minimum Ontario Electrical Safety Code clearances are maintained between the privately owned electrical equipment and any vegetation, such as trees, vines and shrubs. Hydro Ottawa will provide electrical Isolation, if required, to assist the owner in maintaining clearances in the safest manner (see Appendix G-1).

To avoid unnecessary power outages or delayed restoration times Customers must keep a close eye on tree and vegetation growth. Customers should call Hydro Ottawa at 613-738-6400 for inquiries about scheduling a power outage to accommodate vegetation management**.**

If Hydro Ottawa determines that vegetation in proximity to privately owned electrical equipment presents a hazard to Hydro Ottawa's electrical system reliability or assets, Hydro Ottawa may Disconnect the privately owned electrical equipment from its Distribution System until the situation is corrected by the owner (see Appendix G-1).

3.0.6.2 New or Upgraded Services

Customers are to prepare a clear path from vegetation for new or upgraded overhead electrical Service on their Property.

3.0.6.3 Hydro Ottawa Owned Equipment

Customers shall be responsible for maintaining appropriate clearances between vegetation on private Property and Hydro Ottawa equipment, such as a Secondary Service conductor, pole, or, pad-mounted equipment.

Hydro Ottawa will trim, or sufficiently remove vegetation interfering with Hydro Ottawa's distribution assets, if Hydro Ottawa determines that the distribution asset or electrical system reliability is, or will be adversely affected by the vegetation, or if the vegetation presents an electrical safety hazard. Hydro Ottawa shall not be held liable for any damages to vegetation, Customer's standpipe, or outdoor surfaces due to trimming or removal. Property owners are responsible for the health and aesthetics of their trees.

Information on planting and protecting vegetation near Hydro Ottawa equipment is available in the Hydro Ottawa publication *Tree Planting Advice* and in engineering specification UTS0038 Clearances for Pad-mounted Equipment, both available online at www.hydroottawa.com.

3.0.7 Protection of Equipment

Property owners are obligated to protect Hydro Ottawa equipment from damage and maintain the required clearances when the Property owner maintains, repairs, or makes changes to their Property, structures on their Property, or vegetation at all times.

3.0.8 Property Reinstatement

If any repair of the service conductor on the Customer's Property is required and Hydro Ottawa is responsible for such repair, Hydro Ottawa shall reinstate outdoor surfaces with sand, gravel, and/or soil. It is the Customer's responsibility to repair/replace vegetation (e.g., shrubs, trees, lawn, gardens), hard surfaces, obstacles (e.g., decks, fences, patios, sheds, pools, play structures), foundations, and shallow utility service drops such as telephone, cablevision or watering systems disrupted by the repair.

With new subdivision driveways and sidewalks, the developer is responsible for the construction of the utilities joint-use trench and provides the municipality a warranty with the surface reinstatement within the public road allowance. After the warranty, each property owner is responsible for their driveway as per the Private Approach Bylaw or similar municipal ordinance.

At the termination of an electrical Service, Hydro Ottawa shall remove any and all improvements, chattels and personal Property that Hydro Ottawa has installed including but without limitation, all of Hydro Ottawa's equipment as required by the Property owner to be removed, and shall either, at the Property owner's option: (i) promptly, to the extent and within the time frame reasonably specified by the Property owner, repair all damage and restore the building to its condition prior to the installation of Hydro Ottawa's equipment and other improvements, or (ii) the Property owner in its sole and subjective discretion may, in lieu of requiring or permitting the removal of Hydro Ottawa's equipment, allow that the equipment be left in place at no Cost to the Property owner and the title to the equipment be transferred to the Property owner.

3.0.9 Underground Secondary Services General Requirements

For underground Secondary Services, the Customer shall be required to provide trenching and reinstatement in a location approved by and in accordance with Hydro Ottawa requirements to accommodate service conductors. Hydro Ottawa must inspect the Service trench prior to backfilling or pouring of concrete. The maximum length of Secondary Service from the Supply Point to the Service attachment is 30 meters (100 feet).

If the underground supply pipe is on the side of the building, the meter base must be located within 1.5 meters (5 feet) of the building's corner on the supply point side. Particular attention should be taken in establishing the correct standpipe location for buildings on corner lots.

The Customer is responsible for the Support Structures within their building and for the physical security of underground Service entrance into the Customer's Premise. This includes ensuring a tight seal at the Service entrance to avoid water leakage or animal ingress.

3.0.10 Overhead Secondary Service General Requirements

If the overhead secondary standpipe is on the side of the building, the Service bracket, insulator(s), and meter base must be located within 1.5 meters (5 feet) of the building's corner on the supply point side. Particular attention should be taken in establishing the correct standpipe location for buildings on corner lots.

The Service should not be located where an accumulation of ice may form across the service wires and/or meter base. Hydro Ottawa shall not be responsible for removing such ice formation or damages resulting from ice. If revenue metering equipment is installed inside areas that are prone to ice formation, the Customer shall install appropriate protection (typically in the form of an ice rack) to guard against falling ice. The Customer owns and is responsible for the Support Structures with their building and the physical security of overhead Service entrance into the Customer's Premise. This includes ensuring a tight seal at the Service entrance to avoid water leakage or animal ingress.

The maximum length of Secondary Service from the overhead Supply Point to the Service attachment is 30 meters (100 feet). In addition, the Customer may be required to provide increased support and pay for the excess length of wiring.

3.0.11 Premise Identification

At all times (including during construction), the civic address must be clearly visible from the public roadway.

On each Electrical Safety Authority (ESA) permit Connection Authorization Certificate and Hydro Ottawa Service Agreement and Contract, the civic address must be clearly indicated before the Service will be energized.

3.0.12 Connection and Disconnection of Services by the Public

With few approved exceptions, no unauthorized electrical contractor or Person shall tamper with Hydro Ottawa distribution assets including, but not limited to, meters or seals – refer to Hydro Ottawa Revenue Metering Specification GCS0008. Exceptions may include the removal of a Hydro Ottawa installed seal for the purposes of replacing a damaged Service entrance fuse within the Service entrance Disconnect. Hydro Ottawa installed seals for meter bases and instrumentation transformer access doors and panels shall not be

tampered with. They are not to make any Connection or Disconnection on Hydro Ottawa secondary conductors, Service loops, or any Hydro Ottawa assets, unless the contractor is approved and explicitly authorized by Hydro Ottawa to proceed. In cases where the work to be carried out necessitates Isolation of a Service or removal of a meter, the contractor or electrician can obtain an Electrical Safety Authority permit and then notify Hydro Ottawa. Hydro Ottawa shall then make arrangements for the Service Isolation or Re-energization. The contractor or electrician who does not comply with the items above will be held responsible for any related damage or loss to Hydro Ottawa.

3.0.13 Swimming Pools

Hydro Ottawa will not allow electrical conductors to be located above swimming pools. Hydro Ottawa also has requirements for minimum distance between overhead wires and pool equipment such as pool ladders and between underground cables and the inside walls of a pool. For new swimming pool installations any electrical conductors directly over the proposed pool location must be relocated, at the Customer's expense. Where overhead service conductors are installed over a pre-existing swimming pool, Hydro Ottawa shall provide up to 30 meters (100 feet) of overhead service conductors, at no charge, to allow rerouting of the Service. The Customer shall pay any other Costs. For further details, refer to the pools and powerlines information available at hydroottawa.com/pools.

Pools and powerlines information is available at hydroottawa.com/pools.

3.0.14 Power Line Carrier

The Customer is not permitted to use Hydro Ottawa's electrical system beyond their Ownership Demarcation Point for Powerline Carrier requirements without written permission from Hydro Ottawa.

3.0.15 Overhead Safety Clearances

Where overhead distribution lines exist, activity involving equipment, tools or personnel, within 3 meters (10 feet) of the Hydro Ottawa Primary Voltage distribution lines may only be undertaken by a Hydro Ottawa Qualified Contractor. This condition is compliant with the Ministry of Labour's *Occupational Health and Safety Act*.

Development of permanent structures within the “restricted zone” surrounding overhead Primary Voltage lines is prohibited. This zone is defined by Hydro Ottawa’s clearance standard (see OLS0002). The “restricted zone” surrounds overhead medium voltage pole lines, consisting of a 5 meter (16 feet) radial distance from overhead medium voltage conductors, and a 2 meter (6.5 feet) distance from a vertical line drawn from the conductors to ground level along the length of the pole line. This offset standard complies with the requirements of the Ministry of Labour’s *Occupational Health and Safety Act* and the Ontario Electrical Safety Code that strictly prohibit any work activity within 3 meters (10 feet) (plus conductor swing the side-to-side, up-down conductor movement) of Primary Voltage lines with a resultant clearance of five meters for construction and future Maintenance of the building. Customers may be required to submit, at their cost, a plan profile drawing showing proposed face of building(s), complete with any architectural projections, in relation to existing overhead medium voltage lines. The plan profile drawing will permit Hydro Ottawa to review potential clearance issues. For further details, refer to the overhead clearance information available at hydroottawa.com/overheadclearance.

Overhead clearance information is available at hydroottawa.com/overheadclearance.

3.0.16 Work on Integral Equipment

Hydro Ottawa reserves the right to review and/or approve any Maintenance Agent permitted to work on equipment that is Integral to Hydro Ottawa’s Distribution System. The Customer is responsible for the Costs associated with any modifications, repairs, or Maintenance of their equipment unless there is an agreement that states otherwise.

3.0.17 Other Points of Ownership Demarcation

Where Hydro Ottawa owns the control signal line (e.g., fibre optic cable) in the public road right of way, the ownership demarcation point with the Customer is at the Service Entrance termination facility within the Service Entrance secondary electrical room or designated outside termination facility on the property.

Where the Customer is electrically supplied underground from a secondary distribution vault, the ownership demarcation point is the first Cable Chamber outside of the Customer’s Property.

3.0.18 Electric Vehicle Chargers

Before a Customer purchases and installs an electric vehicle charger, Hydro Ottawa encourages the Customers to consult Hydro Ottawa's website at hydroottawa.com/ev to better understand Connection requirements and learn other helpful tips.

3.1 Residential

This section refers to the supply of electrical Energy to Residential Customers residing in detached, semi-detached, duplex, triplex, or Townhouse dwelling units.

Residential Services are typically 120/240V, 1-phase, 3-wire, up to a maximum of 600A, where available and may be subject to additional restrictions. For residential Services requiring larger supply than mentioned above and for 3-phase Services, refer to Section 3.2 (General Services, secondary voltage supply) and Section 3.3 (General Services, primary voltage supply).

3.1.1 Point of Demarcation

3.1.1.1 Overhead

a. Secondary: For residential secondary overhead Services, the line of electrical ownership, Maintenance and operational demarcation between Hydro Ottawa and the Customer is the first contact point with the building/pole where the Customer owns and is responsible for the Support Structures (e.g., poles and ducts) on their building/pole (Reference ECG0003).

b. Primary: For overhead Primary Services, the line of electrical ownership, Maintenance and operational demarcation is the Supply Point. Typically this is the distribution-isolating device nearest or on the Property line.

3.1.1.2 Underground

a. Secondary: For residential secondary underground Services, the line of electrical ownership, Maintenance and operational demarcation between Hydro Ottawa and the Customer is the line side of the first customer-owned device, typically the meter base. The Customer owns and is responsible for the Support Structures of electrical

equipment on their Property. If non-standard Hydro Ottawa conductor is used by the Customer, the Ownership Demarcation Point is the Connection point of the conductor to Hydro Ottawa's Distribution System (i.e., the Supply Point) (Reference ECG0003).

b. Primary: For underground Primary Services, the line of electrical ownership, Maintenance and operational demarcation is the first distribution-isolating device nearest or on the Customer's Property. With respect to Sections 3.1.2.3 or 3.1.3.7, Service Costs, easements and any specific maintenance agreements between Hydro Ottawa and the Customer shall determine financial responsibilities between the parties.

3.1.1.3 Historical and Specific Agreements

The Ownership Demarcation Point may be different than stated above;

- Where Connection was prior to amalgamation of the five local hydro utilities on November 1, 2000, the Appendix I (Pre-amalgamation Ownership Demarcation Points between Local Hydro and Customer) shall apply.
- Where there is a specific written agreement between Hydro Ottawa and the customer, the Ownership Demarcation Point specified in that agreement shall apply.
- For residential underground Secondary Services with non-standard Hydro Ottawa service conductor, the line of ownership demarcation continues to be the Supply Point.

3.1.2 Residential Underground Subdivisions

This section pertains to the supply of electrical Energy to a new Residential underground subdivision considered as Greenfield construction. Greenfield construction is where secondary servicing may not be nearby, or if it is, would be insufficient in capacity. In this case an Expansion of Hydro Ottawa's Distribution System may be needed. Refer to Hydro Ottawa's standard GCS0001 for full details, including revenue metering and inspection.

Where subdivision construction is to proceed in phases, Hydro Ottawa will determine if a temporary Distribution System configuration is feasible. If implemented, then normal electrical backup may not be available for up to one year. Where the development is a

multi-year and multi-phase project, Hydro Ottawa will install a temporary Distribution System backup at the Cost of the developer.

3.1.2.1 Servicing Requirements

Servicing of the individual residential subdivision units will be underground within the residential subdivision but not necessarily on the outer boundary roads where overhead supply Connection may be available. The main electrical trunk supply to the boundary of the subdivision will be overhead. Where feasible, the trunk supply may be underground if the developer requests and pays for underground trunk supply. Refer to Hydro Ottawa's standard GCS0001.

3.1.2.2 Site Information

Prior to establishing Service details, Hydro Ottawa will require the following information from the Customer:

- project name;
- unit servicing detail;
- number of units to be serviced;
- a plan of subdivision, to scale, showing the buildings in relation to existing and proposed Property lines, other buildings, streets, street entrances, driveways, and the location of other services, gas, telephone, water, cablevision, waste water (sewage and storm, including catch basins);
- a grading plan;
- landscaping plan;
- road cross-sections used. Note: Private Roads shall conform to GCG0003;
- expectation of three or four party trenching. Note: four party trenching is not available for Private Roads;
- proposed construction schedule, and phasing of the development; and
- developer detail;
- a completed Load Summary form may be required (see Appendix A).

All drawings should be provided electronically in a Hydro Ottawa approved file format and adhere to drawing features procedure ECS0031 (Digital Base Mapping Requirements for Electrical Servicing).

3.1.2.3 Servicing Cost

Since Residential underground subdivisions require an Expansion or Enhancement to the Distribution System, the servicing Cost for the subdivision shall be based on the result from the Economic Evaluation (see Appendix B). The Basic Credit per Property is considered in the model. Hydro Ottawa's Offer to Connect shall stipulate the servicing Cost and options.

The Expansion and Enhancement Cost to Hydro Ottawa's normal standard shall be reduced in whole, or, in part by a credit based on the future net revenue of Hydro Ottawa. The normal net revenue horizon period is noted in Appendix B and subject to change depending on the type of development.

These Costs are determined independent of the Rate classification used for energy billing purposes discussed in Section 2.6.

3.1.3 Residential Single Family Homes

This section pertains to the supply of electrical Energy to detached and semi-detached, single family homes. A single family home is a permanent structure located on a single parcel of land and approved by the municipality's building department as a dwelling and occupied for domestic or household purposes by a single Customer.

3.1.3.1 Service Requirements

a. Hydro Ottawa designs new residential subdivisions for each house service with a 120/240 V, 1-phase, 3-wire, 200 A single phase Secondary Service. The maximum Service Size is typically limited to 120/240 V, 1-phase, 3-wire, 400 A. Due to technical constraints, 1-phase Secondary Services greater than 400 A may not be available in all areas. The location of the Service entrance point and the meter base shall be established through consultation with Hydro Ottawa for both new and upgraded electrical Services. Failure to comply may result in relocation of the Service at the Customer's expense.
b. Where revenue metering is located inside a residence, the Customer shall be required to relocate the meter to the exterior of the building when repairing or upgrading the electrical Service, working on service conductors within standpipes, or relocating the Service entrance. This may not apply to designated significant

heritage resources as noted in Section 3.0.5. Refer to Hydro Ottawa Revenue Metering Specification GCS0008 for more information.

3.1.3.2 Overhead Service (where permitted according to bylaw)

Hydro Ottawa shall designate the Supply Point from which the Service shall be supplied and the location of the standpipe.

Hydro Ottawa shall provide up to 30 meters (100 feet) of service conductor to the Ownership Demarcation Point. The Customer shall contribute to the Cost of Services that exceed 30 meters (100 feet) in length and in some circumstances may be required to construct a private pole line.

The maximum capacity of a secondary overhead Service is 200A. Larger capacity Services will be installed underground.

3.1.3.3 Underground Service (Overhead or Underground Distribution System)

Hydro Ottawa shall specify the location of the meter base.

Hydro Ottawa shall install Secondary Service conductors to a maximum length of 30 meters (100 feet) using standard Hydro Ottawa secondary conductors, considering voltage drop and ampacity characteristics.

3.1.3.4 Site Information

Prior to establishing Service details, Hydro Ottawa shall require the following information from the Customer:

- a site plan, to scale, showing the building in relation to existing and proposed Property lines, other buildings, streets and driveways the location of other services, gas, telephone, water and cablevision. In certain situations, a grading plan may be required. Site plans for pre-planned subdivisions shall follow the City of Ottawa mapping coordinate system standard. Data shall be formatted in accordance with Hydro Ottawa Digital Base Mapping Requirements for Electrical Service Working Procedure (ECS0031);
- civic address;
- Customer billing information as per Appendix D;

- requested energized date;
- service amperage required; and
- a completed Load Summary form may be required (see Appendix A).

3.1.3.5 Revenue Metering

The Customer shall supply and install a Meter Socket in accordance with Hydro Ottawa Revenue Metering Specification (GCS0008).

3.1.3.6 Inspection

The electrical installation from inside the home and out to the demarcation point must be inspected and approved by the Electrical Safety Authority (ESA).

- Hydro Ottawa requires notification from the ESA indicating that an inspection has been conducted, from the demarcation point to the first Customer owned device, and subsequent approval has been granted in the form of a Connection Authorization Certificate, prior to the electrical installation being energized.
- The Service entry components, up to and including the meter base, shall be inspected and approved by Hydro Ottawa prior to being energized.

3.1.3.7 Servicing Cost

Refer to Appendix G. For new residential, Hydro Ottawa has defined a Basic Connection for Residential Customers and will recover the Cost of this Basic Connection as part of its revenue requirement through the distribution Rates attributable to Hydro Ottawa. Hydro Ottawa has determined the typical Cost of installing Services.

For residential infill and Upgrades, the Customer is responsible for the Cost of civil works from the meter base to the Supply Point.

For overhead supplied residential secondary Customers, Hydro Ottawa will supply one clearance service pole or one in-line pole within the rural public Road Allowance at no cost to the initially agreed location. The Customer shall secure any third-party land rights and associated authorization for vegetation management at their cost. System Expansion above the one free clearance service pole or in-line pole shall be subject to Economic Evaluation.

These Costs are determined independent of the Rate classification used for Energy billing purposes discussed in Section 2.6.

Please refer to Section 2.1.4, for existing non-standard installations that will need to be brought up to current standards. The customer requesting the servicing shall be responsible for these upgrade costs.

3.1.4 Residential Townhouses

This section pertains to the supply of electrical Energy to row Townhouse units. For stacked Townhouses, refer to Section 3.2.

One residential Townhouse Consumer should occupy one unit and have direct outside access at ground level.

3.1.4.1 Service Information

Each Townhouse block will be provided with one Service up to 120/240 V, 1-phase, 3-wire, 400 A Service to the building end-wall that will supply a maximum of five (5) – 100 A gang metered Services.

- Greater than 5 meters (16 feet) will require a revenue metering centre with the aggregate Load limited to a maximum of 400 A, or additional ganged meter troughs. Service Size shall be supported by a Load summary that meets the requirements of the Ontario Electrical Safety Code;
- Where a revenue meter is located inside a Townhouse, the Customer shall be required to relocate the meter to the exterior of the building at the time of upgrading or repairing the electrical Service or relocating the Service Entrance, or performing work on their Service Entrance that requires an Electrical Safety Authority permit.
- The Customer shall enter into a servicing agreement with Hydro Ottawa, governed by the terms and conditions under which the electrical Distribution System and Services shall be designed and installed.
- The Customer shall provide all civil works, as needed, to accommodate Hydro Ottawa's Distribution System.
- Where the development is no more than one Townhouse block and the Service Size is less than 400 A, the tie to the Distribution System may be overhead, if possible and permitted in the area. In all other cases the tie to the Distribution System and Services shall be underground.

- Under certain conditions, 200 A, 120/240 V, 1-phase, 3-wire gang metered services may be available. Contact Hydro Ottawa to determine eligibility and availability prior to construction.

3.1.4.2 Site Information

Prior to preparing a design for Services to the Premise, the Customer must provide the following information to Hydro Ottawa:

- Grading and site plan showing the building(s) in relation to existing and proposed Property lines, other buildings, streets and driveways, the location of other services such as gas, telephone, water and cablevision. Site plans for pre-planned subdivisions shall follow the City of Ottawa mapping coordinate system standard. Data shall be formatted in accordance with Hydro Ottawa Digital Base Mapping Requirements for Electrical Service Working Procedure (ECS0031);
- Civic addresses;
- Customer billing information as per Appendix D;
- Legal reference plan by a land surveyor;
- Municipal servicing plan showing the location of water and sewer services;
- Layout showing the number of units and the size of electrical Services required;
- Completed Load Summary form may be required. A copy is attached (see Appendix A); and
- Requested energization date.

All drawings should be provided electronically in a Hydro Ottawa approved file format.

3.1.4.3 Revenue Metering

The Customer shall supply and install Hydro Ottawa approved Meter Sockets in accordance with Hydro Ottawa Revenue Metering Specification (see GCS0008).

3.1.4.4 Inspection

Prior to each Service being energized, the Electrical Safety Authority (ESA) is required to notify Hydro Ottawa that the electrical installation from inside the buildings and out to the demarcation point has been inspected and approval given in the form of an ESA Connection Authorization Certificate.

3.1.4.5 Servicing Cost

Service Costs shall be handled in a similar manner to the single-family residential Connections as per Section 3.1.3.7. These Costs are determined independent of the Rate classification used for Energy billing purposes discussed in Section 2.6.

Please refer to Section 2.1.4, for existing non-standard installations that will need to be brought up to current standards. The customer requesting the servicing shall be responsible for these upgrade costs.

3.2 General Services (Secondary Voltage Supply)

This section includes small apartment buildings, dense condominium arrangements, small Commercial, agricultural, billboards, industrial and institutional developments supplied from the public Road Allowance or Hydro Ottawa easement. This section does not apply to residential Services (see Sections 3.1 and 4). Larger Services may require a primary supply (see Section 3.3).

3.2.1 Point of Demarcation

The point of electrical ownership demarcation between Hydro Ottawa and the Customer varies depending on the overhead or underground supply configuration (see ECG0001), unless there is specific written agreement between Hydro Ottawa and the Customer. The Customer shall own and maintain the electrical Service equipment up to the point of ownership and is responsible for the Support Structures of electrical equipment on their Property. With respect to Section 3.2.6, easements and any specific maintenance agreements between Hydro Ottawa and the Customer shall determine financial responsibilities between the parties. Utilities, government, and their agencies with general services within the public road allowance shall own and maintain their service up to the Hydro Ottawa designated Supply Point.

For underground secondary services from a Hydro Ottawa secondary distribution vault, the Supply Point is the first Cable Chamber outside the secondary distribution vault.

For the cases without a specific written agreement, Appendix I (Pre-amalgamation Ownership Demarcation Points between Local Hydro and Customer) shall apply.

3.2.2 Service Requirements

The Service voltage, for a permanent Service, shall be established by Hydro Ottawa, depending upon the location of the Premise and shall be one of the following:

- 120/240 V, 1-phase, 3-wire, up to 200 A overhead supplied (subject to municipal bylaw) or underground;
- 120/240 V, 1-phase, 3-wire, 800 A underground supplied in designated areas;
- 120/208 V, 3-phase, 4-wire, grounded wye connected, up to 800 A underground supplied;
- 347/600 V, 3-phase, 4-wire, grounded wye connected, up to 200 A overhead or underground supplied in designated areas; or
- 347/600 V, 3-phase, 4-wire, grounded wye connected, 400 A underground supplied in designated “Downtown” areas, and if available.

One Service will be provided for each building. In circumstances where more than one Service is installed to a single building and any of the Services are to be upgraded, the upgraded Service will replace all previous Services.

Commercial Services for utility towers (e.g., cell towers) may have a minimum Service Size, see Hydro Ottawa’s Revenue Metering Specifications GCS0008.

Hydro Ottawa no longer provides 600 V, 3-phase, 3-wire delta connected Secondary Services. In cases where a Customer performs work on their existing 600 V delta connected Service entrance equipment that requires an Electrical Safety Authority (ESA) permit, or repair requires an ESA permit to an existing 600 V Delta Service, Hydro Ottawa shall provide a 347/600 V, 3-phase, 4-wire, grounded wye connected Service Sized according to the Customer provided Load summary. Costs for the change in wiring from a 600 V, 3-phase, 3-wire, delta connected Service to a 347/600 V, 3-phase, 4-wire, grounded wye connected Service will be treated as an Upgrade and are included in Appendix G.

Hydro Ottawa shall establish the location of the Service entrance to the Property and to the Premise.

3.2.3 Site Information

Prior to preparing a design for Service to the Premise, the Customer must provide the following information to Hydro Ottawa:

- Grading plan and site plan, to scale, showing the building in relation to existing and proposed Property lines, other buildings, streets and driveways and the location of other services such as gas, telephone, water, and cablevision;
- Civic address;
- Customer billing information as per Appendix D;
- Requested energization date;
- Service amperage;
- Preferred voltage;
- Preferred Service Entrance location;
- Estimated initial kilowatt Demand and ultimate maximum Demand;
- Single-line diagram showing the provision for revenue metering facilities and a listing of all significant Loads such as lighting, motors, cooling, heating, welders, etc.;
- Completed Load Summary form may be required (see Appendix A); and
- In the event that an electrical room is to be installed, a plan to scale showing this room and provision for revenue metering equipment must be provided.

All drawings should be provided electronically in a Hydro Ottawa approved file format and adhere to drawing features procedure ECS0031 (Digital Base Mapping Requirements for Electrical Servicing).

3.2.4 Revenue Metering

The Customer shall supply and install a Meter Socket in accordance with Hydro Ottawa Revenue Metering Specification (GCS0008).

3.2.5 Inspection

The electrical installation from inside the building and out to the Ownership Demarcation Point must be inspected and approved by the Electrical Safety Authority (ESA).

- Hydro Ottawa requires notification, in the form of an ESA Connection Authorization Certificate, to indicate that this inspection has been done and that subsequent approval has been confirmed prior to the electrical installation being energized.
- The Service entrance components, up to and including the meter base, shall be inspected and approved by Hydro Ottawa prior to being energized.

3.2.6 Servicing Cost

The methodology for determining amounts to be contributed by the Customer for Service is set out in Appendix G. The Customer shall provide and install all electrical works and civil infrastructure for the Service up to the Supply Point, plus the Connection Costs. For Expansion or Enhancement of the system, the actual Cost will be recovered from the Customer with a credit for the future revenue from the Service, through the use of an Economic Evaluation (see Appendix B). The Economic Evaluation uses Rate class information to determine future operating Costs.

Please refer to Section 2.1.4, for existing non-standard installations that will need to be brought up to current standards. The customer requesting the servicing shall be responsible for these upgrade costs.

3.3 General Service (Primary Voltage Supply)

This section includes apartment buildings, Commercial, agricultural, industrial, and institutional developments, where a Primary Voltage Service is required, as outlined in Appendix F.

The decision as to whether or not a transformer vault or pad-mount transformer is required rests solely with Hydro Ottawa and Customers are not to be advised in this regard without consultation with Hydro Ottawa. Hydro Ottawa shall not install multi-pole overhead transformer structures. When these structures require upgrading, Hydro Ottawa shall Disconnect and remove its equipment, or, may sell the structure, change the demarcation point and retain ownership of the transformers at its discretion.

3.3.1 Point of Demarcation

Prior to November 1, 2000, when the five local hydro utilities amalgamated, the point of ownership demarcation between Hydro Ottawa and the Customer varied depending on the overhead or underground supply configuration. With any general Primary Service supplied prior to amalgamation, the point of ownership demarcation remains the same as when originally supplied.

After November 1, 2000, for all general Services supplied with a standard primary Connection, the line of electrical ownership demarcation is described in drawing ECG0005 and ECG0009 with the Customer owning and being held responsible for the Support Structures of electrical equipment on their Property, unless there is a specific written agreement between Hydro Ottawa and the Customer. General Service Customers with complex primary electrical Distribution Systems may consult Hydro Ottawa for the Ownership Demarcation Points. A typical Customer owned scenario is illustrated in drawing ECG0005.

The Customer shall own and maintain the electrical Service up to their respective Ownership Demarcation Point (see ECG0005 and ECG0009). Hydro Ottawa shall own and maintain the primary electrical Service of their respective point of ownership demarcation. Hydro Ottawa, will be the Operating Agent with specific Customer equipment as set out in Section 1.7 unless otherwise agreed to in writing. With respect to Section 3.3.6, easements and any specific maintenance agreements between Hydro Ottawa and the Customer shall determine financial responsibilities between the parties. The Customer shall own and maintain the civil structures, protective bollards, grounding system, and auxiliary equipment (e.g., fences, ventilation, 120 V systems such as lighting and receptacles) on their Property unless there is a specific Hydro Ottawa agreement indicating otherwise.

Hydro Ottawa shall maintain operating control of the Customer owned Primary Voltage disconnect switch, as designated by Hydro Ottawa.

3.3.2 Service Requirements

- The Service voltage shall be established by Hydro Ottawa depending upon the location of the Premise and shall be as set out in Section 2.4.5.
- If feasible, Hydro Ottawa will provide up to two underground Secondary Services directly from a Hydro Ottawa owned transformer that is dedicated to one Property

for Hydro Ottawa Customers. These may be either Load or Distributed Energy Resource Services. The Property owner is responsible to manage all Service capacity changes and planned outages with the electrical Service users on the Property, unless otherwise indicated in a written agreement between the Property owner and Hydro Ottawa. The Property owner is required to provide Hydro Ottawa written acceptance for all Service change requests and associated Costs with that Property, as well. If there are more than two direct Services from the transformer, then a consolidated secondary distribution and revenue metering centre shall be required.

- Where subdivision construction is to proceed in phases, Hydro Ottawa will determine if a temporary Distribution System configuration is feasible. If implemented, then normal electrical backup may not be available for up to one year. Where the development is a multi-year and multi-phase project, Hydro Ottawa will install a temporary Distribution System backup at the Cost of the developer.

3.3.3 Site Information

Prior to the preparation of a design for a Service to a Premise, the following information is to be provided by the Customer to Hydro Ottawa:

- Grading plan and site plan, to scale, showing the building in relation to the existing and proposed Property lines, other buildings, streets and driveways and the location of other services such as gas, telephone, water, and cablevision. Site plans shall follow the City of Ottawa mapping coordinate system standard;
- Civic address;
- Customer billing information as per Appendix D;
- Requested energization date;
- Service amperage;
- Preferred Service voltage;
- Preferred Service Entrance Location;
- Estimated initial kilowatt Demand and ultimate maximum Demand;
- Single-line diagram showing the provision for revenue metering facilities and a listing of all significant Loads such as lighting, motors, cooling, heating, welders, etc.;
- Completed Load Summary form may be required (see Appendix A) and loads must meet the limitations (see Appendix F); and

- Plan to scale showing the electrical room and provision for revenue metering equipment shall be provided.

All drawings should be provided electronically in a Hydro Ottawa approved file format and adhere to drawing features procedure ECS0031 (Digital Base Mapping Requirements for Electrical Servicing).

3.3.4 Revenue Metering

The Customer shall supply revenue metering equipment in accordance with Hydro Ottawa Revenue Metering Specification (GCS0008).

3.3.5 Inspection

- The electrical installation inside the building and out to the demarcation point must be inspected and approved by the Electrical Safety Authority (ESA). Hydro Ottawa requires notification from the ESA that this has been done prior to the electrical installation being energized.
- The Service entry components, up to and including the meter base, shall be inspected and approved by Hydro Ottawa prior to being energized.

3.3.6 Servicing Cost

The Developer is required to pay the entire amount for all electrical and civil Costs from the Supply Point to the electrical Ownership Demarcation Point that only benefits the Developer within a Customer Connection horizon. Also, per Appendix B, the Developer shall contribute to the actual Cost of the system Expansion that brings the Service to the development Supply Point, plus, the system Enhancement Cost based on diversified Load.

The Expansion Cost to Hydro Ottawa's normal standard shall be reduced, in whole or in part, by a credit based on the future net revenue of Hydro Ottawa. The normal net revenue horizon of Hydro Ottawa shall be based on fifteen (15) years of Load usage, subject to change depending on the type of development.

The Load used for calculating the credit shall be based on typical diversified demand, based on the Service Entrance Size or on detailed Load projections provided by the Customer. An agreement with the Customer may be required to guarantee the detailed loading schedule

(i.e., when Services are to be connected and electricity used) for the development. The agreement shall be reviewed, per the Distribution System Code, on the fifth year anniversary and the security shall be reduced based on the actual Load experience. The Load security deposit shall be reduced if the loading schedule is realized as per Section 3.2.23 in the Distribution System Code.

These Costs are determined independently of the Rate classification used for Energy billing purposes discussed in Section 2.6.

Please refer to Section 2.1.4, for existing non-standard installations that will need to be brought up to current standards. The customer requesting the servicing shall be responsible for these upgrade costs.

3.3.7 Inspection and Maintenance of In-service Primary Equipment

Each Customer with a Primary Service is to inspect and maintain their equipment, equipment consistent with Hydro Ottawa procedure VIS0001. For the Property Owner's primary equipment directly connected to Hydro Ottawa's Distribution System, the Property Owner or its competent electrical contractor is to provide Hydro Ottawa with its maintenance and testing results after each maintenance shutdown.

3.4 Distributed Energy Resource

This section applies to all Distributed Energy Resources.

Facilities are categorized according to size, per the Ontario Energy Board's Distribution System Code.

Hydro Ottawa requires all Customers wishing to connect their Distributed Energy Resource to its Distribution System to execute an agreement, in accordance with the Ontario Energy Board's Distribution System Code and Hydro Ottawa's Conditions of Service.

Each Feed-In-Tariff (FIT) Customer shall maintain in full force and effect insurance coverage as per its executed agreement with Hydro Ottawa.

Each microFIT Customer is encouraged to maintain in full force and effect insurance coverage.

Connection of Embedded Distributed Energy Resources will be provided where technically feasible. The Cost sharing responsibilities of Hydro Ottawa and the Customer for the Connection and related protections to ensure the safety of the public, employees and security of the system shall be in accordance with the Distribution System Code. The technical requirements for Embedded Distributed Energy Resources are set out in Hydro Ottawa's Generation Technical Guideline (see ECG0006) and Revenue Metering Specification (GCS0008). Furthermore, an Operating and Service Agreement shall be signed between Hydro Ottawa and the Embedded Energy Resource Facilitator with the Offer to Connect. A Connection Cost Agreement will also be executed with the Customer per the Ontario Energy Board's Distribution System Code prior to directly or indirectly connecting the Customer to the Grid. The Property owner is responsible to manage all Service capacity changes and planned outages with the electrical Service users on the Property.

Administrative and technical requirements can be found in the Distribution System Code (DSC) Sections 6.2.5 through 6.2.30, at the Ontario Energy Board website at ontarioenergyboard.ca.

For program details, construction specifications and online application for Distributed Energy Resource connections, visit the Generation page at hydroottawa.com/generation.

It is the Customer's obligation to become informed of the Distributed Energy Resource related rules, regulations, standards, policies and procedures. It is the Customer's responsibility to select the equipment, if the equipment is accepted by the Electricity Safety Authority and the specifications are per the utility's Distributed Energy Resource standards. Hydro Ottawa recommends consideration of the equipment's durability, reliability, longevity and serviceability over the Distributed Energy Resource's lifetime or contract lifetime. Hydro Ottawa will Disconnect any facility from the Grid which causes disruption thereto until the problems are resolved and the facility passes re-commissioning. Should any equipment or settings be considered for replacement, removal or alteration, the Customer shall first notify and seek Hydro Ottawa's written approval. Hydro Ottawa will respond to the Customer as to whether a revised Connection Impact Assessment is necessary. Any fees for additional requirements will be on a Cost recovery basis from the Customer, per Appendix G.

Hydro Ottawa has technical requirements for proper integration of Distributed Energy Resources to the Grid or Host Load. For example, there is a requirement to isolate this

equipment automatically from Hydro Ottawa's Distribution System when the Customer's electrical system or Hydro Ottawa's Distribution System present unacceptable operating characteristics or faulty conditions. Where a Customer plans to install such a facility that connects directly or indirectly to Hydro Ottawa's Distribution System, the Customer shall contact Hydro Ottawa for details regarding specific technical requirements and the Connection process while in the planning stage well in advance of the proposed installation.

3.4.1 Net Metering

If a Customer of Hydro Ottawa meets the eligibility criteria of O. Reg. 541/05, Net Metering, then that Customer may apply to be a Net Metering participant. Net Metering will be made available on a first-come, first-served basis until the Distributed Energy Resource capacity in Hydro Ottawa's licensed Service Area is reached, in accordance with Section 6.7.2 of the Distribution System Code. Billing shall be in accordance with the O. Reg. 541/05. A Customer wishing to participate in the Net Metering program may access more details at hydroottawa.com/netmetering.

3.4.2 Energy Resource Connection Process Fees

Prior to any Distributed Energy Resource being installed, or, changes made to an existing Distributed Energy Resource, the Customer is encouraged to request a complimentary initial consultation with Hydro Ottawa. The intention is to familiarize each other with the proposed project, identify potential Connection issues and discuss the process.

With the Customer's submission of a Form B, electrical single line diagrams and payment of the required fee, Hydro Ottawa shall perform and issue a Connection Impact Assessment (CIA). The fee for this service is based on the type and size of the Distributed Energy Resource, as defined in Appendix G.

In the event that Hydro Ottawa must consult or request work be performed by upstream Grid authorities such as Hydro One Networks Inc., or the Independent Electricity System Operator, it will do so on behalf of the Customer at the appropriate times. Hydro Ottawa shall inform the Customer of any fees that may be charged by these authorities and shall transact, at no additional Cost, the payments or refunds between the Customer and these authorities.

Once all requirements are known for the Connection of the Distributed Energy Resource to the Grid, Hydro Ottawa will send the Customer an Installation and Service Agreement with a Connection Cost Agreement. Once the agreements are executed and Connection fees collected, the project may proceed through to the Connection stage. Upon completion of the work, Hydro Ottawa shall return to the Customer any credit remaining or request from the Customer any remaining amount due.

In addition to the Hydro Ottawa direct charges, other immediate and future Costs imposed on Hydro Ottawa by others will be passed through to the Customer that may include taxes, levies, and surcharges that Hydro Ottawa is required to pay as a result of the Connection of the DER to the Grid.

CIA revisions shall be subject to the fees specified in Appendix G.

3.5 Embedded Market Participant

See the Distribution System Code.

3.6 Embedded Distributor

See the Distribution System Code.

3.7 Unmetered Services

Unmetered Loads are Loads that are billed based on an estimated usage and Load profile. Hydro Ottawa has the sole right to determine if a Load is to be classified as unmetered.

Unmetered Loads are intended for small Load use within the public Road Allowance. The specific Service is for publicly owned utility infrastructure, other licensed utilities for their infrastructure access with the road authority, government agencies, and temporary community events. Typical unmetered Load types are: streetlights, traffic signals, communication power supplies, bus shelters, railroad signals and telephone booths. These Services do not normally require system Enhancements or Expansions for Connection. When unmetered Service Connections are requested and system Enhancements or

Expansions are needed, the Costs shall be based on the Economic Evaluation (see Appendix B). Otherwise, for applicable charges, refer to Appendix G for the methodology in determining the fee and contact Hydro Ottawa's Service Desk (see Section 1.5) for a quote.

When a Customer is eligible for an unmetered Service and has chosen such, Hydro Ottawa may choose to meter the Load at any time and for any duration to, for example, verify or study typical usage (i.e., amount or profile) at the Customer's expense. Also, when requested by Hydro Ottawa, the Customer or Consumer shall be asked to undertake, at their Cost, electrical usage profile studies by using either a Hydro Ottawa acceptable certified lab or acceptable in-field metering unit. The interim results and final report are to be provided to Hydro Ottawa in an acceptable format and timeframe. Unmetered Consumers cannot allow other Consumers to use unmetered electrical power from their system without the written consent of Hydro Ottawa. Details are provided in the document ECS0023 (unmetered Services) and ECS0025 (Outage Protocol for unmetered Services). Also, see drawing ECG0004 for demarcation details.

Any metered or unmetered Customer shall not be an unlicensed Distributor to another unmetered Customer without written approval from the Ontario Energy Board.

By selecting the unmetered Service option, the Customer gives Hydro Ottawa consent to share or release Load detail, plus Energy and Demand data to Persons including, but not limited to, utilities, electrical associations, interest groups and Hydro Ottawa's regulators, or as required by law. Unless required by law, however, or with the Customer or Consumer's written consent, their identity shall remain confidential and not be disclosed by Hydro Ottawa. Except otherwise noted, these conditions do not apply to metered Services.

Hydro Ottawa no longer offers new sentinel lights. Any changes requested by the Customer with an existing sentinel light(s) or major Hydro Ottawa Distribution System work on the specific sentinel light poles shall result in the removal of the light(s) or change of ownership of the light(s) to the Customer and any required revenue metering.

3.8 Temporary Services

This section pertains to the supply of electrical Energy on a planned temporary basis, as defined in Section 4.0.

Services for temporary accommodation such as portable school rooms are not permitted.

The Customer must pay all Temporary Service and transformer rental Costs unless a basic Temporary Service is available. Basic Temporary Service means a 120/240 V, 1-phase, 3-wire, up to 200 A Service that Lies Along an existing electrical Distribution System with available transformation.

Hydro Ottawa, at its discretion, may provide multiple Temporary Services to a Property under construction. Once each building is energized from the permanent Service, the constructor shall remove the Temporary Service from that building within five (5) business days.

To assist with Property redevelopment, a separate Temporary Service may be provided to a Property in conjunction with the original electrical Service but not in the same building. The Customer's electrical redevelopment plan and size of the Property will assist Hydro Ottawa in determining if any extension is provided beyond the year for the temporary service.

Customers who install and maintain the Load equipment are also responsible for installing and maintaining the service conductors from the Supply Point to the Load.

If, for some reason, a Supply Point is relocated, the Customer shall be contacted and informed that the service conductors must be extended, at a Cost to the Customer, to the new Supply Point.

For temporary Secondary Service, refer to GCS0008 for functional requirements for the secondary metered pedestal.

If any personnel, including a contractor or sub-contractor, (e.g., floor sander or terrazzo grinder) takes supply from the line side of the meter or jumps the fuse, the Service to the facility or building shall be Disconnected immediately.

3.8.1 Service Requirements

a. The Service voltage will be established by Hydro Ottawa depending upon the location of the building/construction site and will be one of the following:

- 120/240 V, 1-phase, 3-wire, up to 400 A overhead supplied;
- 120/240 V, 1-phase, 3-wire, up to 400 A underground supplied in designated areas;
- 347/600 V, 3-phase, 4-wire, grounded wye connected, up to 200 A overhead supplied in designated areas;
- 347/600 V, 3-phase, 4-wire, grounded wye connected, up to 400 A overhead supplied in designated areas;
- 347/600 V, 3-phase, 4-wire, grounded wye connected, up to 400 A underground supplied in designated areas.

Larger Services may require a temporary Primary Service (see Section 3.3).

b. Hydro Ottawa shall establish the location of the Service entrance to the Property and to the building.

3.8.2 Service Information

a. At the discretion of Hydro Ottawa one or more Temporary Services may be provided for a site, subject to the requirements of the Electrical Safety Authority.

b. The location of the Service entrance point and details of revenue metering shall be established through consultation with Hydro Ottawa. Failure to comply may result in modifications at the Customer's expense.

3.8.3 Supply from Pole Line

The Customer has the responsibility to provide the secondary overhead conductor to the Supply Point, or pay for Hydro Ottawa to provide the conductor. Hydro Ottawa shall install and connect the service conductor at the Supply Point; however, the Customer shall supply any anchoring, as required.

Pole mounted Services require a weatherproof cabinet at a size sufficient to house the Service and meter equipment. The cabinet shall have provision for padlocking. Metering or Service equipment may not be attached on Hydro Ottawa’s poles.

Hydro Ottawa may provide an overhead Primary Service for large projects, at the Customer's expense. Line poles provided for utility equipment shall be a minimum of Class 3.

3.8.4 Supply from Underground Distribution System

There are areas where only an underground system has been installed. The Customer shall consult with Hydro Ottawa to establish the method and Cost of obtaining temporary construction Service.

Due to the wide variation in these Services, the Customer shall pay the Costs incurred by Hydro Ottawa.

3.8.5 Site Information

The Customer is to provide the following information to Hydro Ottawa:

- civic address;
- Customer billing information as per Appendix D;
- requested energization and removal dates;
- service amperage;
- preferred Service voltage;
- preferred Service Entrance Location;
- estimated kilowatt demand;
- a listing of all significant Loads such as large motors;
- a site plan showing the location of the delivery point relative to lot lines and the street; and
- a completed Load Summary form if required (see Appendix A).

3.8.6 Revenue Metering

The Customer shall supply revenue metering equipment in accordance with Hydro Ottawa Revenue Metering Specification (GCS0008).

3.8.7 Servicing Cost

Refer to Service Charge Schedule, Appendix G (for secondary supply voltages). These Costs are determined independent of the Rate classification discussed in Section 2.6.

SECTION 4

Glossary of Terms

“Affiliate” means, with respect to any party,

a. any legal entity of which the securities or other ownership interests representing fifty percent (50%) or more of the equity or fifty percent (50%) or more of the ordinary voting power or fifty percent (50%) or more of the general partnership interest are, at the time such determination is being made, owned, controlled or held, directly or indirectly, by such legal entity, or

b. any legal entity which, at the time such determination is being made, is controlling or under common control with such legal entity. As used herein, the term “control”, whether used as a noun or verb, refers to the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of a legal entity, whether through the ownership of voting securities, by Agreement or otherwise with respect to a corporation, has the same meaning as in the *Business Corporations Act* (Ontario);

“Affiliate Relationship Code (ARC)” means the standards and conditions set out for the interaction between electricity Distributors and transmitters and their respective affiliated companies.

“Applicable Law” means any domestic or foreign law, rule, statute, subordinate legislation, regulation, by-law, order, ordinance, protocol, code, guideline, treaty, policy, notice, direction or judicial, arbitral, administrative, ministerial or departmental judgement, award, decree, treaty, directive, or other requirement or guideline published or in force at any time during the Term which applies to or is otherwise intended to govern or regulate any Person, Property, transaction, activity, event or other matter, including any rule, order,

judgement, directive or other requirement or guideline issued by any Government Authority;

“Basic Credit” refers to cost or equivalent credit for Basic Connection which is recovered through Hydro Ottawa’s distribution rates;

“Basic Connection” means a new residential 120/240 V, 1-phase, 3-wire, up to 200A overhead, single-phase, Secondary Service including transformation capacity, standard revenue metering, and up to 30 meters (100 feet) of overhead conductor;

“Billing Demand” means the maximum Rate at which electricity is consumed during a billing period and is measured in kilowatts (kW) and adjusted for power factor, intermittent rating, transformer losses, and minimum billing;

“Bulk Meter” means a revenue class Measurement Canada approved meter and/or installation that is used as a single point of measurement which Hydro Ottawa uses to bill the Customer’s energy account for a Premise. A Bulk Meter is not a Customer-owned revenue meter or a meter which is owned and operated by a licensed Sub-Metering provider;

“Buss” means a common current carrying element that allows the connections of other elements to that Common Element;

“Cable Chamber” is a permanent, secure, self-contained enclosure designed to install, support, and operate underground cables. These chambers can be one of several forms: hand-hole, maintenance hole, sidewalk vault, transformer base, switching base, station basement, enclosed pull pit, or transformer vault;

“Check Meter” means a revenue class Measurement Canada approved meter and/or installation that is not used as part of the typical billing arrangement for a Premise, yet, may be used for the assessment of a charge for the recovery of lost Energy and Demand from customer-owned equipment, dry core transformers, and losses down-stream of Hydro Ottawa’s revenue meters;

“Cold Metering” means an installation of a switch, which is located on the Customer Property, is on the supply side (also referred to as the line side) of the Hydro Ottawa revenue meter;

"Commercial" means any Customer service class other than a Residential Customer service class. This category of Customers is also referred to as "general" service class;

"Common Element" shall have the meaning ascribed to it in the *Condominium Act, 1998*;

"Competent Person" shall have the meaning ascribed to it in O.Reg. 22/04;

"Conditions of Service" means these Conditions of Service which are developed in accordance with the Distribution System Code;

"Connection" means the process of installing and activating Connection assets in order to Distribute electricity;

"Connection Agreement" means an agreement entered into between Hydro Ottawa and the Customer and sets out the conditions of the Connection and delivery of electricity to or from that connection;

"Connection Impact Assessment" (CIA) is an analysis of a potential Distributed Energy Resource's impact to the Grid, outlining project feasibility, initial technical specifications, and the effect the project would have on the Grid. The CIA may be preliminary or detailed providing different levels of information, options, and responsibilities. Any Customer who changes its information used for the CIA will require an application for a CIA revision;

"Connection Authorization Certificate" means an Electrical Safety Authority (ESA) certificate that is required when work of an electrical nature includes the installation, repair, alteration, replacement and re-attachment of customer owned electrical equipment when the installation has been disconnected or cut off from any service or source of supply.

"Consumer" means a Person who uses, for the Person's own consumption, electricity that the Person did not Generate;

"Controlling Authority" shall have the meaning ascribed to it in the Electrical Utility Safety Rules (EUSR);

"Cost" includes all burdened labour, material, vehicles, equipment, and expenses, including travel time; however, applicable taxes are excluded. "Cost" and "Fee" are interchangeable;

"Critical Care Customer" means a Customer who has provided Hydro Ottawa with a physician's written confirmation that a Disconnection will pose a risk of significant adverse

effects on the physical health of the Customer or other Person that regularly resides with the Customer;

“Customer” means a Person that has contracted for or intends to contract for Connection of a Load or a Distributed Energy Resource. This includes developers of residential or Commercial sub-divisions or Distributed Energy Resources;

“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;

“Design Prepayment” means a deposit required to be paid by the customer to initiate a design review, Offer to Connect, engineering investigation(s), field reviews and estimates for all types of customer service requests. Unused portions of the Design Prepayment are refunded to the customer should the request be withdrawn;

“Disconnection” means a temporary or permanent deactivation of Connection assets that result in cessation of distribution Services to a Customer;

“Disconnect/Collect Trip” means a visit by an employee or agent of Hydro Ottawa to a Customer's Premises to demand payment of an outstanding amount or to shut off or limit distribution of electricity to the Customer failing payment;

“Distribute”, with respect to electricity, means to convey electricity at voltages of 50 kilovolts or less;

“Distributed Energy Resource” means a Generation Facility or another facility (e.g., storage) connected directly or indirectly to the Grid that provides short and/or long term Energy storage and releases the Energy as electricity;

“Distribution System” means a system for distributing electricity, and includes any structures, equipment or other items used for that purpose (including the electrical, civil, and aerial plant). 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;

"Distribution System Code" (DSC) means the code, issued by the Ontario Energy Board, and in effect at the relevant time, which, among other things, establishes the obligations of a 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;

"Distributor" means a Person who owns or operates a Distribution System;

"Downtown" means the electrical Connection within one of the following areas:

- City of Ottawa and/or National Capital Commission designated existing and future overhead to underground utility conversion zones as amended from time-to-time;
- City of Ottawa and/or National Capital Commission designated restricted pad-mounted equipment zones as amended from time-to-time;
- City of Ottawa and/or National Capital Commission designated core area as amended from time-to-time; or
- Existing Hydro Ottawa underground electrical secondary Buss system zones;

"Dry Core Transformer Charge" means an Ontario Energy Board approved charge for the recovery of lost Energy and Demand from customer-owned dry core transformers that are installed down-stream of Hydro Ottawa's revenue meters;

"Economic Evaluation" refers to the financial evaluation, outlined in Appendix B, used to determine the Customer(s) capital contribution for expansions of the main Distribution System required to connect a specific Customer or groups of Customers;

"Electrical Safety Authority" (ESA) means the Person or body designated under the *Electricity Act, 1998*, Regulations as the Electrical Safety Authority;

"Electrical Utility Safety Rules" (EUSR) refers to rules developed by Infrastructure Health and Safety Association (IHSA);

"Eligible Low-Income Customer" means (a) a residential electricity Consumer who has been approved for the Ontario Electrical Support Program (OESP) by the centralized service provider engaged by the Ontario Energy Board (OEB) to administer the OESP on the OEB's behalf; or (b) a residential electricity Consumer who has been approved by a Low-Income Energy Assistance Program(LEAP) Intake Agency for Emergency Financial Assistance;

“Embedded Distributor” means a Distributor who is not a wholesale market participant and that is provided electricity by a Host Distributor;

“Embedded Distributed Energy Resource” means a Distributed Energy Resource that is not directly connected to the Independent Electricity System Operator controlled Grid, but instead is connected to a Distribution System;

“Emergency” means any abnormal system condition that requires immediate action to prevent loss of life or Property, prevent loss of a Distribution System, or the supply of electricity that could adversely affect the reliability of the electricity system;

“Emergency Backup” means a Distributed Energy Resource that has a transfer switch which isolates it from the Distribution System such that “Emergency Backup” cannot be paralleled to the Distribution System for safety, revenue metering, and equipment damage reasons;

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

“Energy 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 the revenue meter or meter tampering;

“Energy Resource Facilitator” means a Person who owns or operates a Distributed Energy Resource;

“Enhancement” means a modification to the existing Distribution System in order to improve system operating characteristics such as safety, reliability, or power quality or to relieve system capacity constraints resulting, for example, from general Load growth, but does not include a renewable enabling improvement;

“Expansion” means a modification or addition to the main Distribution System in response to one or more requests for one or more additional Customer Connections that otherwise could not be made. An example is increasing the reach of the Distribution System to connect a Customer, or a limited number of Customers and includes the modifications or additions to the main Distribution System identified in Section 3.2.30 of the Distribution System Code, but, in respect of a renewable Distributed Energy Resource, excludes a renewable enabling improvement. Expansion of the system may not provide any general improvement of reliability or capacity to the Hydro Ottawa Distribution System;

“Financial Loss” means any liability, loss, claim, settlement payment, Cost or expense, interest, award, judgement, damages (including punitive damages), diminution in value, fines, fees and penalties, or other charge, other than a Litigation Expense;

“FIT” means the Independent Electricity System Operator’s Feed-In-Tariff Renewable Energy program;

“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;

“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, devices or other resources used for that purpose;

“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. For further detail, refer to Section 1.2 of the OEB’s Distribution System Code;

"Government Authority" means any government, parliament, legislature or any regulatory authority, agency, commission or board of any government, parliament or legislature, or any political subdivision thereof, or any court or, without limitation to the foregoing, any other law-making or regulatory entity or any Person acting under the authority of any of the foregoing or any other authority charged with the administration or enforcement of laws, including the Privacy Commissioner of Canada, the Information and Privacy Commissioner of Ontario, the Ontario Energy Board, the Independent Electricity System Operator, and the Ontario Ministry of Energy;

“Greenfield” means an undeveloped area where all utility infrastructures are required to be installed (i.e., roads, sewer, water, and utilities);

“Grid” refers to the Distributor’s electricity Distribution System and, where relevant, includes the transmission system;

“Grid Cell” means an area of Ontario bounded by lines of geographic latitudes and longitudes based on the NAD 83 (CSRS98) datum using increments of 30 seconds of the series 50 degrees 00' 00", 50 degrees 00' 30", 50 degrees 01' 00", and which is referred to

by the latitude and longitude of its northeast corner, as determined or modified from time to time by the Ministry of Natural Resources;

“Holiday” means the following statutory holidays: New Year's Day, Family Day, Good Friday, Easter Monday, Victoria Day, Canada Day, Civic Holiday, Labour Day, Thanksgiving Day, Christmas Day and Boxing Day;

“Host Distributor” means the Distributor who provides electricity to an Embedded Distributor;

“Hydro Ottawa Approved Contractor,” means a Hydro Ottawa Qualified Contractor who is also a Hydro Ottawa Pre-Approved Contractor;

“Hydro Ottawa Pre-Approved Contractor” means a contractor who has satisfied financial and legal criteria and is in good standing under Hydro Ottawa’s Contractor Occupational Health, Safety and Environment (OHSE) Management Program;

“Hydro Ottawa Qualified Contractor” means a contractor whose work has been evaluated by Hydro Ottawa for quality and craftsmanship with respect to a specific type of work and who has successfully demonstrated the ability to perform such work with an acceptable level of competence;

“IESO” means the Independent Electricity System Operator continued under the *Electricity Act, 1998*.

“Indemnifiable Losses” means the aggregate of Financial Losses and Litigation Expenses;

“Infill Service” means any Service (e.g., rural or urban) installed which was not part of a pre-planned subdivision or a Service that was installed five (5) years or more after the pre-planned subdivision has had the primary electrical installation “Substantially Completed”;

“Integral” means electrical devices and associated supporting civil structures at or adjacent to the Ownership Demarcation Point that have the ability to affect the reliability and safety of Hydro Ottawa’s Distribution System and are:

1. connected directly to the Hydro Ottawa Distribution System without a Disconnect switch and protective device; or

2. on or in Hydro Ottawa structures or in proximity to Hydro Ottawa's energized primary system;

"Integrity", in reference to the Grid, means its safety, security, reliability, performance, operability, maintainability, and accessibility;

"Institute of Electrical and Electronics Engineers (IEEE)" means the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

"International Electrotechnical Commission (IEC)" means an international standards organization that prepares and publishes international standards for all electrical, electronic and related technologies – collectively known as "electrotechnology".

"Interval Meter" means a device that measures and records electricity Energy use (measured in kilowatt-hours) and the Rate at which it is used (measured in kW, kVA, or kQ) on an hourly or sub-hourly basis;

"Isolation" means a Customer initiated Disconnection from Hydro Ottawa's Distribution System typically for the purpose of the Customer doing work on or near electrical apparatus;

"LDC" means the Local Distribution Company;

"LEAP" means Low-Income Emergency Assistance Program. Low-income customers can get a one-time payment in emergency financial assistance for their electricity bills;

"Lies Along" occurs when Customer Property abuts the public Road Allowance or Hydro Ottawa easement having distribution facilities of the appropriate voltage, wiring configuration, and capacity for the Customer's service needs; thus, the Premise can be connected without System Expansion or Upgrade, or the acquisition of land rights;

"Litigation Expense" means any court filing fee, court cost, arbitration fee or cost, witness fee, and any other fee or cost of investigating and defending or asserting a claim for indemnification under this Section, including in each case, legal fees, other professional fees, and disbursements;

"Load" means any device (i.e., equipment, apparatus) or collection of devices that rely on electricity to function;

“Load Customer” means a customer that consumes electricity from the Distribution System of a licensed Distributor;

“Load Displacement” means, in relation to a Distributed Energy Resource that is connected on the Customer’s side of a Connection point, that the output of the Distributed Energy Resource is used or intended to be used exclusively for the Customer’s own consumption;

“Load Control Device” means a load limiter, timed load interrupter or similar device that limits or interrupts normal electricity Service;

“Load Facility” means a facility that withdraws electricity from the distribution system of a licensed Distributor;

“Load Transfer” means a network Supply Point of one Distributor that is supplied through the Distribution System network of another Distributor and where the Supply Point is not a wholesale supply or bulk sale point;

“Load Transfer Customer” means a Customer that is provided distribution Services through a Load Transfer;

“Low-income Energy Assistance Program (LEAP)” provides emergency financial relief to eligible low-income customers to avoid having their service disconnected;

“Maintenance” means any inspection, testing, cleaning, torquing, adjusting, and calibrating electrical equipment, or replace Support Structures associated with the electrical system but no Upgrades;

“Maintenance Agent” means a competent Person who performs Maintenance, repairs and/or Upgrades of the electrical equipment, apparatus, or device on behalf of the Controlling Authority or owner;

“Measurement Canada” is an agency of Innovation, Science and Economic Development Canada. It is responsible for ensuring accuracy in the selling of measured goods, developing and enforcing the laws related to measurement accuracy, approving and inspecting measuring devices and investigating complaints of suspected inaccurate measurement.

“Meter Service Provider” or “(MSP)” means any entity that performs Metering Services on behalf of a Distributor or Energy Resource Facilitator;

“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;

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

“Metering Services” means installation, testing, reading, and Maintenance of meters;

“Micro-embedded Distributed Energy Resource” means an embedded Distributed Energy Resource with a name-plate rated capacity of 10 kW or less;

“microFIT” means the Feed-In-Tariff program under the Independent Electricity System Operator Distributed Energy Resource programs for Micro-embedded renewable Distributed Energy Resource with a nameplate rating of 10 kW or less;

“Multiple Customer Metering System” (MCMS) shall have the meaning ascribed to it in Hydro Ottawa’s Metering Specification (GCS0008);

“MUSH” refers to municipalities, universities, schools, hospitals, or other similar government institutions or agencies;

“Ontario Electricity Support Program (OESP) provides monthly on-bill credits for lower-income customers to reduce their electricity bills;

“Offer to Connect” means Hydro Ottawa’s specific requirements for a Customer to connect to Hydro Ottawa’s Distribution System;

“Ontario Electrical Safety Code” is a provincial regulation that sets safety standards for the installation and maintenance of electrical equipment;

“Ontario Energy Board” or “OEB” means the regulator of the electricity and natural gas sectors and established under the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B;

“Operating Agent” is a Competent Person who alters the condition or position of specific equipment, apparatus, or device on behalf of the Controlling Authority or owner;

“Operational Demarcation Point” means the operable electrical equipment, apparatus, or device(s) at which a Distributor’s responsibility for operational control of distribution equipment, including Connection assets, and Customer equipment ends and the Customer’s control begins;

“Ownership Demarcation Point” means the precise physical location at which a Distributor’s ownership of distribution equipment, including Connection assets, ends, and where the Customer’s begins. Specific equipment belonging to the Distributor may be within the Customer’s ownership side of the demarcation point as defined by the Ontario Electrical Distribution Safety Code. The electrical Ownership Demarcation Point may not be the same point as the supporting civil structure Ownership Demarcation Point;

“Person” means any individual, partnership, franchise holder, association, corporation or any Government Authority and its employees, agents or Representatives;

“Plans” means Hydro Ottawa approved plans, specifications, standards, working drawings, bill of materials, blueprints, schedules, standard work methods, and similar renderings for the construction and installation of Hydro Ottawa equipment;

“Powerline Carrier” means the use of existing electricity wire infrastructure to carry voice and data signals by transmitting high frequency data signals through the electrical power lines;

“Premise” or “Premises” means the location at which an electrical Service is provided and has one Hydro Ottawa account;

“Primary Service” or “Primary Services” means any electrical Service which is supplied with a nominal voltage greater than 750 volts but less than 50,000 volts;

“Primary Voltage” means any voltage between 750 volts and 50,000 volts;

“Prime Interest Rate,” also known as the “prime rate” or “ prime lending rate” is the interest rate a financial institution uses as a base to determine interest rates for loan products. Each financial institution sets its own prime rate, as a function of its cost of funding, which, in turn, is influenced by the target for the overnight rate set by the Bank of Canada.

“Private Road” means any access route including but not limited to a street, road, or lane on land not owned by a municipality and not dedicated and accepted as, or otherwise

deemed at law to be, a public highway, that serves as a motor vehicle access route to or from buildings, lots, units or one or more parcels of land;

“Proceeding” means any judicial, administrative, or arbitration action, suit, claim, investigation, or legal measure;

“Property” means a horizontal parcel or lot of real property as identified by a Property Identification Number (PIN) or, in the absence thereof, by another legal description by lot and/or parcel number or similar legal description or by other appropriate description using metes and bounds. In the case of provincial Crown lands, Property means a Grid Cell. Vertically stacked PINs shall be treated as one parcel;

“Property Identification Number” means the Property identifier assigned to a Property in accordance with the *Registry Act*, RSO 1990, c R.20, s 21(2) or in accordance with the *Land Titles Act* RSO 1990, c L.5, s 141(2);

“Public Service” means that portion of the electrical Service in a multiple unit occupancy facility that supplies electrical Loads shared by or which benefits more than one unit. Examples of such Loads are space heaters, central air conditioners, central ventilating units, pools, laundry facilities, lighting (e.g., for parking lots, sign service, corridor and walkway, electrical water heaters, dry-core transformer losses);

“Rate” means any financial rate, charge or other consideration, and includes a penalty for a late payment;

“Reconnection” means reactivation of Connection assets and results in the Customer’s ability to use their electrical Service;

“Re-energization” means a Customer initiated Reconnection to the source of dynamic Energy;

“Regular Business Hours” are between 8:00 a.m. and 4:00 p.m., excluding Saturdays, Sundays and statutory Holidays. Some exceptions apply, see Section 1.5;

“Regulations” means the regulations made under applicable legislation;

“Renewable Enabling Improvement” means a modification or addition to the Distribution System undertaken by Hydro Ottawa to accommodate a Renewable Distributed Energy Resource;

"Renewable Energy" means Energy Generated from wind (off-shore and on-shore), solar photovoltaic (PV), bio-energy (biogas, biomass or landfill gas) or water generation, or, as prescribed by regulation;

"Renewable Energy Generation Facility" shall have the meaning ascribed to it in the *Electricity Act, 1998*;

"Renewable Energy Source" has the same meaning as in the *Electricity Act, 1998*;

"Representatives" in reference to party, means the party's directors, officers, employees, agents and contractors, the party's Affiliates, and all such Affiliates' respective directors, officers, employees, agents and contractors;

"Residential Customer" means a Customer who uses a Residential Service and resides in a single-dwelling unit that consists of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning designation. Separately metered dwellings within a townhouse complex or apartment building are also Residential Customers; "Residential Service" is a Secondary Service that is for domestic household and personal residency use. Services that do not meet residential requirements are classed as general Services as per Sections 3.2 to 3.9;

"Residential Subdivision" means a Residential area with three or more homes;

"Residential Underground Subdivision" means a residential subdivision with three or more homes electrically supplied from an on-grade pad-mounted transformer(s), transformer sidewalk vault, or secondary pedestal(s) by underground secondary cables;

"Retail Settlement Code" means the code approved by the Ontario Energy 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 Customers. It also provides for tracking and facilitating Customer transfers among competitive Retailers;

"Retailer" means a Person who;

a. sells or offers to sell electricity to a Consumer; or
b. acts as an agent or broker for a Retailer with respect to the sale or offering for sale of electricity; or

c. acts or offers to act as an agent or broker for a Consumer with respect to the sale or offering for sale of electricity;

"Road Allowance" means a common and public highway, street, avenue, parkway, square, place, bridge, viaduct, trestle or any other structure incidental thereto, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral Property lines thereof;

"Service" means the conductor and equipment for transferring electrical Energy between Hydro Ottawa's Distribution System and the Customer's Premise;

"Secondary Service" means any Service that is supplied with nominal voltage not more than 750 volts;

"Service Area" means, with respect to a Distributor, the area in which the Distributor is authorized by its licence to Distribute electricity;

"Service Size" or "Service Entrance Size" means the maximum deliverable amperes allowed to an installation as determined by the continuous ampere rating of the main device (breaker or switch);

"Smart Meter" means a device (including metering equipment, systems and technology and associated equipment, systems and technologies) that measures electrical Energy use (kilowatt-hours, kWh) and is part of an integrated data management system which records, stores, and transmits date and time stamped meter readings to Hydro Ottawa for billing purposes. In the case of a Commercial metering point, Demand quantities (kW and/or KVA) on an hourly or sub-hourly basis;

"Standard Supply Service Code" (SSS) means the code approved by the Ontario Energy Board and in effect at the relevant time, which, amongst 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, 1998*;

"Sub-metering" or "Unit Sub-metering" shall have the meaning ascribed to it in Part II of the *Energy Consumer Protection Act*, 2010, S.O. 2010, c.8;

"Sub-Service" means a separately metered Service that is taken from the main building Service;

“Substantially Complete” means the Hydro Ottawa primary distribution supply to the area that has been energized;

“Supply Point” or “Point of Supply” means the Customer Connection point, for both primary and Secondary Services, to the Hydro Ottawa Distribution System. This might be physically located at an underground Cable Chamber, vault, pole, or pad-mounted device. This electrical Supply Point might be located on the public Road Allowance or a nearby Property from which Hydro Ottawa has land access rights. With respect to a Distributed Energy Resource, “Supply Point” means the Connection point where electricity produced by the Distributed Energy Resource is injected into a Distribution System. In all cases, Hydro Ottawa will designate the final Supply Point;

“Support Structure” means any equipment (e.g., poles, overhead platforms, towers, anchors, guy wires, lashing messengers, underground Cable Chambers, transformer and switch bases, and ducts) that physically supports and routes the Distribution System between the substation and the Customer;

“Temporary Service” means one of the following: (i) a planned Temporary Service that is an Electrical Safety Authority inspected electrical Service and granted temporarily for a period of less than one year for purposes such as pole mounted Service equipment, construction sites, trailers, cranes, boathouses, or special events; (ii) an unplanned Temporary Service conductor that is provided by Hydro Ottawa for a faulted underground supply conductor, or (iii) a planned temporary Distribution System configuration during an underground primary system Expansion and is implemented where subdivision construction is to proceed in phases. This work includes both the installation and removal of the Temporary Service;

“Timed Load Interrupter Device” means a device that will completely interrupt the Customer’s electricity intermittently for periods of time and allows full Load capacity outside of the time periods that the electricity is interrupted;

“Townhouse” means a multi-unit residential complex, each containing more than two residential units, with each unit having their own outside door at ground level;

“Unmetered Loads” means electricity consumption that is not metered and is billed based on estimated usage and its Load profile if it can be determined. These small Services are 120 volts and not more than 15A, with the exception of public traffic signals and public

street lighting if they are operated and maintained by a public road authority, and the Load is not more than 100A;

“Upgrade” means a change to a transmitter’s system, a Distributor’s system, or Customer owned equipment, including a change from one Service Size to another, a relocation of a meter from one location to another, a change in Service from overhead to underground, or other changes that require an Electrical Safety Authority permit;

APPENDIX A

Load Summary Form

The most current version of this form is found on Hydro Ottawa's website at hydroottawa.com/developersguide.

APPENDIX B

Economic Evaluation for Distribution System Expansion/Enhancement

This Costing method applies to all new servicing not covered by Appendix G that necessitates an Expansion and/or Enhancement of the Hydro Ottawa system. To support the Costs of supplying the additional Load or connecting a, capital contributions shall be required from new Load or Distributed Energy Resource Customers who connect to the system. The Economic Evaluation follows the requirements of chapter three (3) and the suggested formula from Appendix B of the Ontario Energy Board 's Distribution System Code with Hydro Ottawa amendments detailed below. Any credits due for an Distributed Energy Resource project as prescribed by the Ontario Energy Board codes shall be deducted from the capital contributions required.

For servicing Commercial and DER projects, the servicing Costs beyond the Supply Point specific to the project (e.g., Connection assets) are recovered at one hundred percent (100%) and are not considered in the Economic Evaluation.

The Supply Point location may differ between residential and commercial Connections on or off the property. Consult the specific Connection type for details (see Section 3).

“Present Value” of Annual Wires Revenue and Annual Incremental operating and Maintenance Costs (including all applicable taxes and third-party Costs) are applied using a 25 year net revenue horizon of metered Load usage for residential and a 15 year net revenue horizon for general Load Services. Hydro Ottawa, at its sole discretion, may consider a revenue horizon of up to 25 years for general Service MUSH Customers depending on the nature of the development, supporting business case, and guarantees provided by the Customer.

Hydro Ottawa’s maximum Connection horizon for Customers is five (5) years as prescribed in appendix B of the Ontario Energy Board’s Distribution System Code. The Connection horizon is calculated from the energization date of the facilities or the date in which energization of the facilities is possible.

Where an Expansion Deposit was received and one year after the energization date, the Customer is entitled to an annual reduction of the Expansion deposit based on the number of Connections and/or Demand that occurred during each year of the connection horizon. It is the Customer's responsibility to provide the Connection details to Hydro Ottawa for verification. If, at the end of the duration of the connection horizon, the forecasted loading has not been met, Hydro Ottawa will retain any remaining portion of the Expansion deposit or may require additional funds to complete the servicing.

The Customer shall be required to pay any additional Costs beyond what is expected for a specific Expansion or Enhancement project under normal circumstances. Such exceptional circumstances include, yet are not limited to, work in a contaminated, heritage, or archaeological area, or where there is a request or a need to apply significantly higher construction or reliability standards above Hydro Ottawa's.

Hydro Ottawa will release the Customer's excess system capacity that was estimated with the Customer's initial system Expansion request after the connection horizon unless Hydro Ottawa provides the Customer specific capacity guarantee or the Customer is paying the OEB approved standby rates.

As of the first Ontario Energy Board (OEB) Cost of Service Rate approval after 2010, Hydro Ottawa shall apply an Enhancement Cost (per kilowatt) according to approved OEB Rates.

APPENDIX C

Hydro Ottawa Contracts

1. The Installation and Service Agreement (formerly the Installation and Maintenance Agreement) is a signed contract. The most current version of this agreement can be found at www.hydroottawa.com.
2. The Standard Application and Contract for Connection or Upgrade of an Electrical Metered Load Service is an implied contract (see Section 2.1.7.2).
3. The Operating and Maintenance Agreement is a signed contract (see Section 2.1.7.1).
4. The Distributed Energy Resource Access Agreement is a signed contract (see Section 2.1.7.1).
5. A Distributed Energy Resource without a provincial supply contract is an implied contract (see Section 2.1.7.2).

APPENDIX D

Customer Billing Account Information

The most current version of this form is found at hydroottawa.com/developersguide.

APPENDIX E

Contracts and Applications for Connecting Distributed Energy Resource

For information on connecting Distributed Energy Resources, please see Section 3.4.

Contracts for Embedded Distributed Energy Resources are discussed in this Conditions of Service in conjunction with Appendix E of the Ontario Energy Board's Distribution System Code.

APPENDIX F

Table A – Underground Primary Service Connection – Overhead Primary Line (Radial, Dual Radial and Loop)

	Distribution Voltage (kV)						
	4.16 GW	**8.32 GW**	**13.2 GW**	**13.2 Δ**	**27.6 GW**	**44 Δ**	
Maximum 3⌀ Primary Circuit Service Entrance Supply (kVA)	300 (Note 1)	1,000 (Note 1)	1,500 (Note 1)	8,000 (Note 1)	9,000 (Note 1)	15,000 (Note 1)	
Maximum 1⌀ Primary Circuit Service Entrance Supply (kVA) (Note 8)	100	167	167	N/A	167	N/A	
Type of Supply (radial, dual radial or looped) (Note 3)	Radial	Radial	Radial	Dual Radial/ Loop	Radial/ Loop	Radial	**Secondary Voltage (V)**
Max Size of Hydro Ottawa Supplied **3⌀ Vault** Transformer **Bank** per Customer per Primary Circuit (kVA) (Note 1, 5, 6, 7 & 11)	300	1,000	1,500	1,500	750	N/A (Note 5)	**120/208** (Note 9)
	300	1,000	1,500	4,500	2,250	N/A (Note 5)	**347/600**
Max Size of Hydro Ottawa Supplied **1⌀ Vault** Transformer per Customer per Primary Circuit (kVA) (Note 5, 7 & 8)	100	167	167	N/A	167	N/A	**120/240**
Max Size of Hydro Ottawa Supplied **3⌀ Pad-mounted** Transformer per Customer per Primary Circuit (kVA) (Note 1, 4, 5, 7 & 11)	300	500	500	N/A	500	N/A (Note 5)	**120/208** (Note 9)
	300	1,000	1,500	N/A	2,500		**347/600**
Max Size of Hydro Ottawa Supplied **1⌀ Pad-mounted** Transformer per Customer per Primary Circuit (kVA) (Note 4, 5, 7 & 8)	100	167	167	N/A	167	N/A	**120/240**

Notes:

1. The provision of three-phase Service from an overhead feeder shall only be allowed in areas where the Distribution System can accommodate the proposed Service. Contact Hydro Ottawa to discuss your requirements.
2. GW = 4 wire grounded wye primary configuration and Δ = 3 wire delta primary configuration.
3. Dual radial and loop supplies are defined as two supplies to one or more devices.
4. Availability of pad-mounted transformers is restricted within specific areas of the urban core.
5. The Customer shall own non-Hydro Ottawa standard size transformers.

6. For installations greater than the maximum vault bank specified, multiple banks are required.
7. A Hydro Ottawa owned sectionalizing protection device (fused switch/switchgear) must be installed prior to transformation equipment.
8. Up to a maximum of 100% rated 600 A @ 120/240 V for a single Service entrance main switch supplied from a pad-mounted transformer.
9. 120/208 V primary service connections are limited to pad-mounted and vault transformer configurations.
10. Maximum motor size for starting current on each primary circuit is determined by Hydro Ottawa Power Quality Guideline ECG0008 (applicable to each Service).
11. Three-phase pad-mounted and vault transformers are only available on customer property.

APPENDIX F

Table B – Underground Primary Service Connection – Underground Feeder (Loop)

	Distribution Voltage (kV)					
	4.16 GW	**8.32 GW**	**13.2 GW**	**13.2 Δ**	**27.6 GW**	
Maximum 3⌀ Primary Circuit Service Entrance Supply (kVA)	300 (Note 1)	1,000 (Note 1)	1,500 (Note 1)	8,000 (Note 1)	9,000 (Note 1)	
Maximum 1⌀ Primary Circuit Service Entrance Supply (kVA) (Note 8)	100	167	167	N/A	167	
Type of Supply (radial, dual radial or looped) (Note 3)	Loop	Loop	Loop	Loop	Loop	**Secondary Voltage (V)**
Max Size of Hydro Ottawa Supplied **3⌀ Vault** Transformer **Bank** per Customer per Primary Circuit (kVA) (Note 1, 5, 6, 7 & 11)	300	1,000	1,500	1,500	750	**120/208** (Note 9)
	300	1,000	1,500	4,500	2,250	**347/600**
Max Size of Hydro Ottawa Supplied **1⌀ Vault** Transformer per Customer per Primary Circuit (kVA) (Note 5, 7 & 8)	100	167	167	N/A	167	**120/240**
Max Size of Hydro Ottawa Supplied **3⌀ Pad-mounted** Transformer per Customer per Primary Circuit (kVA) (Note 1, 4, 5, 7 & 11)	300	500	500	N/A	500	**120/208** (Note 9)
	300	1,000	1,500	N/A	2,500	**347/600**
Max Size of Hydro Ottawa Supplied **1⌀ Pad-mounted** Transformer per Customer per Primary Circuit (kVA) (Note 4, 5, 7, & 8)	100	167	167	N/A	167	**120/240**

Notes:

1. The provision of three-phase Service from an underground feeder shall only be allowed in areas where the Distribution System can accommodate the proposed Service. Contact Hydro Ottawa to discuss your requirements.
2. GW = 4 wire grounded wye primary configuration and Δ = 3 wire delta primary configuration.
3. Dual radial and loop supplies are defined as two supplies to one or more devices.
4. Availability of pad-mounted transformers is restricted within specific areas of the urban core.
5. The Customer shall own non-Hydro Ottawa standard size transformers.
6. For installations greater than the maximum vault bank specified, multiple banks are required.
7. A Hydro Ottawa owned sectionalizing protection device (fused switch/switchgear) must be installed prior to transformation equipment.

8. Up to a maximum of 100% rated 600A @ 120/240 V for a single Service entrance main switch supplied from a pad-mounted transformer.
9. 120/208 V primary service connections are limited to pad-mounted and vault transformer configurations.
10. Maximum motor size for starting current on each primary circuit is determined by Hydro Ottawa Power Quality Guideline ECG0008 (applicable to each Service).
11. Three-phase pad-mounted and vault transformers are only available on customer property.

APPENDIX G

Methodology for Standard Fees for Various Services

G-0: General Notes and Guidelines when using Appendix G

1. Appendix G applies to infill development, Services Upgrades, and special Services. Appendix G applies to “one of” projects and is not intended for several multiple connections by a Customer within the same time and location. For such multiple requests, Hydro Ottawa will provide a customized estimate to the Customer for the proposed work.
2. For a quote, contact Hydro Ottawa’s Service Desk (see Section 1.5). Hydro Ottawa shall assess final servicing and Cost based on this Conditions of Service document including Appendix G.
3. Appendix G may be applied wherever a particular Service voltage and size is available. However, some types of Services may not be available in parts of the Service Area. For example, an overhead Service is not available in all underground areas and 120/240V, 1-phase, 3-wire, 400A Services are not available as an overhead Service.
4. A Service Upgrade means a change from one Service Size to another, a relocation of a revenue meter from one location to another, a change of Service from overhead to underground, work requiring an Electrical Safety Authority permit, or other electrical improvements not designated as Maintenance such as a change in wiring or electrical equipment. Note that there may be fees even when the size of the Service is reduced. A deduction for the standard basic overhead Service does not apply in the case of Upgrades to existing Services because the Services are deemed to have received this deduction already.
5. Fees apply to the full rating of the main switch (e.g., 100 A, 200 A, etc.) and not to the installed protection that could be of smaller size.
6. When a dedicated transformer supplies a Customer on private Property, the Customer shall pay the actual Costs less, if applicable with a residential Service, the Basic Credit.

7. Quotes expire after 90 calendar days after date of issue, but, may be extended at the determination of Hydro Ottawa in writing for an additional 45 days.
8. Hydro Ottawa shall provide one free Customer Layout per rolling twelve (12) month period for a secondary Infill or Service Upgrade for a Residential or Commercial Property. This Customer Layout may include an initial site review, cost estimate, and review of the service loading for the changes to the new or existing service and does not include emergency services. Further charges may apply to complete the requested work or for revisions to the initial Customer Layout. Requests for additional Customer Layout within a rolling twelve (12) month period will result in an additional layout fee. If the Property ownership changes during that rolling twelve (12) month period, the new Property owner shall be provided one free Customer Layout if required.
9. Once Hydro Ottawa receives payment for the Customer Layout from the Customer, Hydro Ottawa will hold the quoted Customer Layout Cost for up to one year.
10. Temporary secondary Service supplied from a Hydro Ottawa shared vault and the associated duct usage fee shall be charged out at half the cost of a permanent shared vault secondary service and duct usage fee. The supply conductor from the shared vault shall be charged out at full cost to supply, install, and remove it
11. Should Hydro Ottawa be required on scene of an Emergency Service, Service fees will apply and will be billed against the Premise address.

For more information, contact Customer Service (see Section 1.5).

G-1: Methodology for Standard Fees for Various 120/240V Service Connections

G-1.1 Residential Infill – Basic Connection Fees

The basic residential Service Size is 120/240 V, 1-phase, 3-wire, 100 A overhead supplied. However, for the definition of a “Basic Connection”, refer to the Glossary (see Section 4.0). Underground supply and Services greater than 100 A are available for a fee equivalent to the difference in Cost to the Basic Connection. Reference should be made to Section 3.1 for Service requirements, and Section 4 for the definition of “Infill.”

Available Service Sizes at 120/240 V, 1-phase, 3-wire Services are as follows:

- Overhead: 100 A (basic Service), and 200 A
- Underground: 100 A, 200 A and 400 A

For a quote, contact Customer Service (see Section 1.5).

a. New Residential Infill

The Fee is based on:

- Shared Cost of transformation and secondary Buss (based on main switch size), *plus* Cost of 30 meters (100 feet) service wire (for 400 A Service or less) *less* Basic Credit.
- *Plus* additional Cost if exceeding 30 meters (100 feet) of service wire for 400 A Service or less.

Notes:

1. The Cost of installing a Service greater than 100 A and less than 200 A is the same as for 200 A.
2. As each Service is different, for simplification, the fees are based on an average burdened Cost of servicing for labour, vehicle time, equipment use, and material that includes revenue metering and a share of the Buss and transformer, plus Enhancement impact (distribution network including stations).
3. The Customer shall be responsible for the installation Cost of civil works from the meter base to the Supply Point, including the installation of the meter base.
4. The transformer may be shared with several Customers; the fee includes an averaged shared Cost, based on demand, for the supplied transformation.
5. The Cost of Infill Service in the “Downtown” is higher than in the suburban areas as they include the Cost for the distribution vault, the secondary Buss, and duct.

b. Upgraded Residential Services

When there is a request for a 120/240 V, 1-phase, 3-wire, residential Service Upgrade, it can fall under one of two conditions and charged as follows:

1. If the Service has not been connected and the subdivision is newer than the five years (determined from the date on the signed Installation Agreement) the Upgrade charge from 100 A to 200 A for a 120/240 V, 1-phase, 3-wire, shall be applied.
2. If the Service has been connected and an Upgrade is requested the Cost shall fall under Appendix G Fee Tables regardless of the signing of the Installation Agreement.

The existing meter and secondary conductor are removed by Hydro Ottawa, when possible, at no additional Cost to the Customer.

As the Basic Credit was already given when the Service was first installed, the Cost for an Upgrade is calculated as follows:

- If the Service capacity is increased (i.e., Service Size grows):
  - Shared Cost of transformation and secondary Buss (based on main switch size), *plus* Cost of 30 meters (100 feet) service wire (for 400 A Service or less) (as needed).
  - *Plus* additional Cost if exceeding 30 meters (100 feet) service wire for 400 A Service or less.
- If the Service capacity is not increased (i.e., no Service Size change):
  - Cost of Isolation/Re-energization at either meter (less costly); standpipe; or pad-mounted transformer.

Notes:

1. For underground installations, the Customer is responsible for the Cost of the civil infrastructure from the Supply Point to the meter base, installation of the meter base (if applicable).
2. For a 400 A Service, the fee includes an averaged shared Cost for the supplied transformation.

G-1.2 General and Commercial Service – Basic Connection Fees

The General and Commercial Service Sizes are referenced in Section 3.2.2 (Service Requirements). In all cases, the Customer supplies and installs the service conductor. The

applicable fees are for transformation, revenue metering and Connection of the Service by Hydro Ottawa. Reference should be made to Section 3.2 for further requirements.

For a quote, contact Customer Service (see Section 1.5).

Available Service Sizes, for permanent Services, are at 120/240 V, 1-phase, 3-wire Service as follows:

- Overhead: 100 A, and 200 A
- Underground: 100 A, 200 A and 400 A

a. New Commercial Infill

The fee is based on:

- shared Cost of transformation and secondary Buss (based on main switch size).

The Customer shall provide and install all electrical works and civil infrastructure for the Service from the Supply Point, plus the Connection Costs.

Notes:

1. Cost of installing a Service greater than 100 A and less than 200 A is the same as for 200 A.
2. As each Service is different, for simplification, the fees are based on an average burdened Cost of servicing for labour, vehicle time, equipment use, and material that includes revenue metering and, a share of the Buss, and transformer.
3. The Customer supplies all civil infrastructures from the Supply Point to the meter base, and installation of the meter base.
4. For underground infill and Upgrades, the Customer supplies the service conductor.
5. For a 120/240 V, 1-phase, 3-wire, 400 A Service, the fee includes an averaged shared Cost for the supplying transformer.
6. The transformer is shared with several Customers. A dedicated transformer is at an additional Cost.
7. Cost of Services in the “Downtown” is higher than in the suburban areas as they include the Cost for the vault, the secondary Buss, and duct.

b. Upgraded Commercial Services

Upgrade Commercial infill Cost is based on:

- If capacity increased (i.e., main switch grew)
  - Shared Cost of transformation and secondary Buss (based on main switch size)
- If capacity not increased (i.e., no main switch change)
  - Cost of Isolation/Re-energization at either the Meter Socket (less costly); standpipe or pad-mounted transformer; or relocated Service.

G-1.3 Special Services – 120 V/240 V Basic Connection Fees

In all cases, the Customer supplies and installs the service conductor. The applicable fees are for transformation, revenue metering and Connection of the Service by Hydro Ottawa.

For a quote, including situations not covered here, contact Customer Service (see Section 1.5).

a. Temporary Services

Reference should be made to Section 4 (Glossary) for the definition of "Temporary Service". The basic Temporary Service is 120/240 V, 1-phase, 3-wire up to 200 A, either overhead or underground supplied, that Lies Along where no transformation or secondary Buss Upgrade is needed. In this case, the Cost will be based on:

- connection and revenue metering installation Costs *plus* removal Cost.

The Customer shall provide and install the wire at their Cost to Hydro Ottawa's standards in order for Hydro Ottawa to make connections.

For non-basic temporary Secondary Services, which include 120/240 V, 1-phase, 3-wire, up to 400 A (either overhead or underground supplied), and 347/600 V, 3-phase, 4-wire, grounded wye connected, up to 200 A (overhead supplied) or up to 400 A (underground supplied) Services, the Cost shall be based on:

- Connection Cost *plus* transformer rental fee (half of the transformer Cost) *plus* all installation and removal work Costs on time and material.

The standard stock transformer fee is based on the five (5) year average rolling stock Cost for an average group of transformers within a similar transformation class. There is no charge for the transformer rental when the transformer is paid for and used as the permanent transformer with that Service connection project.

b. Unmetered Services

The fee is based on:

- Connection Costs *plus* Expansion Costs.

The Customer provides and installs all their materials including their wire. Any Expansion Cost is at the Customer's expense.

When more than one unmetered Service Connection can be made within close proximity of each other, and during the same service call, the Connection Costs shall be based on time and material.

Where Hydro Ottawa undertakes a planned Hydro Ottawa structure replacement/relocation (e.g., a pole or pad-mounted transformer), the unmetered Customer shall have a free Isolation/Re-energization to facilitate its transfer to the new structure.

G-1.4 Residential – Basic Meter Fees

When more than one meter is needed at a Premise in an existing gang meter base/ splitter trough or a meter centre and a meter technician is already on site (thus no additional travel time is needed), the fees described below shall apply.

The Service Sizes, for permanent Services, are as follows:

- 120/240 V, 1-phase, 3-wire: 100 A, 200 A, or 400 A;

The revenue metering fee is based on:

- Meter Installation Cost and does not include the meter.

Powerline Technicians may install meters onto secondary 1-phase Services up to 200 A and when instrumentation transformers are not needed as part of the revenue metering equipment. However, Meter Technicians are required to install meters onto Secondary Services of more than 200 A or onto Secondary Services that require instrumentation transformers as part of the revenue metering equipment.

See Section 2.3.7 for revenue metering installation Costs.

G-1.5 Minor Upgrades

To qualify as "minor" Upgrades, three conditions apply:

1. The current Conditions of Service have been met;
2. Hydro Ottawa does not need material to do the work; and
3. There is no impact on Hydro Ottawa's distribution network including stations.

Thus only a Service Isolation/Re-energization (see G-1.6, Isolation/Re-energization) and the associated fee is required. Typical examples of minor Upgrades are:

1. Change from a fuse panel to a breaker panel and Hydro Ottawa material or transformation was not required (sometimes requested by insurance companies);
2. Replacement of a damaged main switch with the equivalent ampacity rating;
3. Installation of a socket-mounted transfer switch enabling connection of a home backup generator;
4. Repair damaged stand pipe;
5. Rewire of a Premise without an increase in Service Size (therefore, Hydro Ottawa material or transformation are not needed, but, sometimes requested by insurance companies).

Additional Costs may apply if a crew is needed to work overtime for these minor Upgrades, or other job specific circumstances result in other recoverable fees.

G-1.6 Isolation/Re-energization

Three fees would apply for secondary supplied Services, in increasing order of Cost, each based on work done by regularly scheduled staff:

1. when a meter technician simply isolates/re-energizes the Service via the socket meter base only;
2. when a two person line crew isolates/re-energizes at the standpipe only, with or without material; and
3. when a two person line crew isolates/re-energizes at a pad-mounted device.

For primary Isolation/Re-energization fees, see Appendix G-3.1 (Primary Maintenance Shutdown Fees).

Where Hydro Ottawa undertakes the replacement of its pole or pad-mounted device, it will provide connecting utilities and public road authorities a free Isolation/Re-energization to assist with expediting the replacement.

If a secondary conductor is replaced for any reason, the cost shall be borne by the customer.

To encourage electrical safety, Hydro Ottawa shall give each Customer one electrical Service Isolation/Re-energization free-of-charge for doing non-electrical Maintenance (i.e., no Upgrades, or wire changes). Conditions are such that an Electrical Safety Authority permit is not required, and this applies to an existing electrical Service, during Regular Business Hours, once per Property per rolling year. Examples of non-electrical Maintenance include tree trimming, painting, siding, and brick pointing. Government emergency crews, while performing their duties, are exempt from the associated Isolation fees. The Property Owner requiring the outage requested by the government emergency crews shall pay any associated fees to re-energize including the Costs of any incremental outages.

G-2: Methodology for Standard Fees for Various 347/600 V Service Connections

G-2.1 Reserved

G-2.2 General and Commercial Service – Basic Connection Fees

In all cases, the Customer supplies and installs the Service conductor. These fees are for transformation and Connection of the Service by Hydro Ottawa. For revenue metering Costs, see G-2.4.

Available Service Sizes, for permanent Services, are at 347/600 V as follows:

- Overhead: 100 A or 200 A;
- Underground: 100 A, 200 A, or 400 A.

For dedicated 200 A and 400 A underground Services in the “Downtown”, additional fees shall apply for the vault, the secondary conductor and duct occupation.

Customers who wish to upgrade a Service, for a Premise that has more than a single supply voltage (i.e., a combination of 120/240 V, 120/208 V, or 347/600 V), shall consolidate their Service to a single supply voltage.

G-2.3 Special Services – 347V/600V Basic Connection Fees

In all cases, the Customer supplies and installs the service conductor. These fees are for transformation and Connection of the Service by Hydro Ottawa. For revenue metering Cost see G-2.4 (Commercial – Basic Meter Fees). For situations not covered by this table, contact Hydro Ottawa for an estimate.

a. Temporary Services

Reference should be made to Section 4 (Glossary) for the definition of "Temporary Service". In this case, the Cost shall be based on:

- Connection and revenue metering installation Costs plus removal Cost.

The Customer shall provide and install the wire at their Cost to Hydro Ottawa's standards for Hydro Ottawa to make connections.

For non-basic Temporary Services where transformation is needed or the Service Size is ≥400A, the Cost shall be based on:

- Connection Cost *plus* transformer rental fee (half of the transformer Cost) *plus* all installation and removal work Costs on time and material.

The standard stock transformer fee is based on the five year average rolling stock Cost for an average group of transformers within a similar transformation class. The transformer rental charge is waived when the Customer buys the transformer to Service the same development. There is no charge for the transformer rental when the transformer is paid for and used as the permanent transformer with that Service connection project.

b. Unmetered Services

Not available.

c. Isolation/Re-energization

See G-3.1 (Primary Maintenance Shutdown Fees) and G-3.2 (Vault Access Fees).

G-2.4 Commercial – Basic Meter Fees

Fees will be charged when extra meters are added to a gang meter base/ splitter trough of a meter centre by a meter technician already on site (thus no additional travel time needed).

The meter Services available are as follows:

- 120/240 V, kWh meter (30/60 A, 100 A, 200 A, or 400 A);
- 120/208 V, 2-phase, 3-wire network kWh meter (30/60 A, 100 A, or 200 A);
- 120/208 V, 3-phase, 4-wire, grounded wye configured, kWh meter (30/60 A, 100 A, 200 A, or 400 A – for Temporary Services only);
- 347/600 V, 3-phase, 4-wire, grounded wye configured, kWh meter (30/60 A, 100 A, 200 A, or 400 A – for Temporary Services only);

The revenue metering fee is based on:

- Meter Installation Cost including meter material.

Powerline Technicians may install meters onto secondary 1-phase Services up to 200 A and when instrumentation transformers are not needed as part of the revenue metering equipment. However, Meter Technicians are required to install meters onto secondary 1-phase Services of more than 200 A, or onto Secondary Services that require instrumentation transformers as part of the revenue metering equipment, or for all 3-phase Secondary Services.

See Section 2.3.7 for revenue metering installation Costs.

G-3: Methodology for Standard Fees for Miscellaneous Services

G-3.1 Primary Maintenance Shutdown Fees

Hydro Ottawa encourages its Property Owners to maintain their primary electrical equipment in good order with a regular inspection and Maintenance program.

Hydro Ottawa refers to a primary Maintenance shutdown as the electrical Isolation from Hydro Ottawa's Primary Voltage supply, so the Property Owner can maintain their electrical equipment. Indoor vault shutdown details and primary equipment Maintenance details can be found in Hydro Ottawa's procedure VIS0001. Typical primary, customer-owned enclosures and devices that Hydro Ottawa would isolate are vaults, unit substations, pad-mounted switching centres, pad-mounted transformers, and primary overhead lines.

A Property Owner can request a planned primary Maintenance shutdown Isolation and Re-energization as follows:

a. During Regular Business Hours with non-dedicated Hydro Ottawa Crew

Hydro Ottawa will attempt to be available for the scheduled Isolation and Re-energization service; however, crews may be called to address Distribution System reliability issues. Thus, a specific Isolation or Re-energization time is not guaranteed.

The fixed fee is based on a maximum of four (4) hours of labour, travel time, and vehicle and equipment Cost for Isolation or Re-energization.

b. Outside Regular Business Hours with non-dedicated Hydro Ottawa Resources

Hydro Ottawa will attempt to be available for the scheduled Isolation and Re-energization service; however, crews may be called to address Distribution System reliability issues. Thus, a specific time for Isolation or Re-energization service is not guaranteed.

The fixed fee is based on a maximum of four (4) hours reflected in the "During Regular Business Hours" except at overtime labour rates.

c. Dedicated Hydro Ottawa Crew

This service is offered at any time based on a minimum six (6) hour shutdown and provides for a guaranteed specific Isolation or Re-energization. Hydro Ottawa will ensure that dedicated resources are available and scheduled to meet the agreed scope and timelines of the shutdown with actual incurred Costs billed to the requesting Property Owner.

With permission from the Property owner, any other Customer or third-party requests for primary Isolation from Hydro Ottawa's Distribution System will be quoted on a case-by-case basis.

For further information, or to schedule services, contact Customer Service (see Section 1.5).

G-3.2 Vault Access Fees

Property Owners requiring vault access for the purposes of fire alarm testing, ventilation checks and testing, contractor supervision, customer inspections, or other non-electrical equipment related work, must contact Hydro Ottawa to schedule a visit.

A minimum of one week's lead time is required to schedule vault access, subject to availability.

Hydro Ottawa's charges for site visits for vault access that does not exceed two (2) hours duration are as follows:

a. During Regular Business Hours

b. A Property Owner is allowed one vault access at no charge, per location, per rolling twelve (12) months for the purpose of non-electrical work. The vault access must not exceed two (2) hours in duration. With permission from the Property Owner, any other Customer or third-party requests for primary Isolation from Hydro Ottawa's Distribution System will be quoted on a case-by-case basis.

c. Chargeable Vault Access During Regular Business Hours (2nd access)

   For subsequent vault access during a rolling twelve (12) month period a fixed fee is applicable. The vault access must not exceed two (2) hours in duration.

   Vault Access During Regular Business Hours (in excess of two (2) hours in duration)

d. Hydro Ottawa will prepare an estimate, in advance, for any site visits for vault access exceeding two (2) hours duration.

e. Outside Regular Business Hours (under two (2) hours in duration)

   Same conditions apply as "Chargeable Vault Access During Regular Business Hours (second access)" except the requesting Customer will be billed actual Costs at overtime labour rates.

f. Outside Regular Business Hours (in excess of two (2) hours in duration)

   Same conditions apply as "Vault Access During Regular Business Hours (in excess of two hours in duration)" except the requesting Customer will be billed actual Costs at overtime labour rates.

See Section 1.5 for Regular Business Hours, to schedule a field visit or to contact Hydro Ottawa's Vault Maintenance department

G-3.3 Unauthorized Energy Usage Fee

As per Section 2.2 of Hydro Ottawa's Conditions of Service, Hydro Ottawa reserves the right to isolate or Disconnect the supply of electricity to a Consumer or Customer for causes not limited to a safety concern, Energy Diversion, tampering, fraud or abuse on the part of the Consumer or Customer, or, when ordered by law.

In accordance with Sections 4.3.2 and 5.3.10 of the Distribution System Code, Hydro Ottawa will monitor and act upon instances of tampering of metering and Service entrance equipment. Notification of the appropriate entities, such as Measurement Canada, the Electrical Safety Authority, and/or police may also occur. The Customer shall be responsible for the Costs associated with the Isolation, servicing and Reconnection of electrical Service. Servicing may not proceed until all technical and financial conditions for Reconnection have been met. In the absence of the Customer, the Property owner shall be responsible to pay for the associated Costs with the Isolation, servicing and Reconnection of electrical Service, and unauthorized reconnections.

Technical conditions may include bringing non-standard Service equipment configurations up to Hydro Ottawa's current technical servicing standards, as noted in Appendix G-0. Further, the Property must be re-inspected by the Electrical Safety Authority (ESA) and an ESA Connection Authorization Certificate issued. The aforementioned requirements are at the Property owner's expense.

In accordance with Section 4.3.3 of the Distribution System Code, Hydro Ottawa may recover all reasonable Costs incurred as a result of unauthorized Energy use. The Costs incurred by Hydro Ottawa may vary; however, they are based on the applicable Costs of labour, transportation time, equipment, asset damage, visits to the Property, estimated energy used, and administration involved to safely restore power. Associated legal or court fees may be applied, separately, as the case may arise.

Hydro Ottawa will take all remedies available to mitigate unauthorized Energy usage; including collecting estimated Costs of unmetered consumption, as calculated by Hydro Ottawa.

G-3.4 Customer Technical Support

Hydro Ottawa does not charge for an initial consultation. The service provided is an initial discussion on the proposed project, the process involved, the existing Service and any apparent considerations for success of the project.

a. Connection Impact Assessments (CIA) fees are assessed per the Distribution System Code and based on the project type and size plus any Costs attributable to other participating organizations such as Hydro One Networks Inc., and the Independent Electricity System Operator.

b. Assessment fees are a fixed Cost with the intent of recovering Costs.

c. Project Connection fees are assessed on a Cost recovery basis through Appendix G or as quoted depending on the job complexity.

d. Fees for re-assignment of the supply contract or a Direction to Pay are a fixed Cost with the intent of recovering Costs.

e. General technical support by Hydro Ottawa to support the Customer after an initial consultation.

Revised Distributed Energy Resource and load applications and additional site visits shall be provided at an additional fee(s).

G-3.5 Civil and Cable Installation Support

If the Customer needs to install civil structures (e.g., underground ducts) and cables around/onto Hydro Ottawa's energized equipment for the Customer's electrical connection, Hydro Ottawa and its Approved Contractors will undertake this work for a fee. Assessment fees are at a fixed price with the intent of recovering Costs. Project Connection fees are assessed on a Cost recovery basis through Appendix G or as quoted, depending on the job complexity. The Customer shall be responsible for excavation permits and final surface reinstatement.

G-3.6 Construction/Maintenance Field Support

When the Customer requests that Hydro Ottawa assist the Customer and its agents with its construction, operating, or Maintenance commitments, Hydro Ottawa shall determine its availability of resources, resource competencies, the current state of its Distribution System, its current work plan and commitments, and its legislative obligations before it can

commit to assisting the Customer. Where Hydro Ottawa can assist the Customer with these activities, Hydro Ottawa may provide a fixed price estimate or a time and material estimate to support the Customer's request as work for others. Unless otherwise stated in a specific agreement, the warranty period with Hydro Ottawa's work shall be one year from the date of energization or the date that the installation is able to be used.

G-3.7 Cancellation or Site Not Ready for Hydro Ottawa Work

Where a Customer provides less than two (2) business days cancellation notice to Hydro Ottawa for scheduled work at the Customer's Property or the Customer's Property conditions are not ready when Hydro Ottawa or its contractor arrives at the Property to Hydro Ottawa's satisfaction, the Customer will pay for Hydro Ottawa's Costs.

G-3.8 Vegetation Management Support by Hydro Ottawa

When Hydro Ottawa or its contractor is working in the area clearing vegetation from its lines; the Customer may request that Hydro Ottawa provide vegetation removal support with its trees. If Hydro Ottawa accepts the request and has the additional capacity to provide this vegetation removal support, the Customer shall cover the Cost of the work undertaken by Hydro Ottawa.

G-3.9 Inspection and Testing Support

When the Customer requests that Hydro Ottawa assist the Customer and its agents with Testing and Inspection of medium voltage equipment such as switchgear, transformers, and substations, Hydro Ottawa shall determine its availability of resources, resource competencies, the current state of its Distribution System, its current work plan and commitments, and its legislative obligations before it can commit to assisting the Customer. Where Hydro Ottawa can assist the Customer with these activities, Hydro Ottawa may provide a fixed price estimate or a time and material estimate to support the Customer's request as work for others. Unless otherwise stated in a specific agreement, the warranty period with Hydro Ottawa's work shall be one (1) year from the date of energization or the date that the installation is able to be used.

G-3.10 Design Consultation Fee

If the customer is not prepared to initiate Design, however wishes to undertake design consultation, an hourly or fixed price engineering review consultation fee may apply.

Hydro Ottawa will prepare a quote based on the engineering service being requested and payment will need to be received from the customer prior to Hydro Ottawa completing the service.

APPENDIX H

Rate Schedule

For the latest approved Ontario Energy Board Rates, please refer to Hydro Ottawa's website at hydroottawa.com/rates.

APPENDIX I

Pre-amalgamation Ownership Demarcation Points between the Local Distribution Company and the Customer

This table applies where a specific ownership demarcation agreement does not exist with the Customer for the specific location.

Commercial							
Electrical Supply onto Customer's Property	**Notes Applicable to All**	**Former Local Distribution Company (LDC)**					
		Ottawa	**Gloucester**	**Nepean**	**Kanata**	**Goulbourn**	**Casselman**
		Utility Specific Notes					
Primary (> 750 V)							
Overhead	①③④⑦⑩❶❸	--	--	--	--	--	--
Overhead – Customer Owned Station	⑤⑦⑩❶❸	--	--	--	--	--	--
Underground – Vault	①②③⑩❸	+⑥	+⑨	+⓪⑦	+❷	+⑤⑦	+⑤⑦
Underground – Pad mount	①②③⑩❸	+⑥	+⑨	+⓪⑦	+❷	+⑤⑦	+⑤⑦
Underground – Customer Owned Station	②③⑩❸	+⑥	+⑨	+⑤⑦	+❷	+⑤⑦	+⑤⑦
Secondary (≤ 750V)							
Underground	①③⑦⑧⓿❸	--	--	--	--	--	--
Overhead	①③⑤⑦⓿❸	--	--	--	--	--	--

Residential							
Electrical Supply onto Customer's Property	**Notes Applicable to All**	**Former Local Distribution Company (LDC)**					
		Ottawa	**Gloucester**	**Nepean**	**Kanata**	**Goulbourn**	**Casselman**
		Utility Specific Notes					
Primary (> 750 V)							
Underground	①②❶❸	+⑥	+⑤	+⑤	+⑥	+⑤	+⑤
Overhead	❸						

Secondary (≤ 750 V)							
Underground	①②❶	+⑥	+③⑤⑦	+③⑤⑦	+⑥	+③⑤⑦	+③⑤⑦
Overhead	①③⑤⑦❶❸	--	--	--	--	--	--

Appendix I – Notes:

⓪ The Local Distribution Company (LDC) owned all primary electrical equipment on Customer Property.

① Normally, the LDC owned the transformer and meters within the Customer's ownership demarcation unless otherwise noted on file.

② The Customer owned all non-standard LDC wires (both residential and Commercial), to the Supply Point.

③ If the LDC supplied other Customers from a Customer's Property, the LDC required an easement unless there was a Common Element agreement between Customers.

④ The Customer owned up to the overhead primary fuse/cut-out on/or closest to the public Road Allowance / easement.

⑤ The LDC owned the electrical conductors on the Customer's Property for: (i) underground Services, up to the Connection to the line side of the first electrical device/connection, or (ii) overheads Services, up to the first contact point with the building/pole where the Customer owns and is responsible for the Support Structures on their building/pole.

⑥ The Customer owned all equipment within the Property line/outside the easement including all civil Support Structures and grounding equipment but excluding Items ① and ②. If a fault occurs on the supply cable, the Customer's repair/replacement Costs (or in-kind funding) are shared with the LDC proportional to the amount of cable inside versus outside of the Customer's Property.

⑦ The Customer owned all civil Support Structures and grounding equipment on the Customer's Property. The LDC owned the Support Structures within the public Road Allowance and on easements.

⑧ The Customer owned the electrical conductors up to the LDC Supply Point Connection (e.g., a pole, pad-mounted transformer, underground Cable Chamber).

⑨ The LDC owned underground ducts and all primary electrical equipment on the Customer's Property. The Customer owned the vault civil structure, grounding equipment, lighting,

ventilation, and secondary conductors.

⑩ The Customer owned all 44 kV electrical equipment and civil Support Structures up to the LDC Supply Point (e.g., a pole, underground Cable Chamber) including transformers.

⓿ Excludes electrical supplies to other utilities' equipment; similar to Item ⑧.

❶ Excludes trailer parks.

❷ The Customer owned all equipment within the Property line and outside the easement(s) including all civil Support Structures, grounding equipment, and transformers > 750 kVA but excluding Items ① and ②. The LDC owned the underground primary electrical conductors on the Customer's Property for the underground Service(s) from the Supply Point to the line side of the first electrical device/connection.

❸ Although the LDC encouraged regular Maintenance, it was the Customer's responsibility to establish a Maintenance program for its electrical equipment and facilities with its Maintenance Agent.

Attached Drawings

The most current versions of drawings ECGS0001, ECS0002, ECGS0003, ECGS0004, ECG0005, ECS0006 and ECG0009 are found on Hydro Ottawa's website at hydroottawa.com (Commercial Design Specifications or Residential Design Specifications).