

HYDRO OTTAWA

**Conditions of Service
Version 7 (April 2019)**

APPENDIX G

Methodology for Standard Fees for Various Services

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 in all overhead areas.
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 for secondary Infill and Upgrade Service per Property, per year. Additional Customer Layouts within that calendar year shall have an additional layout fee, per request. If the Property ownership changed during that year, 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.
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.

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 120/204 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 400A Service or less) *less* Basic Credit.
- *Plus* additional Cost if exceeding 30 meters (100 feet) of service wire for 400A Service or less.

Notes:

1. The Cost of installing a Service less than 200A is the same as for 200A.
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 400A 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 less than 200A is the same as for 200A.
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, 400A 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

Reference should be made to Section 4 (Glossary) for the definition of "Upgrade." In every case, the existing meter is removed by Hydro Ottawa when possible, at no fee or credit to the Customer. In cases where the existing Service can be re-used without change, consider them as being under the "free Isolation/Re-energization once a year" practice.

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. Repair damaged stand pipe;
4. 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 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 $\geq 400A$, 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 200A 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. For further information, or, to schedule a field visit, contact Hydro Ottawa's Vault Maintenance department (see Section 1.5).

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 Energy Resource Facility 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 re-instatement.

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 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 fund this work undertaken by Hydro Ottawa.

G-3.9 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.