

Customer Guidelines for New or Upgraded Services

(3Ø 200-amps or greater and 1Ø greater than 200-amps)

Thunder Bay Hydro will connect (reconnect) a new or upgraded service once the following steps 12 have been completed:

1. As a first step, we strongly recommend you **read the Thunder Bay Hydro Conditions of Service**, which is available online at www.tbhydro.com. Print copies are also available at our Power Systems building, located at 37 Front Street.
2. Set up an **appointment with a Distribution Designer** to discuss the requirements of your new or upgraded electrical service and where it should be located. Call our Engineering Services Department at 343-1168 to make arrangements.
3. The Designer will require you to provide the information listed on the **Service Information Sheet** (formerly the Transformer Information Sheet). Information required will include, but not be limited to:
 - Dimensioned project layout drawings showing electrical installations. Transformer foundation installation to be shown as per TBH Standard 37-371. Duct runs to be shown using 4" type DB2 PVC at 40" depth with 6" sand bed above and below. Marker tape to be shown 1' down from grade. Pull rope to be in duct.
 - All service and load data
 - Shop drawings for the service entrance and metering equipment, which must comply with TBH Standard 25U-160, 25U-162, 25U-164, or 25U-166. All service entrance and metering equipment must meet Thunder Bay Hydro's Engineering Standards (available from the Designer). Please note that all service entrance equipment (except the main breaker, which must be sealable) up to and including the meter cabinet must have hinged and lockable doors. Meters shall be mounted to be centered 5' 6" above the floor. Meter sockets must be approved by the Designer prior to installation.
 - Grounding design (ground resistance to be 8 ohms maximum)
 - The quantity of meters required for the service

Note: Any installation that is forecasted by Thunder Bay Hydro Engineering Services to have a monthly average peak demand over 500kW, during a calendar year, shall be required to have interval metering installed at the applicant's cost.

Once you have provided all information deemed necessary by the Designer, we will proceed with reviewing your electrical service.

4. After reviewing all your information and finding the details acceptable, the Designer will complete a Thunder Bay Hydro Estimate to Connect Overhead & Underground Distribution form or a Thunder Bay Hydro Estimate to Connect Commercial Customers & Customers Over 200 Amp form. This document will include the estimated cost of the labour and materials supplied by TBH to install/upgrade the service. The Estimate to Connect can be directed to the property owner or an authorized representative for the property owner.

This Estimate to Connect must be paid in full before Thunder Bay Hydro can proceed with any work. Once the work is completed, a true-up will be completed and the customer will be billed for actual costs.

Thunder Bay Hydro Customer Guidelines

New or Upgraded Service over 200-amps continued

After the Estimate to Connect is issued:

- We will officially communicate only with the person named on the Estimate to Connect. Unofficial communication may take place with others, but any directives required either way will be between the person named on the Estimate to Connect and the Designer.
- The person named on the Estimate to Connect will receive an invoice from our Finance Division within one week, detailing the costs to have TBH complete the required work to connect/reconnect the new or upgraded service.

5. The **interim invoice**, based on the Estimate to Connect, **will need to be paid in full** before Thunder Bay Hydro can proceed with any work on the electrical service. Payment can be made two ways:
 - by forwarding a cheque or money order to our Accounting Department, 34 N. Cumberland Street, P7A 4L4, or
 - by VISA credit card **in person*** at our Accounting Department, on the 8th floor of 34 N. Cumberland Street (between 8 am to noon or 1 pm to 4 pm weekdays).
** no telephone credit card payments will be accepted.*
6. If, after the Estimate to Connect is issued, you require changes to the work to be done by TBH, the actual costs to revise the drawings will be charged to the customer and will be reflected in the true-up when the work is completed.
7. Either you or the contractor doing the electrical work must contact **the Electrical Safety Authority (ESA)** at 1-877-372-7233 to obtain an electrical permit.
8. Three preliminary inspections and one final inspection must be performed by TBH. These are separate from the ESA inspection, which is also required. It is recommended that you request the Thunder Bay Hydro preliminary and final inspections before the ESA inspection to avoid having to request ESA re-inspection should TBH require modifications.

The first TBH preliminary inspection is required after the gravel bed is prepared for the transformer foundation. The second TBH preliminary inspection is required after the transformer foundation and ducts are installed in accordance with TBH Standard 37-371. The third TBH preliminary inspection is required after the ground grid is installed. TBH will then measure the ground resistance.
9. The cost of one ground resistance reading test is included in the amount quoted on the Estimate to Connect. If ground resistance testing results in readings over the maximum 8 ohms, actual costs for each additional test required until the readings are at or below 8 ohms will be added to the cost of the job and will be reflected when the true-up of costs has been completed.
10. When the contractor has completed the electrical service you or your authorized representative must notify the Designer the electrical service is available for **TBH final inspection**. **Both TBH and ESA inspections need to be completed satisfactorily and payment must be received in full before we will be able to connect/reconnect the new or upgraded service.**

Note that the cost for additional inspections by the Designer or any additional work that is required by TBH staff will be added to the cost of the job and reflected in the true-up.
11. **If this is a new service**, you will **need to set up an account at our Customer Accounts Department**, located on the main floor at 34 N. Cumberland Street. Call 343-1131 for more information.
12. When the electrical work is complete and has been approved by TBH, **contact the ESA to arrange for an inspection**.

When the ESA Inspector's authorization is received, our Customer Accounts Department will prepare a service connection order for each meter. These orders are forwarded to our Engineering Services Department. Once Thunder Bay Hydro has completed the necessary line work and the TBH inspection has been completed and approved, the new or upgraded service will be connected within 10 working days.