



Frequently Asked Questions

Primary Metered Electrical Service

What does primary metered service mean?

A primary metered electrical service means the customer is metered at the primary voltage level of their incoming power supply and the customer owns primary voltage electric distribution equipment downstream of the demarcation (i.e. metering) point.

Equipment owned by primary metered customers typically consists of medium voltage switchgear, cables and transformers (which may be rentals) operating at either 13.2 kV or 25 kV. Sometimes, this equipment can also include poles, anchors and overhead conductor.

Along with ownership of medium voltage electric distribution equipment comes prescribed responsibilities outlined and governed by both the Canadian Electrical Code (CEC) and the Alberta Electrical Utility Code (AEUC) that must be adhered to.

Am I eligible for primary metered service?

Primary metered electrical service is used to supply customers having high electrical demand, typically greater than 2 MVA. High electrical demand may require transformer sizes that ENMAX Power does not have available and as such, must be procured, owned, operated and maintained by the customer. Please contact getconnected@enmax.com to discuss your service requirements and eligibility for a primary metered service.

What roles and responsibilities do I have as a primary metered customer?

In general, you are responsible for the maintenance and operation of your medium voltage electrical equipment in accordance with the applicable electrical codes (i.e. Canadian Electrical Code Part 1 and 3, Alberta Electrical Utility Code) and all occupational health and safety legislation, including in particular Part 17 and Part 40 of the Occupational Health and Safety Code.

Please note, that those personnel who perform maintenance testing/activities and operate medium voltage equipment require certain qualifications to perform the work. These qualifications are outlined in the applicable Codes, Acts and Regulations.

A detailed description of your role and responsibilities as a primary metered customer is outlined in your Primary Metered Service Agreement with ENMAX Power.

How do I know if I own transformers or rent them?

Rental transformers will typically have an equipment tag labeled 'Rental' or sometimes the equipment tag will include the letter 'R'. Iconic Power Systems is responsible for the transformer rental program for primary metered customers.

If clarification is needed regarding rental vs. customer owned transformers, please contact partnerconnect@enmax.com or Iconic Power Systems at txrentals@iconicpowersystems.com.

I am experiencing a power outage - who should I call?

Please contact ENMAX Power to report the outage at (403) 514-6100 (ENMAX Control Center) or via ENMAX Power's website at <https://outages.enmax.com/portal/reportoutage.aspx>

ENMAX Power will assess the outage situation and determine if the issue is with ENMAX Power's electrical supply. Should we determine that the issue is not related to ENMAX Power's equipment we will advise the customer accordingly.

Note that primary metered customers either own or rent their transformer(s). If the outage is related to the transformer, please proceed as follows:

- For customers who own transformer(s) please refer to **"Who is authorized to perform work on primary metered equipment?"** section below.
- For customers who rent transformer(s) please contact Iconic Power Systems @ (403) 650-1160. Iconic will assess and work with the customer accordingly to resolve any issues.

If the outage is related to other customer owned medium voltage equipment (either CEC Part 1 or AEUC Part 3), please refer to **"Who is authorized to perform work on primary metered equipment?"** section below.

For outages related to customer owned low voltage equipment (i.e. building service entrance equipment), please contact your site electrician.

It is important to note that the customer is responsible for all repair costs if the issue is with customer owned equipment.

Where is the demarcation point between ENMAX Power and the customer?

The demarcation point between the ENMAX Power electrical distribution system and the customer's electrical distribution facilities can vary from site to site depending on the age and type of installation. The typical demarcation point is at the customer's metering point in the system, however some older sites may differ. The defined demarcation point is identified in your Primary Metered Service Agreement. If clarification is needed regarding demarcation points, please contact partnerconnect@enmax.com.

Why is primary metered service beneficial for customers?

Primary metered services allow the customer to specify and design an electrical supply that meets their large load requirements and can provide for additional reliability to their site if required. Primary metered customers fall under the distribution tariff rate structure (D410) that provides for reduced monthly electrical costs, as compared to secondary metered customers. These reduced monthly costs offset the additional cost the customer is responsible for in procuring, operating and maintaining the customer owned medium voltage equipment.

If I am performing maintenance on my medium voltage electrical equipment, do I need to inform ENMAX Power?

Depending on the type of maintenance being performed, you may require the incoming ENMAX Power supply to the site to be disconnected to ensure any inspection or maintenance work being performed is done safely. ENMAX Power must perform this temporary disconnect/reconnect for you, for which you will be charged a fee. Please request temporary disconnect/reconnects via our website [here](#).

Please note, if you are a part of the Transformer Rental Program, any inspection, repair or maintenance on the rental transformer(s) is to be done by Iconic Power Systems. Please contact txrentals@iconicpowersystems.com for any inspection/maintenance inquiries.

I am planning on making changes to my site (reconfiguration, expansion etc.) downstream of the demarcation point (i.e. meter). Do I need to contact ENMAX Power?

In short, yes. While there may not be a requirement to work with ENMAX Power in the design and construction of your project, it is always important to confirm project scope, available capacity, and responsibilities with ENMAX Power. For work being performed on AEUC Part 3 infrastructure, ENMAX Power will review the project drawings associated with the proposed work and discuss any inspection or switching requirements. Please contact getconnected@enmax.com to discuss any planned changes and submission of plans.

Who is authorized to perform work on primary metered equipment?

All work being performed on customer owned medium voltage switchgear, transformers and associated medium voltage cable that is deemed CEC Part 1, must be done by qualified/trained/competent electrical engineering consultants (e.g. REV Engineering, Schneider Electric, PCA Valance, Ener-Phase Solutions, Pace Technologies, Magna IV Engineering, etc.) who are knowledgeable and trained on medium voltage installations.

As work on CEC Part 1 equipment falls outside of ENMAX Power's jurisdiction, any changes or additions must be inspected and approved by the City of Calgary Electrical Inspection department. ENMAX Power will **not** energize any customer owned equipment that has not been inspected and showing a current affixed green approval label.

All work (i.e. repairs/alterations/additions) on customer owned medium voltage infrastructure that is deemed AEUC Part 3 infrastructure (i.e. overhead powerlines, transformers, switchgear, cables, terminations, pullboxes, etc.) is to be done by one of the four (4) pre-qualified ENMAX Power Design Build Companies authorized to perform this work:

Iconic Power Systems

General Request:

engineering@iconicpowersystems.ca

(403) 910-3823

Power Engineers

General Request:

infocanada@powereng.com

(403) 948-3620 X 103

Primary Engineering and Construction

General Request:

info@primaryeng.com

(403) 873-0400 X 308

Site Power Engineering Consultants

General Request:

info@sitepower.ca

(403) 689-6431

In conjunction with your chosen Design Build Company, ENMAX Power will review the proposed design/changes prior to construction to ensure they meet utility standards for construction/materials and future maintenance/operability. ENMAX Power will be involved in any switching required and the inspection of projects involving alterations/additions to customer owned infrastructure that is deemed AEUC Part 3. Upon completion of the project, ENMAX Power must receive a copy of the customer as-built drawings to update our records.

How do inspections of our primary metered equipment occur?

As part of the roles and responsibilities that are associated with being a primary metered customer, the customer should be performing inspections and maintenance on their primary metered equipment using qualified contractors/personnel at regular intervals. Depending on such things as physical environment (e.g. indoor vs. outdoor, contaminated areas, etc), age of equipment and degree of operational reliability required, inspections should be performed anywhere from annually to a 3 - 5 year cycle.

Inspections on customer owned CEC Part 1 infrastructure may be performed by one of the qualified/trained/competent electrical engineering consultants (as noted above) who are knowledgeable and trained on medium voltage installations.

Inspections on customer owned AEUC Part 3 infrastructure may be requested of ENMAX Power through a Minor Service Order (MSO) that has been created for this purpose. Please complete an email request for the Minor Service Order through mso@enmax.com. Additional information will be requested as needed and a work order for the inspection to be completed will be issued to the field crews performing the work. An invoice will be issued upon completion.

Who should I contact if I have any questions about my existing or new primary metered service?

Please contact partnerconnect@enmax.com.