

REQUIREMENTS FOR HIGH VOLTAGE METERING

Approvals:

- All Meters/Instrument Transformers/Wiring will meet Measurement Canada Standards.
- Drawings of the proposed high voltage switch gear must be provided to the Customer Connections Metering Department and must show the metering cell(s) and is to be approved by Horizon Utilities Corp prior to manufacture.
- Final single line diagram must be approved by Horizon prior to purchasing.
- All equipment must be CSA approved.
- An ESA Authorization for Connection must be provided for the metering before the service will be energized.

Single Line Diagram:

- Single line diagram must be submitted to Customer Connections.

IT Cell

- This service will require an Instrument Transformer (IT) cell for each for each metering point.
- Located in High Voltage switchgear
- For the sole purpose of Horizon Instrument Transformers
- Designed for energized primary voltage
- Configured for 3 Element metering, including 3 CTs and 3 PTs connected in a star configuration with common point connected to the Primary Neutral.
- ITs to be installed and primary connections are to be made at switchgear manufacturer.
- Horizon ITs will purchase and ship ITs directly to switchgear manufacturer.
- Current transformers and their secondary terminals are to be readily accessible (without dismantling bus work), from the front or back of the cell via a hinged door.
- Any access doors to the metering cell and equipment shall include provision for sealing and padlocking by Horizon Utilities Corp.
- Potential transformer drawers are not permitted.
- Grounding Balls – one for each phase and one ground on line side of each phase.

Meter Cabinet

- Remote meter cabinet to be located inside same room as the IT Cell.
- Horizon must have unrestricted access to meter cabinet location.
- The centre of the cabinet to be mounted 5 feet from floor grade
- Must be padlockable.
- Min size: 36" x 36". (15x24x9 Hydrel 74820585 may be used upon approval)
- Removable back plate.
- Dedicated 120Volt 15A receptacle located inside cabinet.
- To be grounded by customer as per ESA grounding rules.
- Meter cabinet specifications must be approved prior to purchasing.

Meter and Wiring

- Horizon to supply and install meter and associate wiring from meter to Its unless where it is pre-wired by the switchgear manufacturer and wiring meets Measurement Canada wiring standards and colour coding and must correspond to the primary phasing. ABC rotation.
- The customer is required to install one 1" (250mm) conduit from EACH metering cell to the meter enclosure.
- The customer is required to install one 1" (250mm) conduit to the meter enclosure for a dedicated phone line.
- The customer will provide and maintain a dedicated analog phone line to the meter enclosure.
- Metering circuits for exclusive use of Horizon revenue metering.
- Standard meter does not include any customer accessible options.
- Customer accessible options will be considered as requested by customer.