

Requirements for Primary Service Voltage Revenue Metering (4 kV to 35 kV)



July 2026

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1 Definitions

Term	Definition
BCEC	The British Columbia Electrical Code is CSA C22.1 <i>Canadian Electrical Code, Part I</i> adopted for British Columbia and endorsed by Technical Safety BC
Instrument transformer	A high accuracy voltage transformer (VT) or current transformer (CT) that transforms the metered circuit voltage and current to lower levels for connection to an instrument transformer-type meter. Metering VTs and CTs secondaries are 120 V and 5 A respectively.
Instrument transformer metering	A metering installation where the meter is connected to the metered circuit conductors via instrument transformers
Approved certification marks for electrical products	See TSBC Information Bulletin B-E3 071019 3 R13 - Approved Certification Marks for Electrical Products.
Transformer-type meter socket	A customer-supplied meter socket that comes with a test switch compartment in various jaw configurations required to install a BC Hydro-supplied test switch and meter for instrument transformer metering. The meter socket is referred to as the meter mounting device in the BCEC.
Premises	A building, a separate unit of a building, a dwelling, or machinery, together with the surrounding land

2 Interpretation

This document contains the requirements for BC Hydro distribution system primary service voltage class revenue metering. The meter records the power delivered by BC Hydro to the customer.

Responsibilities are for load-only applications, where the customer only purchases power from BC Hydro.

Table 1 – Possible primary service voltages

BC Hydro power system	BC Hydro primary service voltage class (kV)	Nominal voltage (V)		CSA equipment voltage class (kV)
Distribution system	35 (note 1)	19,920/34,500Y	3 phase, 4 wire	35
	25	14,400/24,940Y	3 phase, 4 wire	27.5
	12	7200/12,470Y	3 phase, 4 wire	15
	4	2400/4160Y	3 phase, 4 wire	5
	35 (note 1)	19,920	1 phase, 2 wire	35
	25	14,400	1 phase, 2 wire	27.5
	12	7200	1 phase, 2 wire	15
	4	2400	1 phase, 2 wire	5

Note 1 - Restricted to a limited number of rural circuits in the Central Interior.

New additions and changes from the previous version of this document are denoted with a vertical line to the left of the new or changed content.

This document is not intended as a customer design specification or instruction manual and shall not be used by the customer for those purposes. Persons using information included in this document do so at no risk to BC Hydro, and they rely solely upon themselves to ensure their use of all or any part of this document is appropriate in the particular circumstances.

The customer and their employees and agents recognize they are, at all times, solely responsible for the plant design, construction, and operation. Neither BC Hydro nor any of their employees or agents shall be nor become the agents of the customer in any manner howsoever arising.

BC Hydro's review of the specifications and detailed plans shall not be construed as confirming or endorsing the design or as warranting the safety, durability, or reliability of the customer's facilities. BC Hydro, by reason of such review or lack of review, shall be responsible for neither the strength, adequacy of design, or capacity of equipment built pursuant to such specifications, nor shall BC Hydro or any of their employees or agents be responsible for any injury to the public or workers resulting from the failure of the customer facilities.

In general, the advice by BC Hydro and any of its employees or agents, that the customer's plant design or equipment meets certain limited requirements of BC Hydro does not mean, expressly or by implication, that all or any of the requirements of the law or other good engineering practices have been met by the customer in its plant, and such judgement shall not be construed by the customer or others as an endorsement of the design or as a warranty, by BC Hydro or any of its employees.

The information contained in this document is subject to change and may be revised at any time. Any user of this document is advised to confirm the current version and consult with BC Hydro on the applicability of its provisions. Without limit, BC Hydro may refuse service and energization of the metering installation if, in its view, the customer's facilities, including the service entrance and metering equipment, are unsafe, hazardous, or otherwise do not comply with the requirements set out in this document.

3 Metering Equipment

3.1 Approval

The proposed primary revenue metering equipment locations shall be accepted by BC Hydro prior to installation and commissioning.

3.2 Location

Revenue metering equipment shall:

- a. Be installed in a clean readily accessible location free from severe or continual vibration;
- b. Be installed in accordance with the latest edition of the Canadian Electrical Code;
- c. Not be installed in locations which may be hazardous to persons installing, testing, or maintaining the equipment; and
- d. Be protected from damage due to vandalism, vehicles, and the like.

A minimum working space of 1 m shall be provided and maintained around revenue metering equipment per Canadian Electrical Code section 2.

3.3 Access

BC Hydro shall have reasonable access to the revenue metering equipment to permit its installation, testing, and maintenance.

For an indoor meter socket:

- a. Accessibility arrangements shall be agreed upon by BC Hydro prior to approval of the proposed location; and
- b. Rooms containing a meter socket shall be accessible by a door leading directly to the exterior of the building where practicable; and
- c. Keys shall be provided to BC Hydro where the meter socket is not accessible due to locked doors or alarm systems.

3.4 Illumination

A meter socket installed indoors shall be in a location with a minimum illumination of:

- a. 100 to 200 lux horizontal at 750 mm (2'6") above grade; and
- b. 100 lux vertical at the front face of the meter socket.

Lighting in rooms containing indoor metering equipment shall be controlled by a wall switch at the room entrance.

4 Point of Metering

4.1 Load Only

The point-of-metering (POM) for load-only customers shall be on the power transformer secondary side. The POM may be on the power transformer primary side under the following or other special circumstances, subject to BC Hydro approval:

- a. Multiple power transformer installation;
- b. Customer-owned primary voltage powerline; or
- c. Non-standard power transformer secondary voltage.

Where the POM is on the power transformer primary side, the revenue metering installation shall be in accordance with the requirements of this document.

Where the POM is on the power transformer secondary side, the revenue metering installation shall be in accordance with the BC Hydro document *Requirements for Secondary Voltage Revenue Metering (750 V and Less)*.

Where two or more POMs are required, the revenue metering installation shall be in accordance with the BC Hydro document *Requirements for Complex Revenue Metering*.

The BC Hydro 12XX tariffs include an allowance for power transformer losses.

4.2 Generation

The POM for generation applications shall be determined for the specific situation.

Where the POM is on the power transformer primary side, the revenue metering installation shall be in accordance with the BC Hydro document *Requirements for Complex Revenue Metering*.

Where the POM is on the power transformer secondary side, the revenue metering installation shall be in accordance with the BC Hydro document *Requirements for Secondary Metering Installations (750 V and Less)*.

5 Voltage Transformers (VT) and Current Transformers (CT)

5.1 General Requirements

Instrument transformers shall be installed at the POM in accordance with the requirements of this section 5.

References to phase A, B, and C are arbitrary since revenue metering is insensitive to phase rotation direction, and do not necessarily comply with other designations in the customer facility. If not explicitly identified, the convention of phase A, B, and C from left to right or from top to bottom is assumed.

5.1.1 Primary Winding

The VT H1 polarity primary windings shall be connected to the phases on the BC Hydro side of the CTs. The VT H2 primary windings shall be connected to the BC Hydro isolated neutral bus in the revenue metering cubicle with a removable bonding jumper to the ground bus. The CT H1 polarity marks shall be towards BC Hydro.

The VT or CT shall not be used to support the primary winding connections or bus. The primary winding connections shall:

- a. Not subject the VT and CT bushings to strain; and
- b. Facilitate the easy replacement of the VT, CT, and associated equipment.

5.1.2 Lightning Arrestors

VTs and CTs where exposed to lightning shall be located within a lightning arrestor zone of protection, refer to Requirements for Customer-Owned Primary Services Supplied at 4 kV to 35 kV.

5.2 Outdoor Metering Kit

Metering kits are prefabricated assemblies with CTs, VTs, JB's and other related equipment mounted on a pole.

See BC Hydro distribution standard ES43 J7-01 and J7-02 (Primary Revenue Metering) and Requirements for Customer-Owned Primary Services Supplied at 4 kV to 35 kV.

The meter cabinet for pole mounted applications shall be:

- a. Secured to the pole using the manufacturer's purpose-built pole mounting bracket; and
- b. Located on the side of the pole not subject to vehicle damage. If this is not practicable, protection posts shall be installed 600 mm in front of the meter. For illustration, refer to Section "Individual Pole-Mounted Meter Socket" from the Requirements for Secondary Voltage Revenue Metering (750 V and Less).

5.3 Individual Indoor CT and VT

Individual indoor VTs and CTs in switchgear shall be installed in accordance with this section and shall comply with the applicable CSA standards and Requirements for Customer-Owned Primary Services Supplied at 4 kV to 35 kV.

5.3.1 Instrument Transformer Compartment

VTs and CTs shall be installed in a switchgear instrument transformer compartment. The instrument transformer compartment shall:

- a. Not be used as a splitter;
- b. Not contain devices and connections other than the BC Hydro revenue metering equipment;
- c. Not require access through other compartments; and

- d. Be permanently labelled “BC Hydro Metering”.

It is acceptable to provide openings of sufficient size to maintain the required phase bus clearances through the sides of the instrument transformer compartment. There is no requirement to completely barrier these openings with insulating material up to or contacting the phase buses.

VT and CT secondary winding wiring routed through other switchgear compartments shall be installed in a continuous conduit without access fittings within the switchgear.

5.3.2 Instrument Transformer Compartment Doors

A front hinged instrument transformer compartment door is required when the phase buses are side-by-side when viewed through the open front instrument transformer compartment door, and all VT and CT primary winding and secondary winding connections are readily accessible. See Figure 2.

Both a front and rear hinged instrument transformer compartment door are required when the phase buses are one behind the other when viewed through an open instrument transformer compartment door. See Figure 3.

No means of access shall be provided other than through the hinged instrument transformer compartment doors. Each door shall have provision for locking with an 8 mm (5/16”) shank padlock.

5.3.3 Interlocks

Instrument transformer compartment doors shall be key interlocked with the service main.

Key interlocks are required on both doors where there is both a front and a rear door. A latching mechanism that can only be released from within the switchgear instrument transformer compartment, in lieu of a second key interlock, is not acceptable. The interlock scheme shall be designed so both doors can be open at the same time.

5.3.3.1 Load-Only Applications

Instrument transformer compartment doors shall be key interlocked with a BC Hydro (line) side disconnect device.

For load-only applications where there is not a likely potential for power backfeed, the key interlock shall prevent opening the instrument transformer compartment doors unless the disconnect device is visibly open.

For load-only applications where there is a likely potential for power backfeed Instrument transformer compartment doors shall be key interlocked with a BC Hydro (line) side disconnect device and a customer (load) side disconnect device. The key interlocks shall prevent opening instrument transformer compartment doors unless all disconnect devices are visibly open.

Examples of the potential for power backfeed include situations where:

- a. There are multiple POMs on the customer side of multiple power transformers and the power transformer secondary windings may be paralleled (by special permission from BC Hydro); or
- b. The customer has a power generator that may be synchronized with BC Hydro.

There is no potential for power backfeed where the customer has a generator connected via a BC Hydro-approved transfer switch. Only a BC Hydro (line) side disconnect is required.

Prior to energization, the customer shall:

- a. Completely install and test the key interlock system;
- b. Remove and secure any spare keys; and
- c. Demonstrate the complete operation of the key interlock system to the BC Hydro field meter technician.

Problems arise more frequently when the customer obtains the key interlock system from one vendor and is required to mount components on equipment supplied by another vendor. All this work must be complete and functional.

5.3.4 Neutral Bus

A neutral bus shall be installed in the instrument transformer compartment. It shall be a rigid bus not less than 25 mm x 6 mm (1" x ¼") supported on 600 V rated insulators. The bus shall have a connection provision to the Ground bus with removable bonding jumper.

5.3.5 Ground Bus

The switchgear ground bus shall:

- a. Be extended to the instrument transformer compartment; and
- b. Have provision for terminating the BC Hydro installed meter socket conduit bonding conductor with either a:
 - i. 10-32 screw and washer; or
 - ii. Mechanical connector suitable for a #12 to #8 AWG conductor.

5.3.6 Working Ground Points

Grounding for 4-wire 3-element revenue metering applications shall be provided at the following locations within the instrument transformer compartment per BC Hydro work methods for high-voltage equipment:

- a. On each side of the phase A CT;
- b. On each side of the phase B CT;
- c. On each side of the phase C CT; and
- d. On the ground bus, i.e. a total of seven ground studs.

Each ground stud shall be positioned for unobstructed application of a ground clamp using a hot stick. Where there are two doors, all working ground points shall be accessible from each door.

The ground bus stud shall be located immediately behind the instrument transformer compartment door.

Where there is both a front and a rear instrument compartment door, a single ground bus stud may be located immediately behind the same door as the other ground studs.

5.3.7 Instrument transformers

5.3.7.1 Installation

The VTs and CTs should preferably be installed, and the primary winding connections made, at the switchgear manufacturer's factory. This work may also be done by the customer in the field. Regardless of where the work is done, the customer is solely responsible for ensuring the installation is in accordance with switchgear manufacturer and inspection authority requirements.

5.3.7.2 Electrical Clearances

Minimum electrical clearances shall be in accordance with the published switchgear manufacturer requirements as switchgear certification and electrical performance is based on maintaining the published clearances. The following clearances are typical:

- a. 150 mm (6") for 12 kV class phase-to-phase;
- b. 125 mm (5") for 12 kV class phase-to-ground; and
- c. 230 mm (9") for 25 kV class phase-to-phase and phase-to-ground.

The minimum typical clearances between the VT or CT body and adjacent VT or CT bodies and ground shall be maintained.

5.3.7.3 Accessibility

The VT and CT primary and secondary winding terminals shall remain accessible and the nameplates visible. The installation shall facilitate the easy replacement of VTs, VT fuses, and CTs.

VT secondary winding terminals when phase buses are one behind the other typically face the side of the instrument transformer compartment. 300 mm (12") clearance should be maintained between the side of the instrument transformer compartment and the VT secondary winding terminals.

5.3.7.4 VT Installation and Connections

VT primary winding fuses shall be in the horizontal position.

The VT shall be a minimum of 150mm (6") above the bottom of the enclosure.

VT H1 primary winding conductors shall be:

- a. Sized and supported in accordance with the switchgear manufacturer's requirements, including for clearances, fault current bracing, and partial discharge;
- b. Permanently connected. Drawout and automatic self-disconnecting VT primary winding connections are not acceptable;
- c. Minimum #6 AWG conductor for 12 kV class and lower voltages; and

- d. 1" x ¼" rigid bus for 25 kV class voltages. See Figure 4. Fuse holders for 25 kV class VTs are typically cantilevered from the primary winding VT terminals. The 1" x ¼" rigid bus is required to provide support and stability to the fuse holder and to prevent its rotation.

VT H2 primary winding terminal shall be connected to the neutral bus where applicable with a separate minimum #8 AWG white insulation conductor. Daisy chaining is not acceptable.

The phase C to B VT primary winding polarity is reversed for switchgear applications only to simplify the connections. This is an exception to industry convention. BC Hydro also reverses the secondary winding polarity to correct the VT primary winding polarity reversal.

5.3.7.5 CT Installation and Connections

The CT H1 primary polarity marks shall be towards BC Hydro, though may be towards the customer if orientation towards BC Hydro prevents access to the secondary winding terminals. BC Hydro shall be advised if this exception occurs. BC Hydro will reverse the secondary winding polarity in this instance to correct the CT primary winding polarity reversal.

5.3.7.6 Mounting and Grounding

VTs and CTs shall be bolted to grounded metal panels using all supplied mounting holes. Paint or other protective coatings shall be removed to ensure a low impedance ground connection. Lock washers shall be installed.

VTs and CTs with an external ground connector shall be connected to the ground bus with a minimum #8 AWG bare or green insulation conductor. Mounting bolts and lock washers are considered to provide adequate bonding for VTs and CTs without an external ground connector.

5.3.7.7 Typical Installation Drawing

See Figure 1.

6 Meter Socket

Requirements for indoor and outdoor transformer-type meter socket installations are as follows:

- a. The customer supplied meter socket and sealing ring shall be certified in accordance with CSA C22.2 No. 115 *Meter-mounting devices* and be approved by BC Hydro
- b. Accepted Meter Sockets:
<https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/distribution/standards/meter-sockets-list.pdf>
- c. The meter socket shall be installed in a readily accessible location approved by BC Hydro in accordance with the requirements in this document. The sealing ring shall be a screw type.
- d. Meter socket tilt shall not exceed 3° from vertical.
- e. Meter sockets in indoor locations shall be mounted, using four predrilled holes meeting BC Electrical Code rule 6-408 requirements, on a 19 mm (¾") plywood backing or metal support channels.

Meter sockets in outdoor locations shall be wall-mounted on metal support channels.

Plywood and metal support channels shall be securely fastened to the wall. Shooting or otherwise mounting the meter socket directly to the wall is not permitted. Plywood backing for outdoor application will not be accepted.

- f. The centre of the meter shall be mounted between 1500 mm to 1800 mm above finished grade. A mounting height of 1650 mm above finished grade is preferred.
- g. Grounding lugs to be provided inside the meter socket.
- h. Conduit shall enter the meter socket from the bottom or side where knockouts are provided.
- i. Conduit shall not enter from the back of the meter socket.
- j. The meter socket shall not be installed within 1000 mm of gas meters and 3000 mm of propane meters, tanks, regulators, or relief devices.

6.1 Grounding

An external ground conductor shall be provided for the transformer-type meter socket in accordance with BC Electrical Code section 36.

A #2/0 AWG copper conductor is required since its large surface area provides a low impedance path for high frequency electrical noise due to skin effect.

7 VT and CT Secondary Winding Wiring

7.1 General

No other device shall be connected to the VT and CT secondary windings used by BC Hydro revenue metering equipment.

BC Hydro is responsible for VT and CT secondary winding conductor terminations (see section 10 *Responsibilities and Charges*). BC Hydro will wire directly to the VT and CT secondary winding terminals with the Measurement Canada approved multi-colour insulation conductors.

7.2 Cables

7.2.1 Typical Configurations

Table 2 – Typical cable configurations

From	To	Typical cable
Individual outdoor VTs and CTs	Junction box or meter socket	Armoured cable strapped to VT or CT support structure
Outdoor metering kit	Junction box or meter socket	Armoured cable strapped to pole
Junction box	Meter socket	Armoured cable in underground PVC conduit or above-ground cable tray

From	To	Typical cable
Individual indoor VTs and CTs located in the switchgear instrument transformer compartment	Meter socket	Individual conductors in conduit

7.2.2 Armoured Cable Requirements

Armoured cable between individual outdoor VTs and CTs or an outdoor metering kit and the junction box or meter socket shall not be installed underground.

Armoured cable from the junction box to the meter socket may be installed underground . Underground armoured cable shall be installed in a 3" rigid PVC conduit. It shall not be installed in rigid metal conduit or be directly buried.

VT secondary winding circuits in an armoured cable from individual outdoor VTs and CTs do not have overcurrent protection. These armoured cables may not be installed underground to help reduce the chance of a fault. A possible exception is made where individual outdoor VTs and CTs are installed on separate outdoor pedestals and it is impractical to provide cable support between them and the junction box or meter socket.

Junction boxes contain a circuit breaker to protect the VT secondary winding circuits in the armoured cable between the junction box and the meter socket.

Water in conduits can cause crushing and expansion of conductor insulation due to repeated freezing and thawing cycles. It has been BC Hydro's experience that rigid metal conduit installations may result in conductor insulation damage as it does not expand as much as PVC conduit.

7.2.3 Individual Conductors in Conduit Requirements

Conduit requirements are as follows:

- a. The customer shall supply and install a conduit between the transformer-type meter socket and the instrument transformer enclosure or switchgear compartment;
- b. The conduit shall be either rigid metal, EMT, or rigid PVC. ENT (electrical non-metallic tubing) is not permitted;
- c. The conduit shall not have more than the equivalent of three 90° bends;
- d. Conduit length for single-phase installations shall not exceed 3 m (10 ft). The minimum trade size shall be 21mm (¾");
- e. Conduit length for three-phase installations shall not exceed 10 m (33 ft). The acceptable trade size is 41 mm (1½"). Special written approval from BC Hydro is required for conduit lengths between 10 m (33 ft) and 25 m (82 ft);
- f. Conduit shall be continuous and without access fittings, except an LB, LL, or LR style fitting may be installed immediately adjacent to the meter socket provided the fitting cover remains clearly visible and has provision for the installation of a BC Hydro wire seal. Alternatively, a 90° elbow with minimum trade size 41 (1½") shall be installed immediately adjacent to the meter socket;

- g. The conduit shall remain visible for its entire length except where it is embedded in a concrete floor or ceiling within the same room. Conduit shall not be installed through walls or underground;
- h. For switchgear applications where it is necessary to route the conduit through other switchgear compartments, the customer shall provide a continuous metal or rigid PVC conduit without access fittings within the switchgear. Conduit routed through the service entry (wireway) compartment shall enter and exit from either side at the back of the compartment to not obstruct cable pulling and termination; and
- i. The customer shall leave a pull string in the conduit.

8 Meter Communications

BC Hydro revenue meters must be able to transmit data to and from the BC Hydro IT network. The data is transmitted by radio frequency (similar to cell phones). Radio frequency waves cannot always reliably transmit through concrete, metal, or earth. Some buildings will require electrical conduit and termination boxes, which will be used to accommodate additional equipment to enable meter communication. See *Requirements for Secondary Voltage Revenue Metering (750 V and less)* section 3.2.2 *Meter Communications* for further details.

The customer shall provide soft copy dimensioned PDF drawings showing conduit configurations, conduit schedule, and physical locations of terminations and pull boxes to BC Hydro prior to construction. BC Hydro conduits for BC Hydro meter communications shall be clearly labelled on the drawings. See *Requirements for Secondary Voltage Revenue Metering (750 V and less)* section 3.6 *Drawings* for further details.

9 Responsibilities and Charges

Revenue metering responsibilities and charges shall be in accordance with customer contractual documents. Typical customer responsibilities and charges are described below.

9.1 Responsibilities

Tables 3, 4, 5, and 6 define specific responsibilities.

Table 3 – Individual outdoor VT and CT applications

Item		For load-only applications by
VTs and CTs	Material	BC Hydro
	Support structure	Customer
	Installation	Customer
	Primary winding conductor terminations	Customer
	Secondary winding conductor terminations	BC Hydro
Junction box (where applicable)	Material	BC Hydro
	Installation	Customer
	Conductor terminations	BC Hydro
Cable and connectors between:	Material	BC Hydro
	Installation	Customer

Item		For load-only applications by
a. VTs and junction box; b. CTs and junction box; and c. Junction box and meter socket	Conductor terminations	BC Hydro

Table 4 – Outdoor metering kit application

Item		For load-only applications by
Metering Kit complete with VTs and CTs	Material	BC Hydro
	Pole	Customer
	Installation	Customer
	Lightning arrestor material	BC Hydro
	Lightning arrestor installation	Customer
	Primary winding conductor terminations	Customer
	Secondary winding conductor terminations	BC Hydro
Metering socket bonding and ground equipment	Material	BC Hydro
	Installation	Customer
Junction box at base of pole (where applicable)	Material	BC Hydro
	Installation	Customer
	Conductor terminations	BC Hydro
Cable and connectors between the metering kit, junction box (where applicable), and meter socket	Material	BC Hydro
	Installation	Customer
	Conductor terminations	BC Hydro

Table 5 – Individual indoor VT and CT applications

Item		For load-only applications by
VTs and CTs	Material	BC Hydro
	Switchgear instrument transformer compartment	Customer
	Installation	Customer
	Primary winding conductor terminations	Customer
	Secondary winding conductor terminations	BC Hydro
Cable between VTs, CTs, and meter socket	Conduit material and installation	Customer
	Cable material	BC Hydro
	Cable installation	BC Hydro
	Conductor terminations	BC Hydro

Table 6 – All applications

Item		For load-only applications by
Measurement Canada certificate of registration	Documentation	BC Hydro
Measurement Canada approval number for VTs and CTs	Documentation	BC Hydro
Meter	Material and installation	BC Hydro
Meter socket	Material	BC Hydro
	Installation	Customer
	Connections	BC Hydro
Meter socket ground	Material and installation	Customer

9.2 Customer Charges for Load-Only Applications

The customer is typically not charged for revenue metering material and BC Hydro labour for a single POM determined by BC Hydro. If the customer design requests a single POM different from the most cost-effective POM determined by BC Hydro, the customer is typically charged for the incremental cost of their requested POM.

A customer requesting multiple POMs is typically charged for the incremental cost associated with the additional POMs.

10 Drawings

Individual indoor VTs and CTs are shown in Figures 1 through 4.

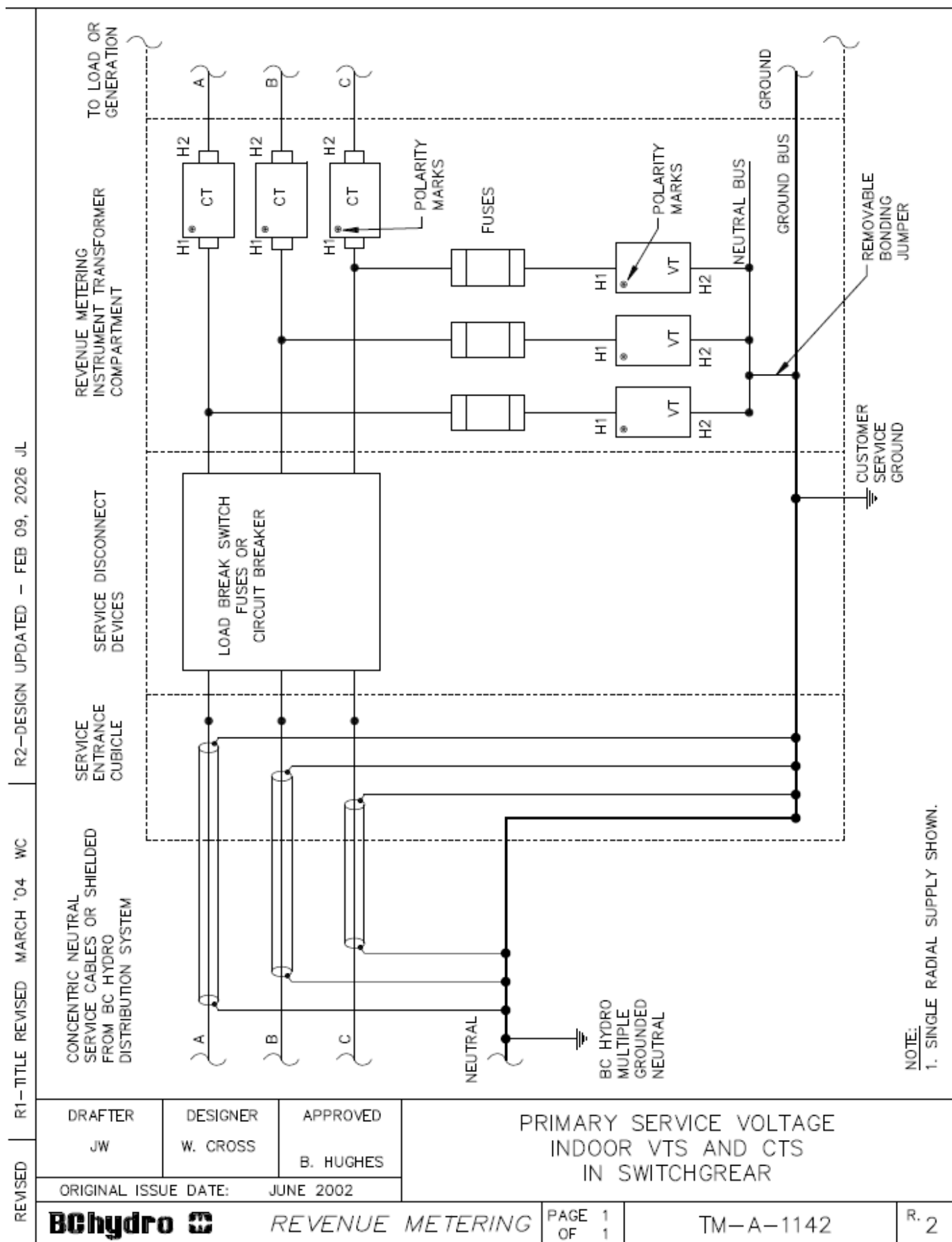
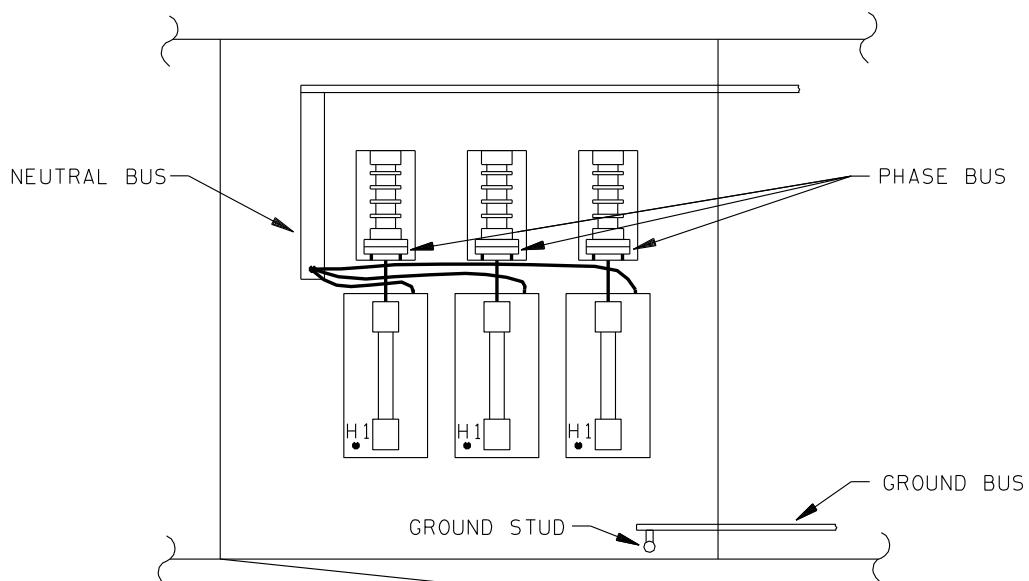
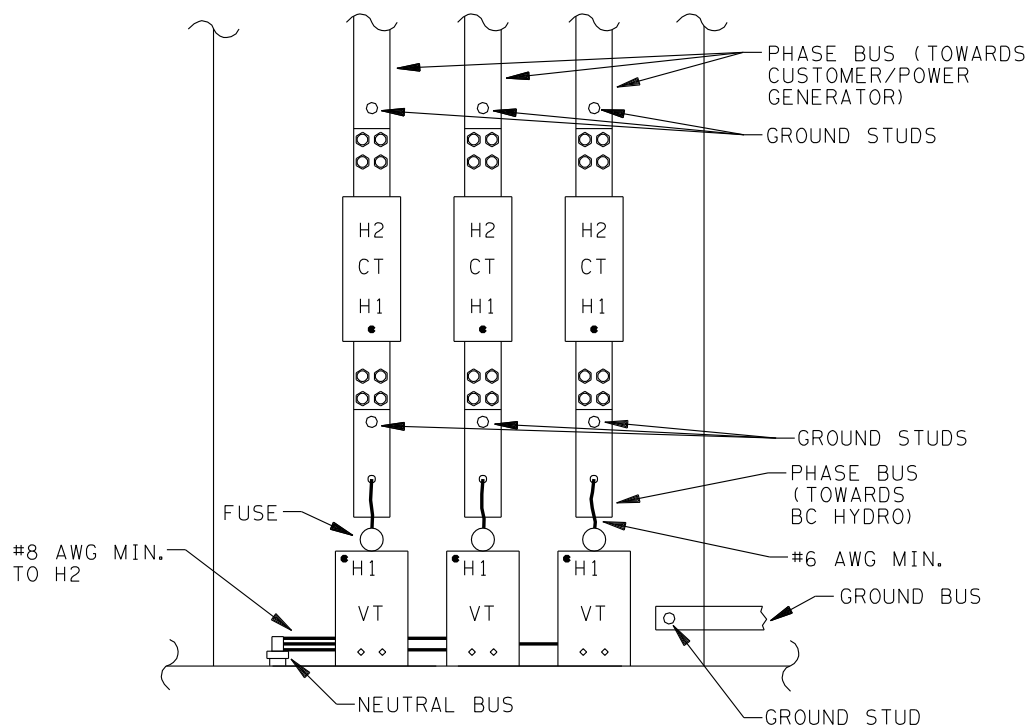


Figure 1 – TM-A-1142 primary service voltage indoor VTs and CTs in switchgear



TOP VIEW



FRONT VIEW

NOTES:

1. 12 kV CLASS 4 WIRE 3 ELEMENT ILLUSTRATED.
2. ONLY A FRONT DOOR IS REQUIRED.

DRAFTER

JW

DESIGNER

W. CROSS

APPROVED

B. HUGHES

**SWITCHGEAR INSTRUMENT
TRANSFORMER COMPARTMENT
"SIDE-BY-SIDE" PHASE BUSES**

ORIGINAL ISSUE DATE: APRIL 2004

BChydro

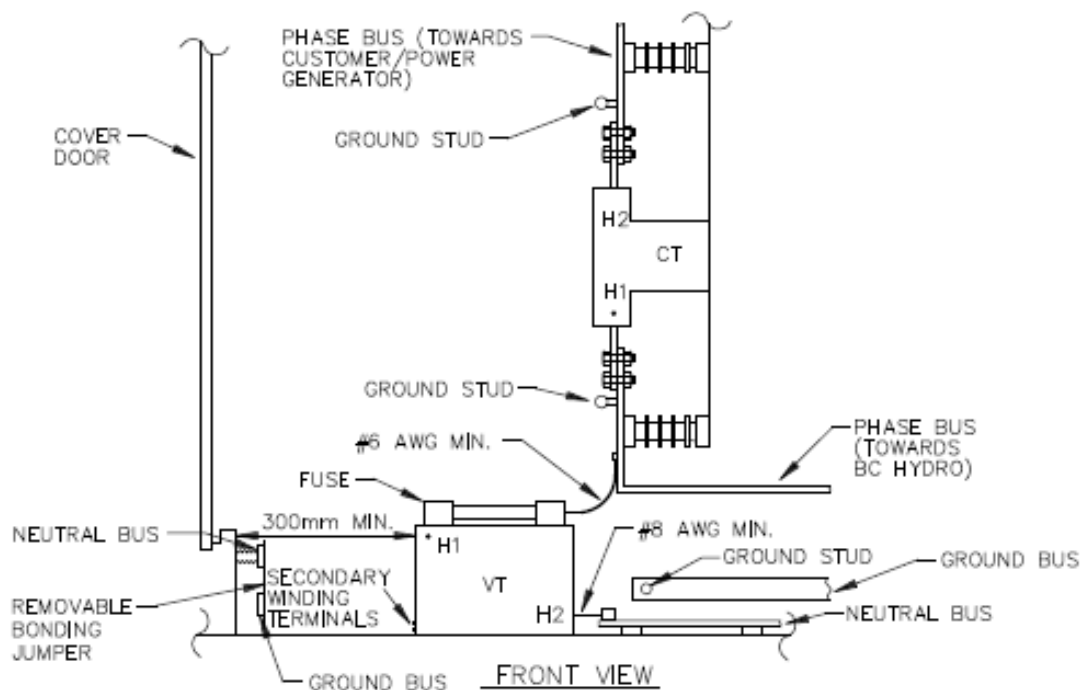
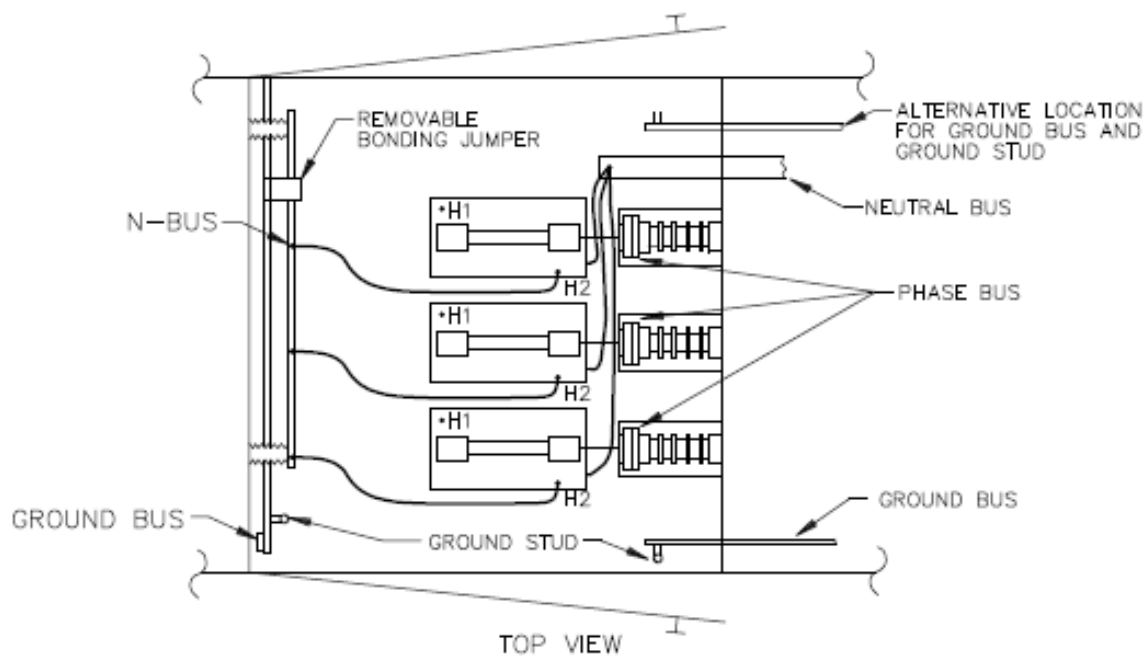
REVENUE METERING

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OF 1

TM- A - 1144

R. 0

Figure 2 – TM-A-1144 switchgear instrument transformer compartment side-by-side phase buses



NOTES:

1. 12 kV CLASS 4 WIRE 3 ELEMENT ILLUSTRATED.
2. BOTH A FRONT AND A REAR DOOR ARE REQUIRED.

DRAFTER JW	DESIGNER W. CROSS	APPROVED B. HUGHES	SWITCHGEAR INSTRUMENT TRANSFORMER COMPARTMENT "ONE-BEHIND-THE-OTHER" PHASE BUSES		
ORIGINAL ISSUE DATE: MARCH 2004					
BCHydro 			REVENUE METERING	PAGE 1 OF 1	TM-A-1145 R. 1

Figure 3 – TM-A-1145 switchgear instrument transformer compartment one-behind-the-other phase buses

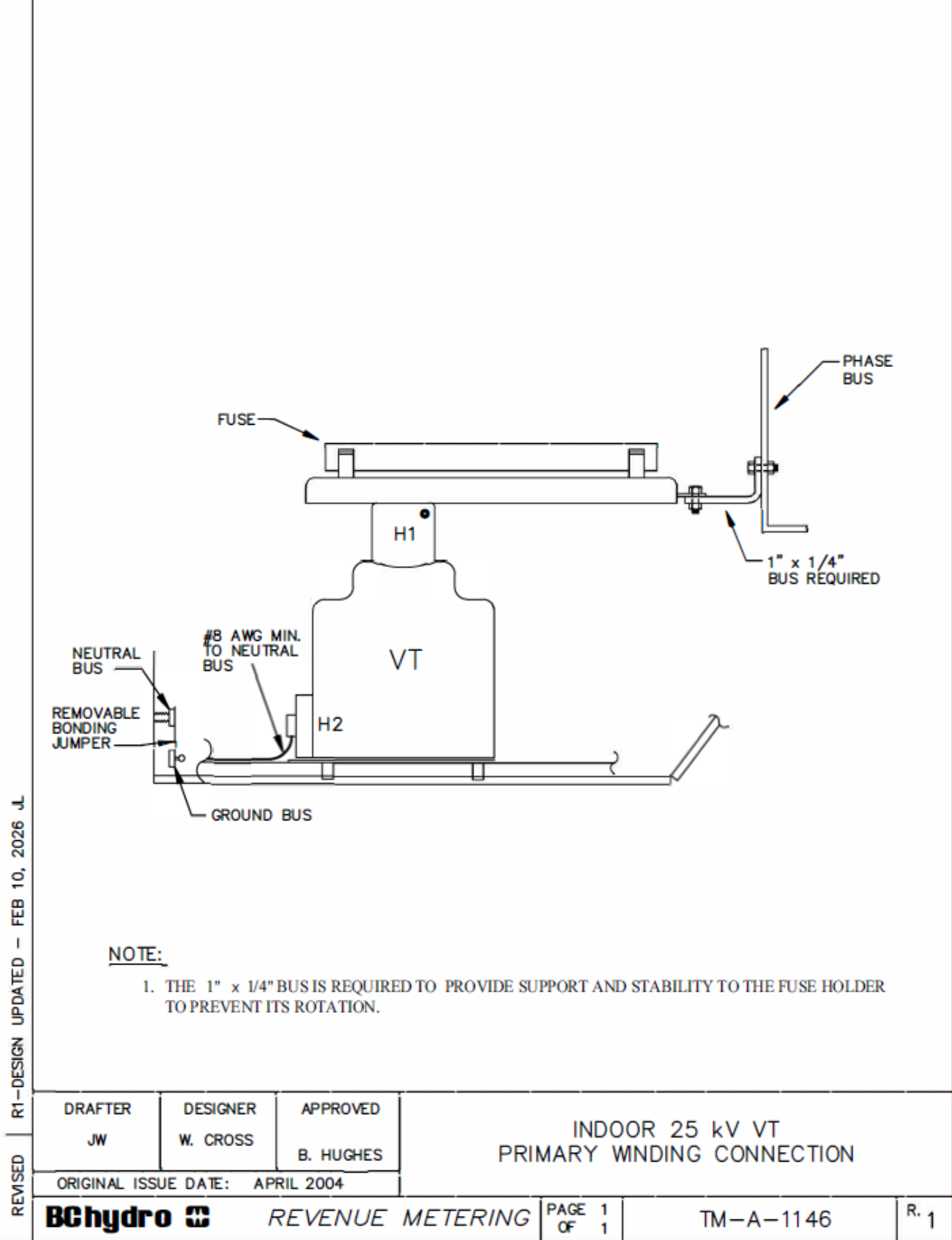


Figure 4 – TM-A-1146 switchgear instrument transformer compartment 25 kV class VT primary winding connections