

To: Current users of the BC Hydro Primary Guide

From: Fred Dennert, Manager, Distribution Standards  
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**Subject: Requirements for Customer-Owned Primary Services Supplied at 4 kV to 35 kV – Primary Guide 2010.**

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Please find attached a copy of the BC Hydro Primary Guide, 2010 edition. The intention of this guide is to provide BC Hydro customers with the latest guidelines for designing and constructing primary services supplied at 4 kV to 35 kV. This revision includes the following substantial changes to the 2009 edition:

- Dual radial and double dual radial configurations will not be available for new construction. BC Hydro primary customers will receive either a radial or dual supply.
- Redundancy of the supply system, as required, will be provided through BC Hydro-owned switchgear, which may be located on the customer's property.
- All new primary service equipment shall be rated and certified for operation at 14.4/25 kV in designated areas, even though initial operation at 7.2/12.5 kV may be required.
- For indoor primary service vaults, BC Hydro requires a minimum of 1.5 m clearance in front of the service cable compartment, to comply with BC Hydro safety work practices and procedures.
- The indoor primary service vault shall have an unobstructed means of egress, in compliance with the Canadian Electrical Code (CEC) Part I, Rule 2-310, where a clear minimum space of 0.6 m must be maintained from the edge of the access door or components when in the fully open position.
- New requirement added for additional conduit, in parallel with the service cable conduits(s), for installation of communication cable(s) into the service cable compartment.
- New section added for primary service voltage conversions.
- Customer-owned SF<sub>6</sub> insulated switches for outdoor type primary service kiosk are now acceptable.
- New requirement added for the primary service cable compartment, neutral bus, bus insulation and additional safety barriers.
- New requirement added for a dedicated customer power supply for service kiosk heaters, lights and convenience plugs after the revenue metering point – also shown on the one-line diagram.

- Reference drawings updated, regrouped and renumbered.
- Definitions section revised and expanded.
- Additional Internet links embedded to reference other regulatory authorities.

BC Hydro is now displaying three versions of the Primary Guide on the external BC Hydro website (at [http://www.bchydro.com/youraccount/content/electrical\\_connections.jsp](http://www.bchydro.com/youraccount/content/electrical_connections.jsp)) as follows:

- 1) Primary Guide 2010 – Formal Document, effective on October 12, 2010, except for the 25 kV conversion requirements and elimination of dual radial and double dual radial feeds. Please contact the local design office for the specific grace period.
- 2) Primary Guide 2010 – Reference Document, shows all additions and changes to the previous Primary Guide 2009.
- 3) Primary Guide 2009 – Current Guide, will remain available on the website until the expiry date of October 12, 2010.

**Please note:** Effective immediately, BC Hydro will accept SF<sub>6</sub> insulated primary service switches for outdoor kiosks having no cable pull pits below the switchgear.

Signed:

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