

Distribution Generator Interconnections

Application Requirement Checklist 2

Extended (Soft) CTT

We have prepared a checklist for Extended (a.k.a. Soft) Closed Transition Transfer (CTT) for a transition time between 100 ms and 20 s so that you can give us all the required information we need to assess your project. BC Hydro will begin work upon receipt of the deposit and an application that is deemed complete/valid.

The following items are required for applications for interconnection of a generator(s) in closed transition mode. Please submit all documents as clearly labelled pdfs.

DEPOSIT \$10,500 (\$10,000 + GST)

You may pay your deposit by cheque or Electronic Funds Transfer (EFT). Please mail your cheque to the address below or we cannot guarantee your payment will be received. If you wish to pay your deposit by EFT, please email us at distribution.generators@bchydro.com for more information.

Distribution Generator Interconnections (CTT)
BC Hydro
6911 Southpoint Drive, Podium BO3
Burnaby, BC V3N 4X8

COMPLETED APPLICATION FORM

BC Hydro's Application for Interconnection, Power Generator(s) in Closed Transition Transfer Mode is available on bchydro.com (on the **Distribution Generator Interconnections** page). The form is to be signed and sealed by a Professional Engineer.

A NARRATIVE DESCRIPTION

Description of the CTT system operating modes (normal, auto, manual and/or test mode) including utility interconnection protection, normal and maximum closed transition transfer times and to lesser level of detail, a description of the facility power scheme and generator(s) operation.

For "distributed" (non-ATS) CTT control schemes (e.g., use of PLC controller) the description should cover:

- Facility entrance protection system with associated breaker(s). The protection system must include protection relay function numbers, relay sensing points, relay-controlled devices, type of signal (permissive, trip, close), mechanical and electrical interlocks, as applicable to the CTT.
- Interconnection system of the CTT control scheme(s) demonstrating the flow of control signal(s) to the relay(s).

FACILITY SITE PLAN(S)

Plan should show the location of service entrance and major electrical equipment (including incoming vaults, generators, switchgear, CTT switches).

SIMPLIFIED OVERALL FACILITY ELECTRICAL POWER DISTRIBUTION ONE-LINE DIAGRAM

Diagram should show the service entrance, major power distribution equipment, all onsite generators, CTT switches, entrance transformer(s) complete with their winding connections, BC Hydro revenue metering, key interlock scheme(s), mechanical interlocks, entrance disconnect devices with assigned tag (aka identification) numbers, point of interconnection, voltage levels with equipment ratings and clear demarcation between existing and newly proposed equipment/change. A “Sample SLD for Extended CTT” (located on the **Distribution Generator Interconnections** page) can be used for reference.

PROTECTION & CONTROL ONE-LINE DIAGRAM, OR CONTROL SCHEMATIC, OR THREE-LINE DIAGRAM

Diagram of the CTT transfer switch to show protective devices, protective function numbers and sensing points (CT/PT), number of phases, relay controlled associated devices, type of control signals (trip, permission, close), flow of control and communication signals between the devices (e.g. PLC to relay, relay to relay etc.). In preparing this one-line diagram, the previously mentioned Sample SLD can be used for reference.

TECHNICAL SPECIFICATION(S) OR DATA SHEETS

If any Automatic Transfer Switches (ATSs) are used in the CTT, then please provide the manufacturer’s technical specifications.