
Transmission Service and General Service Self-Generation in the BC Hydro Service Area¹

1. BC Hydro customers are at liberty to install and operate electricity self-generation facilities² to supply a portion of their load requirements, subject to complying with BC Hydro's generator interconnection procedures and meeting BC Hydro's technical interconnection requirements (e.g., frequency, voltage, phase, protection and control (**P&C**) equipment, local operating orders, remedial action schemes, etc.), as well as the requirements of authorities with jurisdiction (e.g., electrical safety, air/water emissions, municipal zoning/bylaws, etc.).
2. If a self-generator has residual electricity requirements (i.e., self-generation output is less than total plant load), BC Hydro supplies the residual requirements in accordance with the electricity supply or service agreement between BC Hydro and the customer.
 - The terms and conditions of service to transmission service rate (**TSR**) customers are set out in the Tariff Supplement No. 5 Electricity Supply Agreement and the applicable rate schedules.
 - The terms and conditions of service to general service rate customers are set out in BC Hydro's Electric Tariff, an Electric Service Agreement and the applicable rate schedules.
3. The customer is billed for the electricity supplied by BC Hydro in accordance with the energy, demand and basic charges set out on the applicable rate schedule(s).
4. If a customer produces incremental self-generation output in excess of the amount normally produced, and at the customer's own cost, this will reduce the customer's electricity purchases (other things being equal).
 - For a TSR customer taking service under the Rate Schedule (**RS**) 1823 stepped rate, at the customer's option incremental self-generation output can be treated as a customer-funded demand side measure (**DSM**) for the purposes of applying the annual customer baseline load (**CBL**) "dead band".³ A Non-Contracted GBL⁴ is used to identify the incremental self-generation output to be treated as customer-funded DSM.
 - For a general service rate customer, incremental-self-generation output reduces electricity purchases and has no other rate treatment.
5. If the amount of a customer's self-generated electricity exceeds the customer's plant load, there may be a physical transfer of electricity to BC Hydro's system.
 - P&C equipment is typically installed at the point of interconnection between the customer's and BC Hydro's systems to prevent the flow of electricity from the customer's system to BC Hydro's system.

¹ This document does not apply to residential service customers, and does not include Net Metering Service.

² "Self-generation facilities" means electrical power generation facilities that are installed at the same site as the customer's plant, on the customer's side of the point of delivery, and are used to supply a portion of the customer's plant load.

³ Sections 4.3 and 4.4 of the Tariff Supplement (**TS**) No. 74 CBL Determination Guidelines and sections 3.1 to 3.3 of TS No. 74 Attachment B.

⁴ "Non-Contracted GBL" means the gross output of a non-contracted generating unit used to serve an equivalent portion of the customer's plant load during the 365-day period used to determine the CBL for the customer's plant.

-
- If the P&C equipment is modified to allow electricity to flow from the customer's system to BC Hydro's system, the customer may be compensated (or penalized) for delivering electricity to BC Hydro's system depending on the applicable tariffs and agreements between the customer, BC Hydro and any third party purchaser that might be involved. If the customer is connected at transmission voltage, it can use BC Hydro's open access transmission tariff (**OATT**) to schedule and deliver capacity and energy to BC Hydro's system at designated Point(s) of Receipt and transmit such energy and capacity to designated Point(s) of Delivery, in accordance with BC Hydro's OATT.
6. BC Hydro does not have tariffs to enable a self-generator that produces self-generation output below load to simultaneously purchase electricity from BC Hydro and sell electricity to a third party. BC Hydro's electricity supply or service agreements and OATT do not enable such transactions.

Electricity Purchase Agreements (EPAs) and LDAs with Self-Generators in the BC Hydro Service Area

If BC Hydro and a self-generator are considering entering into a prospective EPA or Load Displacement Agreement (**LDA**) in relation to incremental self-generation output, a Contracted GBL will be determined to demark the amount of electricity that the customer generates for self-supply in current normal operating conditions. Electricity to be generated by the customer in excess of the Contracted GBL is recognized as incremental or new electricity.

The Contracted GBL is used in a LDA or EPA to identify the incremental or new electricity that BC Hydro will incentivize pursuant to the LDA or procure pursuant to the EPA. The purpose of the Contracted GBL is to mitigate the risk to other ratepayers when BC Hydro incentivizes or procures customer incremental or new electricity at the same time it is selling electricity to the customer at regulated rates pursuant to an electricity supply or service agreement.

- An LDA is a contract structure that can be used to incentivize incremental self-generation for self-supply, which results in reduced demand on BC Hydro's system. The LDA approach also results in the customer purchasing less electricity from BC Hydro. The financial incentive under an LDA is structured to remove financial barriers to the customer undertaking the incremental generation for the benefit of all customers, while accounting for the benefit to the one customer of reduced purchases from BC Hydro.⁵
- An EPA is another contract structure that can be used to encourage incremental self-generation that the customer would not otherwise produce. In most cases, even though an EPA is for the sale of electricity, some or all of the self-generated electricity is consumed by the self-generator's plant load and is not physically delivered to BC Hydro. The EPA approach deems the electricity to be delivered to BC Hydro, but in most cases the transaction does not reflect the actual physical flows of electricity.⁶ The impact of a customer's self-generation on the demand placed on BC Hydro's system and the amount of electricity supplied to the customer would look the same at the point of delivery meter as in the LDA approach described above. This approach requires accounting transactions as set out in a billing formula to make the deemed simultaneous purchase and sale. To

⁵ In this way, the total incentive corresponds to the up-front funding under the LDA plus the customer's savings from reduced purchases from BC Hydro over time. For a TSR customer taking service on the RS 1823 stepped rate, the customer's CBL is also reduced by the annual energy commitment under the LDA.

⁶ The only case in which an EPA sales transaction would reflect the actual physical flows of electricity is where the generator is producing electricity in excess of the customer load and selling only the surplus, such that the sale transaction matches the metered delivery to the utility system.

ensure the customer does not receive a double benefit from the compensation under the EPA and from the reduced physical take of electricity from BC Hydro as measured by the meter, the customer is deemed to have purchased the amount that they would have purchased in the absence of the deemed delivery of incremental self-generation under the EPA.