

CUSTOMER BASELINE LOAD DETERMINATION GUIDELINES

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1.0 OVERVIEW

The purpose of these Customer Baseline Load (CBL) Determination Guidelines is to describe the criteria and procedures that will guide BC Hydro in the determination of the Energy CBL for each customer's plant taking electricity service under Rate Schedule 1823 (RS 1823 - Transmission Service - Stepped Rate) or Rate Schedule 1825 (RS 1825 - Transmission Service - Time-of-Use (TOU) Rate). These CBL Determination Guidelines are also designed to provide greater investment certainty to customers by providing transparent rules to assist them in evaluating and making decisions about potential investments in DSM and Plant Capacity Increase projects at their plants.

The following principles guide the initial determination and adjustment of the Energy CBL in accordance with sections [3.0](#) and [4.0](#).

CBL Right Sizing

In general, the intent will be to determine an Energy CBL that will be representative of the customer's normal historic annual consumption over a 365-day period prior to the customer commencing service under the applicable rate schedule. The Energy CBL will then be subject to revision annually, and at other times to reflect long term changes affecting the customer's plant including operating changes and adoption of energy efficient practices/technologies, in order to ensure that the Energy CBL continues to be representative of normal historic annual consumption over a 365-day period and is an appropriate baseline to encourage electricity conservation and efficiency of use while not discouraging economic growth.

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CBL Adjustment for BC Hydro-funded and Customer-funded DSM

In general, the intent is to provide comparable tariff treatment for Customer-funded DSM and BC Hydro-funded DSM project investments. At the end of the Customer-funded DSM project Duration, the Energy CBL adjustment for the Customer-funded DSM project alternative will be comparable to the Energy CBL adjustment for the BC Hydro-funded DSM project alternative at its in-service date.

All CBLs will be subject to final approval by the British Columbia Utilities Commission (Commission). In the event of disagreement between BC Hydro and the customer as to the appropriate CBL, the customer can raise the disagreement with respect to its CBL with the Commission.

BC Hydro recognises that these CBL Determination Guidelines may not capture all adjustments that may be justifiable within the principles of the tariff. Hence, in circumstances where BC Hydro or customers propose adjustments that are not defined in, and in all cases are not inconsistent with, these CBL Determination Guidelines, and where the Commission is in agreement, BC Hydro will amend the CBL Adjustment Tariff Practices to accommodate similar adjustments in the future.

To the extent that the sum of the adjusted CBL's exceed reasonably anticipated consumption of the non-exempt customers, CBLs may be prorated.

Finally there are two attachments contained in Electric Tariff Supplement No. 74:

Attachment A – Customer-funded DSM Project Duration

Attachment A contains the Customer-funded DSM project Duration that will be determined for each Customer-funded DSM project in accordance with the DSM project type classification that is described in the attachment.

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**Attachment B – CBL Guidelines for RS 1823 Customers with Self-generation
Facilities**

Attachment B contains guidelines that apply to the determination and adjustment of the Energy CBL for each customer's plant taking service under Rate Schedule 1823 (RS 1823 – Transmission Service – Stepped Rate) where electrical power self-generation facilities 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.

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2.0 DEFINITIONS

In these CBL Determination Guidelines, the following terms will have the following meanings respectively:

- (a) **BC Hydro-funded DSM project** means (i) a DSM project for which BC Hydro has provided a direct incentive payment to the customer through an Incentive Agreement, or (ii) the portion of a Split DSM project that is deemed to be BC Hydro-funded.
- (b) **Billing Period** means a period of from 27 to 35 consecutive days as defined in the customer's Electricity Supply Agreement (Tariff Supplement No. 5), and used by BC Hydro for billing purposes.
- (c) **Billing Year** means the twelve monthly Billing Periods starting with the first day of the Billing Period which commences nearest to April 1 in each year, and ending on the last day of the 12th Billing Period thereafter.
- (d) **Customer-funded DSM project** means (i) a DSM project for which BC Hydro has not provided a direct incentive payment to the customer, or (ii) the portion of a Split DSM project that is deemed to be customer-funded. The customer may report its DSM project to BC Hydro and, pursuant to section [6.5](#), submit a request for the project to be recognised as a Customer-funded DSM project for the purposes of these CBL Determination Guidelines. A DSM project that has not been submitted with a request for recognition to BC Hydro within 18 months following the project in-service date will not be eligible for recognition as a Customer-funded DSM project.

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- (e) **Customer-funded DSM project Duration** means the period of time, commencing from the project in-service date, over which a Customer-funded DSM project will be recognised. The Customer-funded DSM project Duration will be determined in accordance with Attachment A.
- (f) **Demand Side Management (DSM) project** means a project relating to energy efficiency or energy conservation that a customer has implemented at the customer's plant, and which BC Hydro has verified to be realizing energy savings.
- (g) **Engineering Review** means the review by BC Hydro, in accordance with commonly accepted engineering principles, of a customer claim related to changes in annual energy consumption as described in sections [6.1.2](#) and [6.1.3](#).
- (h) **ESA Contract Demand** is as defined in the customer's Electricity Supply Agreement (Tariff Supplement No. 5).
- (i) **Force Majeure** includes but is not limited to strikes, legal lockouts, other labour disturbances (including exercises of non-affiliation rights but excluding illegal lockouts), fire, flood, accidents, tempest or acts of God, sabotage or acts of the Queen's enemies, acts or failure to act by lawful authority or any other cause whatsoever beyond the reasonable control of the customer, provided that in no event shall lack of finances, loss of markets or inability to perform due to the financial condition of the customer constitute Force Majeure.
- (j) **Indirect Electricity Service** means electricity service to a customer's plant that is indirectly interconnected to the BC Hydro system in accordance with an Agreement for New Transmission Service Customers with an Indirect Interconnection to the BC Hydro System (Tariff Supplement No. 88).

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- (k) **In-service date** means the date the project is first energised. The project does not need to be fully commissioned or achieving its full design capability and/or energy savings capability at the in-service date. For an operating plant that is not connected to the BC Hydro system and subsequently connects to the BC Hydro system and begins taking electricity service under RS 1823, the in-service date will be the date the connection to the BC Hydro system is first energised.
- (l) **RS 1823** means, unless the context otherwise necessarily requires, Rate Schedule 1823 – Transmission Service – Stepped Rate, Energy Charge B.
- (m) **RS 1823A** means Rate Schedule 1823 – Transmission Service – Stepped Rate, Energy Charge A.
- (n) **Split DSM project** means a DSM project for which BC Hydro has provided a direct incentive payment to the customer, through an Incentive Agreement, for an agreed portion of the project capital cost. As defined in the Incentive Agreement, the annual energy savings acquired by BC Hydro in relation to the project will be deemed to be BC Hydro-funded, and the non-acquired balance of the annual energy savings related to the project will be deemed to be Customer-funded.
- (o) **Verified** means the annual energy consumption impact (increase or decrease) of a project or event has been determined by a completed Engineering Review.

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3.0 INITIAL CBL DETERMINATION**3.1 RS 1823 – Stepped Rate**

3.1.1 For customers taking service under RS 1823 a single "Energy CBL" will be determined for each customer's plant supplied under a discrete Electricity Supply Agreement (ESA). Where there is a single plant at the customer site supplied under a discrete ESA, the Energy CBL will represent the normal historic annual energy consumption at the customer's plant over a 365-day period. Where there are multiple plants at the customer site, under the same or different ownership, supplied under a discrete ESA, the Energy CBL will represent the normal historic annual energy consumption at all of the plants at the site over a 365-day period.

The Energy CBL will be applied as a cumulative annual threshold for energy billing purposes in accordance with the RS 1823 stepped rate structure. Energy consumption under RS 1880 is excluded for Energy CBL determination purposes.

3.1.2 The Initial Energy CBL for a customer that was taking service under RS 1821 when RS 1823 was first implemented in April 1, 2006, was determined on the basis of the customer's energy consumption for the twelve Billing Periods of calendar 2005. The Initial Energy CBL for these customers was then adjusted for Force Majeure, BC Hydro-funded DSM projects, Plant Capacity Increase projects, Legacy DSM projects, Variable Output Generation and Non-recurring Downtime during the Billing Periods used to determine the Initial Energy CBL.

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- 3.1.3 For customers that begin taking service under RS 1823 after April 1, 2006, including customers transferring back to service under RS 1823 after a period of taking service under RS 1823A, the Initial Energy CBL will be determined on the basis of: (i) the customer's energy consumption for the most recent twelve Billing Periods of service taken under RS 1823A, or other period in consultation with the customer and with the approval of the Commission, or (ii) where an existing plant is transferred to Indirect Electricity Service and if the customer requests it, the verified annual energy consumption determined in accordance with section [4.1.6](#) will be used as the basis for the Initial Energy CBL.
- 3.1.4 If the customer's plant or operations were affected by Force Majeure events during the Billing Periods used to determine the Initial Energy CBL, BC Hydro will adjust the historic data to remove the effect of these events. Normally, BC Hydro will use data from the days, weeks, or months prior to the event to make the adjustment; however, BC Hydro may also refer to appropriate data from the same period during the prior year for guidance in making the adjustment.
- 3.1.5 Adjustments will also be made to the Initial Energy CBL to reflect:
- 3.1.5.1 *BC Hydro-funded DSM Projects.* For BC Hydro-funded DSM projects with an in-service date during the period used to determine the Initial Energy CBL, the CBL will be decreased to reflect the verified impact of the project(s) over a full year's operations.

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- 3.1.5.2 *Customer-funded DSM Projects.* For Customer-funded DSM projects that were implemented after April 1, 2006 and are verified to be in-service during the period used to determine the Initial Energy CBL, the Energy CBL will be increased to remove the verified impact of the project(s) over a full year's operations. To qualify, the customer must, pursuant to section [6.5](#), submit a request for recognition to BC Hydro within 18 months following the project in-service date and the Customer-funded DSM project(s) must be verified to deliver energy savings of at least 0.3 GWh/year, either on an individual project basis or as a bundle of related projects.
- 3.1.5.3 *Plant Capacity Increase Projects.* For capital investment projects to permanently increase plant capacity undertaken during the period used to establish the Initial Energy CBL, the criteria that must be met for the project to qualify and the Energy CBL adjustments for qualifying projects are as set out in section [4.1.3](#).
- 3.1.5.4 *Customer-funded DSM Projects as part of new plant.* If the customer has undertaken Customer-funded DSM project(s) as part of the design of new plant and, pursuant to section [6.5](#), has submitted a request for recognition to BC Hydro within 18 months following the project in-service date, the Energy CBL will be increased by the difference between the verified annual energy consumption of the plant actually completed, and the verified annual energy consumption of the higher energy consuming alternative project that was considered by the customer (baseline energy consumption). To determine the energy savings from Customer-funded DSM project(s) undertaken as part of the new plant project, if any, the customer must demonstrate the difference between the energy consumption of the DSM project(s) as

compared to the higher energy consuming alternative project. To qualify, the alternative project must meet the criteria set out in section [4.1.3](#) for plant capacity increase projects.

- 3.1.5.5 *Non-recurring Downtime.* If the customer has unusual downtime events which occurred during the period used to establish the Initial Energy CBL and which are not expected to recur in the future, the Energy CBL will be increased to remove the verified impact of the non-recurring downtime over a full year's operations. To qualify, each discrete event of non-recurring downtime must have a verified energy consumption impact of at least 0.3 GWh/year.
- 3.1.5.6 *Efficient new plant.* If the customer has undertaken to build an efficient new plant where: (i) BC Hydro and the customer can agree on the establishment of a 'theoretical baseline plant' for the purpose of estimating and verifying annual electrical energy savings relative to the efficient new plant that was built; and (ii) pursuant to section [6.5](#), has submitted to BC Hydro a request for recognition of Customer-funded DSM project(s) within 18 months following the new plant in service date, the Energy CBL will be increased by the difference between the verified annual energy consumption of the plant actually completed and the verified annual energy consumption of the higher energy consuming alternative project that was considered by the customer (baseline energy consumption). To qualify, the efficient new plant must result in verified annual energy savings of at least 10 GWh/year relative to the baseline energy consumption, and the higher energy consuming alternative project must: (i) reflect the use of standard technology that is currently available and that is technically and financially viable; and (ii) be

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capable of achieving a similar level of production and quality as the efficient new plant actually built.

The customer must submit, within 18 months of its new plant in-service date: (i) documentation demonstrating that the efficient new plant qualifies; (ii) documentation identifying the Customer-funded DSM projects selected by the customer for the efficient new plant; and (iii) an initial Stage 3 Review - Impact Study for the efficient new plant in accordance with section [6.1.4](#). The Impact Study should be consistent with Option D (Calibrated Simulation) of the International Performance Measurement and Verification Protocol (IPMVP) and include a working model that can be used to perform engineering calculations for verifying the baseline energy consumption and for verifying the energy consumption of the efficient new plant under a range of estimated and actual operating conditions. This supporting documentation will be used to distinguish the energy conservation measures that comprise the efficient new plant and which represent the customer's over-arching investment decisions to achieve electrical energy savings, including: (i) plant process and systems configuration; (ii) equipment selection; (iii) engineering and design optimization; and (iv) advanced operating systems and controls.

Subsequently, by June 30th of each year, the customer must provide to BC Hydro an updated Impact Study and model to allow BC Hydro to verify that the Customer-funded DSM projects continue to operate and to verify the annual energy savings of the efficient new plant. The Energy CBL adjustment will remain subject to annual verification of the actual impact of the efficient new plant on energy consumption and energy savings.

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3.2 RS 1825 – Time of Use Rate

3.2.1 For customers taking service under RS 1825, four "Energy CBL" values will be determined for each customer's plant supplied under a discrete ESA. In aggregate, the four Energy CBLs for the customer's plant will be representative of the normal historic annual energy consumption at the customer's plant over a 365-day period. There will be one Energy CBL for each of the Spring Period (May and June) and Remaining Period (March, April, and July to October) within a Billing Year. There will be a separate Energy CBL for the HLH and LLH periods for the Winter Period (November to February) within a Billing Year. The Energy CBL values so determined will be applied for energy billing purposes in accordance with the RS 1825 TOU rate structure. Energy consumption under RS 1880 is excluded for these purposes.

3.2.2 The Initial Energy CBL values will be determined on the basis of the customer's energy consumption for the most recent twelve Billing Periods of service taken under RS 1823, or other period in consultation with the customer and with the approval of the Commission. If the customer already has an annual Energy CBL under RS 1823, this annual CBL will be first converted into hourly CBLs and then allocated into the four periods described in section [3.2.1](#).

3.2.3 In any case where the events or circumstances described in sections [3.1.4](#) and [3.1.5](#) would apply if the customer were taking service under RS 1823, BC Hydro will adjust the Initial Energy CBL values in the same manner as for customers taking service under RS 1823, except that any adjustments

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will be allocated to the Winter HLH Period, the Winter LLH Period, the Spring Period and the Remaining Period Energy CBL values as applicable.

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4.0 ENERGY CBL REVISIONS

The Energy CBL will be subject to revision (adjustments and resets) annually, and at other times, to reflect the long term changes affecting the customer's plant as set out in this section [4.0](#). The revisions will ensure that the Energy CBL continues as an appropriate baseline to encourage electricity conservation and efficiency of use while not discouraging economic growth. The Energy CBL will be subject to adjustment between Billing Year anniversary dates. The Energy CBL will also be subject to reset at the start of each new Billing Year. The guidelines for these revisions are as follows.

4.1 RS 1823 – Energy CBL Adjustments

This section describes the events and criteria for which the Energy CBL will be subject to adjustment between Billing Year anniversary dates. The events are as follows, with the criteria set out below:

- Customer-funded DSM projects;
- BC Hydro-funded DSM projects;
- Plant Capacity Increase projects;
- Restart of Existing Equipment in an Operating Plant;
- Shut-down/Removal of Existing Equipment in an Operating Plant;
- Permanent Shut-down or Removal of Plant behind Site CBL;
- Co-located Operating Load(s) behind Site CBL;
- End of Customer-funded DSM project Duration;
- End of BC Hydro-funded DSM project Agreement Term;

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- New Equipment Load;
- Market Curtailment Events; and
- Commission Direction.

4.1.1 *Customer-funded DSM Projects*

This section only applies if energy savings attributable to Customer-funded DSM projects have been previously incorporated into the Energy CBL pursuant to one or more of the following sections:

- [3.1.5.2](#) (Energy CBL adjusted for Customer-funded DSM projects);
- [3.1.5.4](#) (Energy CBL adjusted for Customer-funded DSM projects as part of new plant);
- [3.1.5.6](#) (Energy CBL adjusted for Efficient New Plant)
- [4.1.3](#) (Energy CBL adjusted for Customer-funded DSM projects as part of Plant Capacity Increase projects); and
- [4.3](#) (Energy CBL reset to adjusted energy billed).

Upon the final energy savings attributable to the Customer-funded DSM project being determined in accordance with BC Hydro's Engineering Review procedures, a further adjustment will be made to the Energy CBL to reflect any changes in the final energy savings determination.

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- 4.1.2 *BC Hydro-funded DSM projects.* For BC Hydro-funded DSM projects completed during the Billing Year, the Energy CBL will be adjusted in successive steps as follows:
- 4.1.2.1 The current year's Energy CBL will be decreased effective as of the start of the first Billing Period following the in-service date, in proportion to the verified energy savings attributable to the project between the in-service date and the end of the Billing Year.
- 4.1.2.2 At the start of the next Billing Year, the Energy CBL will be adjusted to reflect the balance of annual energy savings attributable to the project.
- 4.1.2.3 Thereafter, upon the final energy savings attributable to the DSM project being determined under BC Hydro's incentive funding program procedures, a further adjustment will be made to the Energy CBL to reflect the final energy savings determination.
- 4.1.2.4 Notwithstanding section [4.1.2.3](#), the Energy CBL may be subject to further adjustment in accordance with any ongoing measurement and verification efforts by BC Hydro to update the final energy savings determination.
- 4.1.3 *Plant Capacity Increase projects.* To qualify: (i) the customer must have undertaken capital investments in its plant to permanently increase plant capacity; (ii) the customer must provide, within 90 days of the in-service date of the project, an engineering estimate of the increase in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company; and (iii) in the absence of customer-funded DSM, the plant capacity increase project must be expected to result in a verified increase in the annual energy

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consumption by the customer's plant, of at least 5 per cent over the pre-project Energy CBL or 10 GWh, whichever is less, or if the plant capacity increase project includes customer-funded DSM, the sum of the expected change in annual energy consumption by the customer's plant and the expected energy savings from DSM undertaken as part of the project must be expected to be at least 5 per cent over the pre-project Energy CBL or 10 GWh, whichever is less.

For projects with multiple components and/or stages over multiple years (Multi-Year Projects), the verified total annual energy consumption impact of the Multi-Year Project, plus any verified energy savings from customer-funded DSM undertaken as part of the project, must be expected to be at least 5 per cent over the pre-project annual consumption or 10 GWh, whichever is less, by the fifth anniversary of the commencement of the project. In the case of a Multi-Year Project, the customer must also provide to BC Hydro a project plan showing the planned timing for each project stage and the estimated energy consumption impact and DSM energy savings, if any, for each Billing Year during the project. BC Hydro will review the customer's request and project plan in consultation with the customer to verify the estimated energy consumption impacts and any DSM energy savings.

Subsequently, by June 30th of each year, the customer must provide to BC Hydro an engineering estimate of the energy consumption impact of the project for the prior Billing Year (using actual data) and the current Billing Year (using forecast data). BC Hydro will verify the actual increase in plant capacity and energy consumption for each Billing Year pursuant to

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section [6.1.4](#). At BC Hydro's discretion, acting reasonably and pursuant to section [6.1](#), annual verification may also require an Impact Study prepared by a third-party acceptable to BC Hydro.

To determine the energy savings from Customer-funded DSM project(s) undertaken as part of the plant capacity increase project, if any, the customer must submit a request for DSM recognition pursuant to section [6.5](#) within 18 months following the project in-service date, and demonstrate the impact on energy consumption of the DSM project(s) as compared to the higher energy consuming project alternative that the customer considered. To qualify, the alternative must have a positive net present value for the customer, it must be technically viable, and it must result in an increase in productive plant capacity that is similar to the increase in plant capacity of the project actually undertaken. The energy savings from customer-funded DSM project(s) undertaken as part of the plant capacity increase project will be deemed to be the difference between the verified annual energy consumption by the customer's plant including the capacity increase project actually undertaken, and the verified annual energy consumption of the customer's plant if the customer had undertaken the higher energy consuming alternative (baseline energy consumption).

For customers with qualifying plant capacity increase projects under this section, the Energy CBL will be increased each Billing Year during the project to reflect the verified energy consumption impact of the capacity increase and any verified energy savings from customer-funded DSM project(s) undertaken as part of the project over that Billing Year so that the customer will not be penalized for its investment in the form of the higher

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stepped rate. The Energy CBL for the Billing Year following project completion will be further adjusted to reflect the impact of the project over a full year's operation.

If the verified total annual energy consumption impact of a Multi-Year Project plus any verified energy savings from customer-funded DSM project(s) undertaken as part of the project does not reach at least 5 per cent over the pre-project annual consumption or 10 GWh, whichever is less, by project completion or the fifth anniversary of the commencement of the project, whichever is sooner, the Energy CBL will be adjusted to remove all previous Energy CBL adjustments with respect to the Multi-Year Project. For greater certainty, Energy CBLs that have been approved by the Commission on a final and permanent basis will not be adjusted, and customer-funded DSM projects will continue to be recognized by BC Hydro subject to section [6.5](#).

The Energy CBL adjustment will remain subject to annual verification of the actual impact of the project(s) on energy consumption and energy savings.

- 4.1.4 *Restart of Existing Equipment in an Operating Plant.* BC Hydro will apply the following criteria to the verified restart of existing equipment in an operating plant. The restart of existing equipment must result in a verified increase in the annual energy consumption by the customer's plant of at least 5 per cent of the Energy CBL or 10 GWh, whichever is less.

To qualify, the customer must provide, within 90 days of the commencement of the equipment restart, written notice to BC Hydro of the equipment restart and an engineering estimate of the increase in load that has been signed by

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a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company. BC Hydro will review the request, in consultation with the customer, to verify the energy consumption impact.

If the customer has a qualifying event of equipment restart, the Energy CBL will be adjusted in successive steps as follows:

- 4.1.4.1 The current year's Energy CBL will be increased effective as of the start of the first Billing Period following the date of the equipment restart, in proportion to the verified energy increase attributable to the equipment restart between the date of the equipment restart and the end of the Billing Year.
- 4.1.4.2 At the start of the next Billing Year, the Energy CBL will be adjusted to reflect the balance of the annual energy consumption increase attributable to the equipment restart.
- 4.1.4.3 The Energy CBL adjustment will remain subject to annual verification of the actual impact of the restart of existing equipment on energy consumption.
- 4.1.5 *Shut-down/Removal of Existing Equipment in an Operating Plant.* BC Hydro will apply the following criteria to the verified shut-down or removal of existing equipment in an operating plant. The shut-down or removal of existing equipment must result in a verified decrease in the annual energy consumption by the customer's plant of at least 5 per cent of the Energy CBL or 10 GWh, whichever is less.

To qualify, the customer must provide, within 90 days of the commencement of the equipment shut-down or removal, written notice to BC Hydro of the

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equipment shut-down or removal, and an engineering estimate of the reduction in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company. BC Hydro will review the request, in consultation with the customer, to verify the energy consumption impact.

4.1.5.1 Equipment Shut-down

Each discrete event of equipment shut-down must result in a verified decrease in annual energy consumption by the customer's plant of at least 5 per cent of the Energy CBL or 10 GWh, whichever is less.

If a customer shuts down multiple pieces of operating equipment at one plant, the energy reductions associated with each shut-down piece of equipment may only be consolidated if the pieces of equipment are directly related to the same production process and they are shut-down as part of a coordinated event of equipment shut-down. If a customer chooses to shut-down operating equipment at various times during the Billing Year, for any reason, and such shut-downs are not part of a coordinated event of equipment shut-down, the energy reduction associated with each shut-down will not be consolidated.

If a customer shuts down multiple pieces of operating equipment at two or more plants within an aggregated Energy CBL, the energy reductions associated with each shut-down piece of equipment may only be consolidated if the pieces of equipment are shut-down as part of a coordinated event of equipment shut-down. If a customer chooses to shut-down operating equipment at different plants within an aggregated

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Energy CBL at various times during the Billing Year, for any reason, and such shut-downs are not part of a coordinated event of equipment shut-down, the energy reduction associated with each shut-down will not be consolidated.

BC Hydro will determine the effective start and end dates of each discrete event of equipment shut-down in consultation with the customer, however, all events of equipment shut-down will be deemed to end no later than the end of the Billing Year in which the event begins. If the equipment remains shut-down at the beginning of the next Billing Year, it will be considered as a new discrete event.

Equipment shut-down events that have become part of normal operations at a customer's plant will not qualify for Energy CBL adjustment under this section.

If the customer has a qualifying event of equipment shut-down, the Energy CBL will be adjusted in successive steps as follows:

- The current year's Energy CBL will be decreased in proportion to the verified reduction in energy consumption attributable to the equipment shut-down between the start and end dates of the equipment shut-down.
- At the start of the next Billing Year, the Energy CBL will be increased by the amount of the adjustment made above.

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- The Energy CBL adjustment will remain subject to annual verification of the actual impact of the equipment shut-down on energy consumption.

4.1.5.2 Equipment Removal

If the customer has a qualifying event of equipment removal, the Energy CBL will be adjusted in successive steps as follows:

- The current year's Energy CBL will be decreased in proportion to the verified reduction in energy consumption attributable to the equipment removal between the date of the equipment removal and the end of the Billing Year.
- At the start of the next Billing Year, the Energy CBL will be adjusted to reflect the annual reduction in energy consumption attributable to the equipment removal.
- The Energy CBL adjustment will remain subject to annual verification of the actual impact of the equipment removal on energy consumption.

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- 4.1.6 *Permanent Shut Down or Removal of Plant (Co-located Load) behind Site CBL.* This section applies where a customer site has multiple plants, under the same or different ownership, which are consolidated under a single Energy CBL and receive electricity service under a discrete ESA. If there has been a permanent shut-down of a plant or removal of a plant (e.g., as a result of transfer of the plant to a different rate schedule or a transfer to Indirect Electricity Service) at such a site, the Energy CBL will be adjusted in successive steps as follows:
- 4.1.6.1 The current year's Energy CBL will be decreased in proportion to the verified reduction in energy consumption attributable to the plant shut-down or plant removal between the date of the plant shut-down or plant removal and the end of the Billing year.
- 4.1.6.2 At the start of the next Billing Year, the Energy CBL will be adjusted to reflect the annual reduction in energy consumption attributable to the plant shut-down or plant removal.
- 4.1.6.3 The Energy CBL adjustment will remain subject to annual verification of the actual impact of the shut-down or removal of plant on energy consumption.
- 4.1.7 *Co-located Operating Load(s) behind Site CBL:* Similar to section [4.1.6](#) above, this section applies to customers that receive electricity service under a single ESA and subsequently re-sell electricity to co-located operating load(s) over which the ESA customer has no control. BC Hydro will adjust the Energy CBL (up or down, as applicable) equal to the verified annual change in metered energy consumption that is attributable to the co-located load(s).

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- 4.1.8 *End of Customer-funded DSM Project Duration.* When the Customer-funded DSM project Duration ends, the Energy CBL will be adjusted in successive steps as follows:
- 4.1.8.1 The current year's Energy CBL will be decreased in proportion to the most recent verified annual energy savings attributable to the DSM project between the date the DSM project Duration ends and the end of the Billing Year.
- 4.1.8.2 At the start of the next Billing Year, the Energy CBL will be adjusted to remove the balance of the most recent verified annual energy savings attributable to the DSM project.
- 4.1.9 *End of BC Hydro-funded DSM project Agreement Term.* Where an Energy CBL has been impacted by energy savings relating to a BC Hydro-funded DSM project under one or more of sections [3.1.5.1](#) and [4.1.2](#), and the applicable Incentive Agreement has expired, the Energy CBL will not be adjusted further.

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4.1.10 *New Equipment Load*. To qualify: (i) the customer must undertake capital investments in its plant the main purpose of which is to comply with regulatory requirements or to switch from the use of one kind of energy to another to decrease greenhouse gas emissions; (ii) the customer must provide, within 90 days of the in-service date of the project, a description of the regulatory requirement or greenhouse gas emission reduction, as applicable, and an engineering estimate of the increase in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company; and (iii) the project must result in a verified increase in the energy consumption by the customer's plant of at least 0.3 GWh/year, either on an individual project basis or as a bundle of related projects.

If the customer has a project that qualifies under this section, the Energy CBL will be adjusted in successive steps as follows:

- 4.1.10.1 The current year's Energy CBL will be increased in proportion to the verified energy increase attributable to the project between the in-service date and the end of the Billing Year.
- 4.1.10.2 At the start of the next Billing Year, the Energy CBL will be adjusted to reflect the balance of the annual energy consumption increase attributable to the project.
- 4.1.10.3 The Energy CBL adjustment will remain subject to annual verification of the actual impact of the project on energy consumption.

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4.1.11 *Market Curtailment Events.* BC Hydro will apply the following criteria to the verified energy consumption impact of a market curtailment event, where the customer can demonstrate to BC Hydro's reasonable satisfaction that its operations were temporarily impacted by the constraint of a key production input or adverse market conditions, which were beyond the customer's control. To qualify, the customer must provide, within 90 days of the commencement of the market curtailment event, written notice to BC Hydro that includes a description of the event and an engineering estimate of the reduction in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the Company. BC Hydro will review the request, in consultation with the customer, and verify the energy consumption impact. Any qualifying event of market curtailment will be deemed to end no later than the end of the Billing Year in which the event begins. If the market curtailment event continues into the next Billing Year, it will be considered as a new discrete event. Each discrete event of market curtailment must result in a verified decrease in annual energy consumption of at least 0.3 GWh. Where a discrete market curtailment event exceeds 120 consecutive days within a single Billing Year, unless otherwise agreed to by BC Hydro and the customer, the plant will be considered to be temporarily or indefinitely shut-down and will be automatically transferred to RS 1823A in accordance with section [4.6.2](#) below. If the customer has a qualifying event of market curtailment, the Energy CBL will be adjusted in successive steps as follows:

4.1.11.1 The current year's Energy CBL will be decreased in proportion to the verified reduction in energy consumption attributable to the market curtailment event; and

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4.1.11.2 At the start of the next Billing Year, the Energy CBL will be increased by the amount of the adjustment made above.

4.1.12 *Commission Direction.* Where the Commission has approved a CBL adjustment as described in section [6.2.2](#), the customer's Energy CBL will be adjusted by that amount, as applicable.

4.2 RS 1823 – Energy CBL Pro-ration

4.2.1 Where a customer takes service under RS 1823 for any period less than 365 days, BC Hydro will pro-rate the Energy CBL for the number of days of service under RS 1823 to ensure that the appropriate Energy CBL is applied to the actual period of energy consumption under RS 1823 by the customer's plant.

4.2.2 Energy CBL pro-ration is required in the following circumstances:

- Where a customer begins taking service under RS 1823 within a Billing Year (e.g., as a result of a transfer to RS 1823 from RS 1823A);
- Where a customer taking service under RS 1823 is transferred to RS 1823A within a Billing Year;
- Where a customer aggregates Energy CBLs that have different Billing Periods (in accordance with section [5.1.4](#));
- Where there is a change of ownership of a single (non-aggregated) plant during the Billing Year; and

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- Where there is a change of ownership of a plant included within an aggregated CBL (in accordance with section [6.4.2](#)).

4.2.3 If an Energy CBL needs to be pro-rated, it will be adjusted as follows:

4.2.3.1 Pro-ration will occur after all other CBL revisions have been made in accordance with section [4.1](#), as applicable.

4.2.3.2 The customer's Energy CBL will then be decreased by multiplying the customer's Energy CBL by the ratio (number of days of service under RS 1823/365).

4.2.4 BC Hydro will also pro-rate the Energy CBLs of all customers taking service under RS 1823 where a Billing Year is a leap year. For leap years, the customer's Energy CBL will be increased by multiplying the customer's Energy CBL by the ratio (366/365). For the Billing Year following a leap year, the customer's Energy CBL will be decreased by multiplying the customer's Energy CBL by the ratio (365/366). The CBL revisions made pursuant to this section [4.2.4](#) will be applied to the customer's Energy CBL after all other revisions have been made in accordance with sections [3.0](#) and [4.0](#), as applicable.

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4.3 RS 1823 – Annual Energy CBL Resets

The Energy CBL for RS 1823 customers will be subject to revision at the beginning of each Billing Year as follows:

- 4.3.1 If the total energy billed under RS 1823 in the previous Billing Year, as adjusted in accordance with section [4.4](#), is less than 90 per cent of the customer's Energy CBL or equal to or more than 110 per cent of the customer's Energy CBL, then the customer's Energy CBL for the current Billing Year will be reset to the customer's adjusted energy billed under RS 1823. For greater certainty, BC Hydro will use two decimal places for rounding purposes in making the annual Energy CBL reset determination: 109.95 per cent will be rounded up to 110 per cent and 89.95 per cent will be rounded up to 90 per cent.
- 4.3.2 If the total energy billed under RS 1823 in the previous Billing Year, as adjusted in accordance with section [4.4](#), is between 90 per cent and 110 per cent, inclusive, of the customer's Energy CBL, then the customer's Energy CBL will not be reset for the current Billing Year.

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4.4 RS 1823 – Energy Bill Adjustments

This section describes the adjustments that will be made to the total energy billed under RS 1823 in the previous Billing Year for the purposes of determining whether the customer's Energy CBL will be reset under section [4.3](#).

4.4.1 The following adjustments, where applicable, will be applied to the customer's previous year's actual energy billed under RS 1823:

4.4.1.1 *Force Majeure*. If the customer's plant was affected during the previous Billing Year by Force Majeure, the customer's previous year's actual energy billed will be further adjusted in the same manner as would have been made for the determination of the Energy CBL under section [3.1.4](#).

4.4.1.2 *BC Hydro Load Curtailment Event*. If the customer's plant was curtailed during the previous Billing Year by a BC Hydro load curtailment event, the curtailed customer's previous year's actual energy billed under RS 1823 will be further increased by the verified curtailed energy amount.

BC Hydro will normally verify the curtailed energy amount by using the customer's performance-adjusted contracted energy volume. If the customer submits to BC Hydro by June 30th a request for an adjustment under this section and an engineering estimate of the reduction in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company, BC Hydro will verify the curtailed energy amount by also including the impact to energy consumption of ramping down/up customer plant in connection with the load curtailment event.

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- 4.4.1.3 *BC Hydro System Outage.* If the customer's plant was impacted during the previous Billing Year by a planned or forced BC Hydro system outage, or a BC Hydro system disturbance, the customer's previous year's actual energy billed under RS 1823 will be further increased to reflect the verified energy consumption impact of the event. To qualify, the customer must submit to BC Hydro by June 30th a request for an adjustment under this section and an engineering estimate of the reduction in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company.
- 4.4.1.4 *Customer-funded DSM Projects.* If the customer's plant has Customer-funded DSM projects that are recognised by BC Hydro under section [6.5](#) with verified energy savings of at least 0.3 GWh/year, either on an individual project basis or as a bundle of related projects, the customer's previous year's actual energy billed under RS 1823 will be further increased to reflect the annual energy savings from the project(s).

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- 4.4.1.5 *Non-recurring Downtime.* If the customer's plant had unusual downtime events during the previous Billing Year that are not expected to recur in the future, the customer's previous year's actual energy billed under RS 1823 will be further increased to reflect the verified energy impact of the downtime events. To qualify, each discrete event of non-recurring downtime must have a verified energy consumption impact of at least 0.3 GWh/year and the customer must have provided to BC Hydro within 90 days of the commencement of the downtime event a request for adjustment under this section, with supporting information to demonstrate that the event is unusual and not expected to recur in the future. The customer must also provide an engineering estimate of the reduction in load that has been signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company.
- 4.4.1.6 Where the Commission has approved an energy bill adjustment as described in section [6.2.2](#), the customer's previous year's actual energy billed under RS 1823 will be further adjusted by that amount, as applicable.

4.5 RS 1825 – Transmission Service Time-of-Use Rate

- 4.5.1 The Energy CBL for RS 1825 customers will be subject to revision at the beginning of each Billing Year in the same manner and subject to the same terms as for RS 1823 customers, as provided in sections [4.2](#) and [4.3](#); except that the Energy CBL for each period will each be adjusted by the ratio of the actual energy consumed in the prior billing year to the annual energy CBL for the prior billing year.

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4.5.2 The Energy CBL for RS 1825 customers will be subject to further revision between Billing Year anniversary dates in the same manner and subject to the same terms as for RS 1823 customers, as provided in section [4.1](#); except the Energy CBL values, and any Energy CBL revisions will be apportioned to the Winter HLH Period, the Winter LLH Period, the Spring Period and the Remaining Period Energy CBL values, where applicable.

4.6 Transfer To and From RS 1823A

A customer taking service under RS 1823 will be transferred to service under RS 1823A as a result of a complex Plant Capacity Increase project, Plant Downsizing, Plant Restart Equipment Shut-down or Operating Hour Change. These specific circumstances are explained in more detail below.

All Energy CBLs and any decision to put a customer on RS 1823A will be subject to final approval by the Commission. If an Energy CBL is established between Billing Year anniversary dates, the CBL will be pro-rated in accordance with section [4.2](#).

4.6.1 *Plant Capacity Increases* (section [3.1.5.3](#) and section [4.1.3](#)). A customer may invest in new equipment in their plant that increases the plant's production to the extent that estimating an Energy CBL per section [3.1.5.3](#) or [4.1.3](#), as applicable, and section [6.1.2](#) is not practical based on BC Hydro's technical staff assessment of the magnitude and complexity of the new load in consultation with the customer. The difficulty in setting an Energy CBL for such a plant results from the magnitude of the increase in load and/or the complexity of the change to its operation. In such cases, the customer may elect to be put on RS 1823A for an initial period of 12 Billing Periods effective as of the plant capacity increase project's in-service date. For greater certainty, if it is not practical to estimate an Energy CBL

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adjustment for a plant capacity increase project and the customer does not request a transfer to RS 1823A, the customer's Energy CBL will remain in effect unadjusted.

If a customer makes a large, complex capital investment in a plant within an aggregated CBL and elects to be put on RS 1823A in accordance with this section, then that customer's plant will be removed from the aggregated CBL to be put on RS 1823A for an initial period of 12 Billing Periods.

The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists to reflect "normal operations" from which an Energy CBL can be reasonably determined pursuant to section [3.1](#).

The customer's plant may be returned to RS 1823 after less than 12 Billing Periods on RS 1823A if BC Hydro is satisfied, in consultation with the customer, that sufficient energy consumption history exists that reflects "normal operations" to establish an Energy CBL.

4.6.2 *Plant Downsizing. Permanent Plant Shutdown:* A customer's plant will be automatically transferred to RS 1823A, at the time the plant is permanently shut-down, for an initial period of 12 Billing Periods. The plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer.

Temporary or Indefinite Plant Shutdown: This treatment will also apply to a customer's plant that is subject to a temporary or indefinite shutdown which exceeds 120 consecutive days pursuant to section [4.1.11](#). The effective

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date of the RS 1823A commencement will be the day that is 121 days after the date the plant is shut-down.

ESA Contract Demand Reduction: Where the customer has made a formal request to reduce its ESA Contract Demand in connection with a partial, temporary or indefinite plant shut-down, the effective date of the RS 1823A commencement will be the date the plant, in whole or in part, is shut-down. If the Contract Demand reduction request is withdrawn before the ESA change becomes effective, the RS 1823A treatment will continue to apply. For greater certainty, this provision will not apply to a customer seeking to right-size their ESA Contract Demand to remove any under-utilized portion of contracted capacity.

If at the end of the 12 Billing Periods on RS 1823A, the customer is still purchasing electricity for the shut-down or partially shut-down plant, a new Energy CBL will be initially determined based on the most recent usage on RS 1823A and pursuant to section [3.1](#). The move to RS 1823A and the subsequent establishment of a new Energy CBL will be done in consultation with the customer.

The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists after the plant downsizing to reflect the new "normal operations" from which an Energy CBL can be reasonably determined pursuant to section [3.1](#). The customer's plant may be put on RS 1823 after less than 12 Billing Periods on RS 1823A if BC Hydro is satisfied, in

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consultation with the customer, that sufficient energy consumption history exists that reflects “normal operations” to establish an Energy CBL.

- 4.6.3 *Plant Restarts.* If a customer restarts an existing plant, then the plant will be treated like new plant for the purposes of setting an Energy CBL and the plant will be put on RS 1823A for an initial period of 12 Billing Periods.

The customer’s plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists to reflect “normal operations” from which an Energy CBL can be reasonably determined pursuant to section [3.1](#).

The customer’s plant may be put on RS 1823 after less than 12 Billing Periods on RS 1823A if BC Hydro is satisfied, in consultation with the customer, that sufficient energy consumption history exists that reflects “normal operations” to establish an Energy CBL.

Notwithstanding the above, where a customer restarts an existing plant following a period of shut-down, the customer may, by written notice to BC Hydro at least 30 days prior to the date of plant restart, request that the Energy CBL in effect immediately prior to the period of plant shut-down be reinstated. If restarted plant operations are reasonably expected to be similar to pre-shut-down plant operations, the pre-shut-down Energy CBL will be reinstated as of the plant restart date or after an agreed period of plant re-commissioning. Where the prior Energy CBL incorporates adjustments made under these CBL Determination Guidelines, these prior

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adjustments will remain subject to annual verification in accordance with section [6.1](#).

- 4.6.4 *Shut-down of Existing Equipment in an Operating Plant.* If a customer applies for a CBL adjustment under section [4.1.5](#), and it is not practical for BC Hydro to verify the energy consumption impact of the shut-down of existing equipment event due to its complexity, or if an extended or recurring shut-down event appears to have become part of normal operations, the customer's plant will be put on RS 1823A for an initial period of 12 Billing Periods.

The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists to reflect "normal operations" from which an Energy CBL can be reasonably determined pursuant to section [3.1.3](#). The customer's plant may be put on RS 1823 after less than 12 Billing Periods on RS 1823A if BC Hydro is satisfied, in consultation with the customer, that sufficient energy consumption history exists that reflect "normal operations" to establish an Energy CBL.

- 4.6.5 *Operating Hour Changes.* If a customer materially changes operations at its plant (including, but not limited to shift changes) that result in reduced (or increased) operating hours and reduced (or increased) annual energy consumption, the customer may request that BC Hydro transfer the customer's plant to RS 1823A. To qualify, the customer must have issued a public notice regarding the change in operations by press release, posting on the company's website or other means of public notification, and the

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customer must submit a request to BC Hydro pursuant to this section within 90 days following the date of the public notice.

The effective date of the transfer to RS 1823A will be the date of the operating hour change as identified in the public notice. The customer's plant will be maintained on RS 1823A for a minimum period of 12 Billing Periods and a maximum period of 48 Billing Periods.

The customer plant transferred to RS 1823A will be removed from any aggregation effective the date of the transfer and the Energy CBL will be prorated for this change in accordance with section [4.2.3](#).

If, during the period the customer's plant is on RS 1823A, the customer notifies BC Hydro in writing that the customer's plant has achieved normal operations, the plant will remain on RS 1823A for a further 12 Billing Periods, after which the plant will be transferred to RS 1823 and an initial Energy CBL established. The customer's plant may be transferred to RS 1823 and an initial Energy CBL established after less than the 12 prospective Billing Periods following such notice if BC Hydro is satisfied, in consultation with the customer, that 12 Billing Periods of energy consumption history exists that reflect normal operations.

In the absence of notice from the customer, as set out above, the customer's plant will be transferred to RS 1823 after 48 Billing Periods on RS 1823A and an initial Energy CBL established based on the last 12 Billing Periods on RS 1823A.

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5.0 AGGREGATION/DISAGGREGATION OF CBLs**5.1 RS 1823 and RS 1825 – Determination of Initial Aggregated CBL**

- 5.1.1 Customers with two or more operating plants can elect to aggregate any combination of their Energy CBLs for the operating plants and have an aggregated Energy CBL determined for the plants. Only Energy CBLs may be aggregated. To qualify for aggregation, the customer's plants must also be taking service from BC Hydro under the same rate schedule, and they must be under common direction and control equivalent to parent companies and subsidiaries. Where there are multiple plants at the customer site, under different ownership, with one Energy CBL, the Energy CBL may be aggregated with other Energy CBLs of the customer if the requirements above are met.
- 5.1.2 Customers may only elect to make any new aggregations, or to disaggregate or revise any existing aggregations, by giving written notice to BC Hydro, prior to the start of the next Billing Year, of their election, listing the plants to be aggregated / disaggregated. The effective date of the aggregation/disaggregation will be the first day of the Billing Year following the customer's notice.
- 5.1.3 BC Hydro will determine individual Energy CBLs for all operating plants to be included within an aggregation, and the resulting individual Energy CBLs will then be aggregated to establish the aggregated Energy CBL.

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5.1.4 If a customer chooses to aggregate two or more operating plants that have different staggered billing dates, BC Hydro will pro-rate the Energy CBL of one or more of the operating plants prior to aggregation. This will align the Billing Period dates for the start of the common Billing Year for the plants to be aggregated. The Energy CBL pro-ration will ensure that actual energy purchases made in the revised current billing year are compared with the appropriate annual Energy CBL. BC Hydro will provide a one-time bill adjustment to capture any resultant billing difference from the bill under the original Energy CBL.

5.1.5 If there is an aggregation of customer plants and if a plant is no longer operating or is subject to transfer to RS 1823A per section [4.6](#), revision to the aggregated Energy CBL will reflect that BC Hydro will first pro-rate the Energy CBL of the plant that is no longer operating or is subject to plant downsizing effective the date of the RS 1823A commencement. The Energy CBL of the plant that is no longer operating or is subject to transfer to RS 1823A will then be removed from the aggregation (disaggregated). The rest of the operating plants will remain within the customer aggregation.

The Energy CBL pro-ration, and subsequent disaggregation, will ensure that the actual energy purchases for the aggregation that are made in the current Billing Year are compared with the appropriate annual aggregated Energy CBL. BC Hydro will provide a one-time bill adjustment to capture any resultant billing difference from the bill under the original aggregated Energy CBL.

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5.2 RS 1823 and RS 1825 – Aggregated CBL Revisions

- 5.2.1 Aggregated Energy CBLs will be subject to revision at the beginning of each Billing Year and between Billing Year anniversary dates in the same manner as specified in section [4.0](#) for individual customer plants taking service under RS 1823 or RS 1825 on an unaggregated basis.
- 5.2.2 For the purpose of annual Energy CBL reset determination as specified in section [4.3](#) the customer's total aggregated energy billed adjusted in accordance with section [4.4](#) under RS 1823 or RS 1825 for the previous Billing Year will be compared to the aggregated Energy CBL, and if the total aggregated energy billed adjusted in accordance with section [4.4](#) under RS 1823 or RS 1825 is outside the thresholds specified in section [4.3.1](#), the Energy CBLs for each plant within the aggregation will be revised based on the actual energy consumed by each plant for the previous Billing Year adjusted in accordance with the provisions of section [4.4](#). The individual Energy CBLs so determined will then again be aggregated to establish the new aggregated Energy CBL for the next Billing Year.
- 5.2.3 Revisions to aggregated Energy CBLs between Billing Year anniversary dates will be made in the same manner and subject to the same terms as specified in section [4.1](#) for individual plants taking service under RS 1823 or RS 1825. The individual Energy CBLs will be revised for the plant or plants affected, and aggregated to establish the revised aggregated Energy CBL.

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- 5.2.4 If a customer's plant included within an aggregation ceases to operate or is moved to RS 1823A during the Billing Year, the Energy CBL for that customer's plant will be removed from the aggregation in successive steps as follows: (1) the Energy CBL will be pro-rated, in accordance with section [4.2](#), effective as of the date the customer's plant begins taking service under RS 1823A; (2) the customer's plant will then be removed from the aggregation (disaggregated) by removing the pro-rated plant Energy CBL from the aggregated Energy CBL; and (3) the Energy CBLs of the remaining operating plants will remain aggregated. BC Hydro will provide a one-time bill adjustment to capture any resultant billing difference from the bill under the original aggregated Energy CBL.

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6.0 GENERAL**6.1 Verification of Energy Consumption Impacts**

6.1.1 In the case of BC Hydro-funded DSM projects, BC Hydro will normally verify energy savings attributable to the project under the procedures specified in the Incentive Agreement with the customer. This will include a "Measurement and Verification Report" ("M&V Report") prepared by BC Hydro approximately 12 to 18 months following project completion. If the M&V Report indicates that the energy savings for the project are greater or less than the savings used for purposes of any prior CBL adjustments, the applicable CBL will be further adjusted to reflect the savings indicated by the M&V Report.

6.1.2 In the case of all other events that impact (increase or decrease) the energy consumption of the customer's plant, BC Hydro will require an Engineering Review in consultation with the customer to assess the project or event, including to determine one or more of the following, as applicable:

- the annual energy consumption impact of the project or event,
- the annual energy savings of a Customer-funded DSM project,
- the Customer-funded DSM project Duration in accordance with Attachment A; and
- whether the plant's energy consumption will change beyond the applicable criteria and threshold(s) specified in these CBL Determination Guidelines.

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- 6.1.3 To initiate the Engineering Review of a project or event specified in section [6.1.2](#), the customer must provide BC Hydro with a completed claim for review by June 30th of each year. The claim must include a Declaration of the estimated energy consumption impact of the project or event, the best available supporting background and technical documentation related to the project or event, and must be signed by a Professional Engineer (P.Eng), Certified Measurement and Verification Professional, or Officer of the company. For greater certainty, where BC Hydro has advised the customer that a project or event is subject to annual verification, and the customer does not submit a completed claim by June 30th, BC Hydro may set the verified energy consumption impact of the project or event to zero for that year. Where the project is subject to end of Customer-funded DSM Project Duration in accordance with section [4.1.8](#), and the customer does not submit the required documentation for annual verification of the project by June 30th, BC Hydro will use the verified annual energy savings for the project from the most recent fiscal year.
- 6.1.4 The Engineering Review will require, at a minimum, a completed “Stage 1 Review” (described below) for BC Hydro to verify and accept the estimated energy consumption impact of a project or event. Stage 2 and Stage 3 Reviews provide for a progressive refinement of energy consumption impact accuracy, and may be requested by BC Hydro, acting reasonably, to verify the ongoing energy consumption impact of a project or event.

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Stage 1 Review: Initial Engineering Estimate

The purpose of the Stage 1 Review is to determine an initial estimate of energy consumption impact based on the application of engineering principles to forecast assumptions of production and plant/system/equipment performance data used in the calculation.

Stage 2 Review: Refined Engineering Estimate

The purpose of the Stage 2 Review is to refine the Stage 1 Review estimate of energy consumption impact based on the application of engineering principles to actual production and plant/system/equipment performance data used in the initial engineering estimate calculation. This review may need to be updated on an annual basis to reflect the energy consumption impact of a project or event over a full year's operations.

Stage 3 Review: Impact Study

The purpose of the Stage 3 Review is to further refine and verify prior engineering estimates of energy consumption impact.

If an Impact Study is requested from BC Hydro, the Impact Study will be based on the application of an international protocol known as the International Performance Measurement and Verification Protocol (IPMVP). The savings calculation for this review uses continuous pre- and post-retrofit measurements of energy and significant energy driver variables. The Impact Study will apply the same criteria as BC Hydro would apply in evaluating a BC Hydro-funded DSM project. If the Impact on consumption is equal to or greater than 2 GWh per year, the Impact Study will be prepared by a

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third-party, acceptable to BC Hydro, and retained and paid for by the customer. If the impact on consumption is less than 2 GWh per year, the Impact Study may be prepared by the customer, by customer personnel acceptable to BC Hydro, and paid for by the customer.

The customer will deliver a copy of the Impact Study report for BC Hydro to review. BC Hydro will not be bound to accept the conclusions of the Impact Study, but may also rely on metering/billing data, or other available data, in making its determination. If BC Hydro determines that a second Impact Study is required to verify the change in consumption, BC Hydro will pay the cost of the second Impact Study.

6.2 Filing of CBL Determinations for Approval/Disputes

- 6.2.1 BC Hydro will submit all CBL determinations to the customer for review and comment prior to filing the CBL determinations with the Commission for approval.
 - 6.2.1.1 The Commission will approve CBLs prospectively on an interim basis, and retrospectively on a final basis.
 - 6.2.1.2 BC Hydro will only apply Energy CBL adjustments and energy bill adjustments to interim CBLs and not retroactively to CBLs that have been approved by the Commission on a final basis.
 - 6.2.1.3 Where the customer has discretion to request a tariff treatment under these CBL Determination Guidelines, the customer must submit the request to BC Hydro within the prescribed time period and the customer may not withdraw a request after the request has been accepted by BC Hydro. The

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customer bears any risks related to untimely submission of a request to BC Hydro, including the risk that the request will not be reflected in the CBL for a Billing Year because the Commission has already approved the CBL on a final basis.

- 6.2.2 If the customer proposes adjustments that are not defined in these CBL Determination Guidelines, BC Hydro will discuss the proposed adjustments with the customer. In cases where BC Hydro agrees with the customer's proposed adjustments and they are consistent with BC Hydro's overall rate design principles, BC Hydro will file the proposed CBL with the Commission. In cases where BC Hydro does not agree with the proposed adjustments and they are not consistent with BC Hydro's overall rate design principles, BC Hydro will file the CBL in accordance with the CBL Determination Guidelines. The customer can file its proposed CBL with the Commission and indicate that its CBL is under dispute. In these circumstances, BC Hydro and the customer will provide information where requested by the Commission. However, the Commission will determine the final CBL.

This process recognises that BC Hydro cannot anticipate precisely all adjustments that may be justifiable within the principles of the tariff. Where the Commission accepts an adjustment not previously accommodated in the tariff, and where the adjustment is not limited to a unique customer by Commission direction, BC Hydro will file an amendment to the CBL Adjustment Tariff Practices to accommodate similar adjustments in the future.

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6.2.3 If the customer disagrees with the CBLs as determined by BC Hydro, the customer can raise its dispute with the CBLs to the Commission. In that event, BC Hydro will file its CBL determination(s) with the Commission for approval, and the customer can notify the Commission that the determination(s) are under dispute. For billing purposes, BC Hydro will use the filed CBL determinations until such time as the CBL values have been finally determined and approved by the Commission, whereupon BC Hydro will make any necessary retroactive billing adjustments.

6.2.4 To the extent that the sum of the adjusted CBLs exceed the reasonably anticipated consumption of the non-exempt RS 1823 customers, CBLs may be pro-rated.

6.3 RS 1825 Initial CBL Determination – Customer Right of Withdrawal

6.3.1 The customer will have a period of 30 days following approval of the customer's initial CBL by the Commission within which the customer may, by written notice to BC Hydro, withdraw from taking service under RS 1825, and revert to taking service under RS 1823 instead. This right of withdrawal is available only when the customer first subscribes to take service under RS 1825, and is applicable only in respect of the initial CBL determination. If the customer exercises this right of withdrawal RS 1823 will apply from the commencement of the Billing Year, and BC Hydro will make any necessary billing adjustments.

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6.4 Change of Ownership of a Facility

- 6.4.1 The CBL and CBL adjustments which have been determined for a facility, and which have been approved by the Commission, are maintained for the facility even if there has been a change of ownership of the facility.
- 6.4.2 If a facility's load is part of an aggregated CBL and if there is a change of ownership of the facility, the facility's load will be disaggregated and an individual CBL will be determined for the facility. If the original owner chooses to keep its remaining facilities aggregated, a new adjusted aggregated CBL will be derived to reflect the removal of the sold facility. Otherwise the original owner may choose to disaggregate its CBL and have individual CBLs for each of its remaining facilities.

6.5 Recognition of Customer-funded DSM projects

- 6.5.1 The following provisions describe the process for a customer to request that BC Hydro recognise their Customer-funded DSM project(s) for the purposes of the Energy CBL adjustments and energy bill adjustments that apply to Customer-funded DSM projects under these CBL Determination Guidelines.
- 6.5.1.1 Customers retain the discretion to request that BC Hydro recognise their Customer-funded DSM project(s) for the purposes of these CBL Determination Guidelines, or to forgo the tariff treatments based on their assessment of the costs/benefits of project reporting and verification requirements, and the tariff treatments.
- 6.5.1.2 BC Hydro will not recognise a Customer-funded DSM project for the purposes of these CBL Determination Guidelines unless the customer

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submits a request in writing to BC Hydro for such recognition. In general, the customer should submit its request using BC Hydro's standard CBL Adjustment Request Form.

- 6.5.1.3 A DSM project that has not been submitted to BC Hydro with a request for recognition as a Customer-funded DSM project within 18 months following the project in-service date will not be eligible for recognition as a Customer-funded DSM project for the purposes of these CBL Determination Guidelines.
- 6.5.1.4 A customer requesting recognition of their Customer-funded DSM project must provide to BC Hydro the in-service date of the project and an estimate of the annual energy savings attributable to the project for verification by BC Hydro pursuant to section [6.1](#).
- 6.5.1.5 BC Hydro will verify whether the project is DSM, verify the annual energy savings and in-service date of the project, and confirm the Customer-funded DSM project Duration that will apply in accordance with Attachment A. BC Hydro retains the right, acting reasonably, to annually verify the energy savings and continued operation of the DSM project.
- 6.5.1.6 A custom Customer-funded DSM project Duration, not to exceed 20 years, may be determined for a Customer-funded DSM project pursuant to Attachment A if the customer can demonstrate that it assumed a longer Duration would apply when making the original investment decision. To qualify, the customer must provide a Declaration, signed by a Professional Engineer (P.Eng) or Officer of the Company, that states the technical and financial project assumptions used by the customer to justify the original

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DSM project investment decision. The Declaration must clearly describe how energy savings duration (and the possibility of custom duration) was considered. Acting reasonably, BC Hydro may request that the customer provide supporting historical documentation (e.g. business case, executive memo, financial model) for review.

- 6.5.1.7 A custom Customer-funded DSM project Duration, not to exceed 20 years, may be determined for the annual energy savings attributable to an efficient new plant that meets the requirements of sections [3.1.5.6](#) and [6.5.1.6](#). For qualifying efficient new plant, the custom Customer-funded DSM project Duration that is determined by BC Hydro will apply to the energy savings of the efficient new plant in its entirety (i.e., to all Customer-funded DSM projects undertaken as part of the efficient new plant).

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CBL Adjustment Tariff Practices

The tariff practices are used by BC Hydro, with the CBL Determination Guidelines, to determine whether to include requested adjustments in Energy CBLs. The tariff practices only cover practices that are not already defined in the provisions of the CBL Determination Guidelines, and that have been accepted by the Commission under section [6.2.2](#) of the CBL Determination Guidelines. All Energy CBLs and any decision to put a customer on RS 1823A will be subject to final approval by the BCUC.

Section references in the tariff practices are to the sections of the CBL Determination Guidelines.

The tariff practices developed up to March 31, 2017 have been consolidated into the CBL Determination Guidelines.

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ATTACHMENT A

CUSTOMER-FUNDED DSM PROJECT DURATION

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The period of time (duration) over which Energy CBL adjustments and energy bill adjustments will apply to Customer-funded DSM reflects the concepts of DSM eventually becoming part of normal plant operations and the economic payback driver for customers to undertake DSM projects at their expense.

The Customer-funded DSM project Duration will be determined for each Customer-funded DSM project in accordance with the DSM project type classifications described below:

- Two years duration for Operational & Maintenance (O&M) DSM measures;
- Five years duration for Process Control/Procedure Optimization DSM measures;
- Ten years duration for 'Hard-wired' Equipment DSM measures, or;
- Custom duration for significant and complex DSM measures.

Operational and Maintenance (O&M) Measures

Duration = two years

Examples:

1	Industrial operational and maintenance measures including: compressed air leak repair, equipment shut-down when not in use, set point adjustment, maintenance/tuning for improved performance.
2	Screw or snap in Lamps
3	Refiner plate segments
4	Production rate effect for time of day pulping
5	Adjustments to lighting control operations (without commissioning)

Note: O&M measures may be eligible for reclassification to 5 years if they are implemented with a formal sustainment plan and/or mandatory work practices/procedures.

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Process Controls and Procedure Optimization**Duration = five years****Examples:**

1	Industrial operational and procedural measures supported by a formal program to maintain savings, such as metering with alarms, documented changes to standard operating procedures, etc.
2	Improved process control
3	Advanced quality control on refiners
4	Grinding optimization (mining)
5	De-lamping without luminaire modification
6	New lighting controls including time clocks, adaptive street lighting, occupancy sensors or photocells

Hard-wired Equipment**Duration = ten years****Examples:**

1	High efficiency fans
2	High efficiency pumps
3	High efficiency compressors
4	Conveyance (conveyors, pneumatic to mechanical)
5	High efficiency refrigerant compressor or condenser
6	Variable speed drives (pumping, air displacement)
7	Efficient rotors for pulp screening

For significant and complex DSM projects, the customer may apply to BC Hydro for determination of a custom Customer-funded DSM project Duration for the project, which may be more or less than ten years, subject to Commission approval.

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Re-classification of Customer-funded DSM Projects

If the customer makes alterations or additions to a Customer-funded DSM project, the customer may request that BC Hydro re-classify the project into a different DSM project type classification above.

To qualify, the altered DSM project must meet the criteria for the new classification. The customer must provide a Declaration, signed by a Professional Engineer (P.Eng) or Officer of the Company, to document the alterations that were made.

Early termination of Customer-funded DSM project Duration

The Customer-funded DSM project Duration will not be reduced or terminated early if the DSM measure becomes part of normal plant operations sooner than originally expected (i.e., the original baseline used to verify the DSM project will be fixed for the purpose of determining ongoing energy savings).

However, the Customer-funded DSM project Duration will be terminated early if the customer provides BC Hydro with notice that: (1) the DSM project has ceased to operate; (2) the customer's plant is shut-down; or (3) plant operations have been modified in a way that eliminates the continued operation of the project to realize energy savings prior to the end of the initially assigned Duration.

This would include the situation where the customer has installed a new DSM project(s) that bypasses the previously installed (original) DSM project(s) in a way that eliminates the energy savings of the original project(s). If the original Customer-funded DSM project is verified to have terminated early, the original Customer-funded DSM project Duration will end effective the date of project termination and the Energy CBL will be adjusted in accordance with section [4.1.8](#).

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A new Customer-funded DSM project Duration will be determined for the new DSM project in accordance with the DSM project type classifications described above.

Customer-funded DSM Duration Suspension

Where a customer plant has been shut-down for a period of time and then is restarted, the Customer-funded DSM project Duration of any Customer-funded DSM projects verified to remain installed and operational at the plant will be extended by the number of days between the date of plant shut-down and the date of plant restart (the suspension period).

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ATTACHMENT B
GUIDELINES FOR RS 1823 CUSTOMERS WITH SELF-GENERATION FACILITIES

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1 OVERVIEW

The guidelines in this Attachment B apply to the determination and adjustment of the Energy CBL for each customer's plant taking service under Rate Schedule 1823 (RS 1823 – Transmission Service – Stepped Rate) where electrical power generation facilities 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.

These guidelines provide certainty and transparency with respect to the administration of the CBL Determination Guidelines in relation to Self-Generation Facilities by providing information applicable to RS 1823 customers that make self-generation output:

- for self-supply in the absence of a contract with BC Hydro in relation to the self-generation output of a generating facility, and that want to have their Incremental Self-Generation Output recognised by BC Hydro for the purpose of section [4.4.1.4](#) of the CBL Determination Guidelines; and/or
- in accordance with a contract with BC Hydro: (1) for self-supply under a Load Displacement Agreement (**LDA**); and/or (2) for sale to BC Hydro under an Electricity Purchase Agreement (**EPA**).

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2 DEFINITIONS

Terms used in this Attachment B have the meaning given to them in the CBL Determination Guidelines. In addition, the following terms have the following meanings respectively:

- (a) **COD** means the commercial operation date or in-service date as specified in the applicable EPA or LDA.
- (b) **Contracted GBL** means a customer's annual, seasonal, monthly or hourly contractual commitment for self-supply from a Contracted Generating Unit that must be satisfied to obtain financial payments or incentives pursuant to an EPA and/or LDA in relation to self-generation output in excess of the Contracted GBL. A Contracted GBL can represent a commitment for self-supply from a single generating unit or multiple generating units.
- (c) **Contracted Generating Unit** means a Self-Generation Facility that is used to make self-generation output in accordance with an EPA or LDA.
- (d) **Declaration of Generation** means a declaration by the customer, signed by a Professional Engineer (P. Eng.) or an Officer of the Company, stating the gross metered output for a 365-day period for each Non-Contracted Generating Unit at the same site as the customer's plant and that is accompanied by the best available supporting data and technical documentation (e.g., daily metered generation output) provided in an electronic format suitable for review and verification by BC Hydro.

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- (e) **Electricity Purchase Agreement (EPA)** means an agreement between BC Hydro and a customer establishing the terms and conditions under which BC Hydro purchases self-generation output produced at the customer's Contracted Generating Unit. The EPA specifies the Contracted GBL.
- (f) **Incremental Self-Generation Output** means the verified annual amount of energy produced from a Non-Contracted Generating Unit in excess of the applicable Non-Contracted Site GBL.
- (g) **LDA Energy** means the portion of the customer's gross metered annual self-generation output that is deemed to be energy savings attributable to the load displacement project and that is less than or equal to the firm energy generation obligations under a LDA, and that reduces an equivalent portion of the customer's RS 1823 energy purchases.
- (h) **Load Displacement Agreement (LDA)** means an agreement between BC Hydro and a customer establishing the terms and conditions under which BC Hydro provides the customer with a financial incentive to make self-generation output for self-supply from a Contracted Generating Unit that is deemed to be energy savings attributable to the load displacement project, and that reduces an equivalent portion of the customer's RS 1823 energy purchases.
- (i) **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 Energy CBL for the customer's plant pursuant to section [3.0](#) (Initial Energy CBL) or section [4.3](#) (Reset Energy CBL) of the CBL Determination Guidelines, as applicable. Where there was no generating unit at the same site as the customer's plant during the 365-day period used to determine the Initial Energy CBL, the Non-Contracted GBL will be zero. A

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Non-Contracted GBL may be subsequently determined in accordance with section [3.4.2](#) of this Attachment B.

- (j) **Non-Contracted Generating Unit** means a Self-Generation Facility that is used to make self-generation output in the absence of a contract with BC Hydro in relation to any portion of that output.
- (k) **Non-Contracted Site GBL** means the sum of the Non-Contracted GBLs for each Non-Contracted Generating Unit at the same site as the customer's plant. Where both thermal and hydroelectric generating units exist at the same site as the customer's plant, the Non-Contracted Site GBL (thermal) is the sum of the Non-Contracted GBLs for each thermal generating unit and the Non-Contracted Site GBL (hydroelectric) is the sum of the Non-Contracted GBLs for each hydroelectric generating unit. Where there is only one Non-Contracted Generating Unit at the same site as the customer's plant, the Non-Contracted Site GBL (thermal or hydroelectric, as applicable) is equal to the Non-Contracted GBL for that generating unit. Where there was no generating unit at the same site as the customer's plant during the 365-day period used to determine the Energy CBL, the Non-Contracted Site GBL will be zero.
- (l) **Non-Firm ESA Offset Energy** means the amount of Non-Firm Excess Energy nominated by the customer, where permitted by and in accordance with an EPA, to offset an equivalent portion of annual RS 1823 energy purchases. The Non-Firm ESA Offset Energy is an energy bill adjustment as set out in section [4.5](#) of this Attachment B.
- (m) **Non-Firm Excess Energy** means the annual amount of energy produced from a Contracted Generating Unit under an EPA in excess of the firm energy delivery obligations set out in the EPA. Any Non-Firm Excess Energy that is not nominated

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as Non-Firm ESA Offset Energy will be sold to BC Hydro under the terms of the EPA and no further treatment under this Attachment B will apply.

- (n) **Non-LDA Energy** means the annual amount of energy produced from a Contracted Generating Unit under an LDA in excess of the firm energy generation obligations set out in the LDA. This excess energy is an energy bill adjustment as set out in section [4.5](#) of this Attachment B.
- (o) **Point of Delivery** is as defined in the customer's Electricity Supply Agreement (Tariff Supplement No. 5).
- (p) **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.

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3 CUSTOMERS WITH NON-CONTRACTED GENERATING UNITS

The provisions of this section [3.0](#) apply to RS 1823 customers that have an Energy CBL and have Non-Contracted Generating Unit(s).

If such a customer requests that BC Hydro recognise the output of such Non-Contracted Generating Unit(s) for the purposes of the CBL Determination Guidelines and this Attachment B, a Non-Contracted Site GBL will be determined. The purpose of the Non-Contracted Site GBL is to define Incremental Self-Generation Output that physically displaces annual RS 1823 energy purchases relative to the Energy CBL and that may be eligible for energy bill adjustment in accordance with this section [3.0](#) and section [4.4.1.4](#) of the CBL Determination Guidelines.

3.1 Recognition of Incremental Self-Generation Output

Customers that do not have an EPA or LDA retain the discretion to request that BC Hydro recognise their Incremental Self-Generation Output for the purposes of this section [3.0](#) and section [4.4.1.4](#) of the CBL Determination Guidelines, or to forgo these tariff treatments based on their assessment of the costs/benefits of reporting and verification requirements, and the tariff treatments.

3.1.1 Declaration of Generation

A customer requesting recognition of their Incremental Self-Generation Output must provide to BC Hydro:

- a Declaration of Generation for verification in relation to the 365-day period used to determine the Energy CBL pursuant to section [3.0](#) or [4.3](#) of the CBL Determination Guidelines, as applicable; and

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- a Declaration of Generation for verification in relation to the Billing Year for which energy bill adjustment treatment is requested.

A customer requesting such recognition in relation to a Billing Year must provide the Declarations of Generations to BC Hydro by April 15 immediately following the Billing Year.

3.1.2 Non-Contracted GBL Determination

For customers that submit the Declarations of Generation, BC Hydro will determine a Non-Contracted GBL for each Non-Contracted Generating Unit at the same site as the customer's plant.

For customers that submit the Declarations of Generation, BC Hydro will also determine a Non-Contracted Site GBL (thermal) for the thermal generating unit(s) and a Non-Contracted Site GBL (hydroelectric) for the hydroelectric generating unit(s), if any. For greater certainty, the Non-Contracted GBLs for generating units at different sites may not be aggregated.

BC Hydro will also pro-rate the Non-Contracted GBL where a Billing Year is a leap year. For leap years, the customer's Non-Contracted GBL will be increased by multiplying the customer's Non-Contracted GBL by the ratio (366/365). For the Billing Year following a leap year, the customer's Non-Contracted GBL will be decreased by multiplying the customer's Non-Contracted GBL by the ratio (365/366).

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3.1.3 Verification of Annual Incremental Self-Generation Output

BC Hydro will not recognise Incremental Self-Generation Output unless the customer submits the Declarations of Generation for verification in accordance with section [3.1.1](#) of this Attachment B. For customers that submit the Declarations of Generation, BC Hydro will verify the amount, if any, of Incremental Self-Generation Output in excess of the Non-Contracted Site GBL (thermal) and Non-Contracted Site GBL (hydroelectric), as applicable.

3.2 Treatment of Incremental/Decremental Thermal Self-Generation Output

For the purposes of determining whether the Energy CBL for a customer's plant is reset under section [4.3](#) of the CBL Determination Guidelines, the customer's previous year's actual energy billed under RS 1823 will be increased by the verified Incremental Self-Generation Output from thermal Non-Contracted Generating Unit(s) during the previous Billing Year, in accordance with section [4.4.1.4](#) of the CBL Determination Guidelines.

If the output of thermal Non-Contracted Generating Unit(s) was less than the Non-Contracted Site GBL (thermal), there was no Incremental Self-Generation Output during the previous Billing Year and thus no energy bill adjustment. All other things being equal, annual thermal generation output that is less than the Non-Contracted Site GBL (thermal) will result in increased RS 1823 purchases relative to the Energy CBL, but have no other specific treatment.

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3.3 Treatment of Incremental/Decremental Hydroelectric Self-Generation Output

3.3.1 Variable Output Hydroelectric Self-Generation Facilities

Where a customer has hydroelectric Non-Contracted Generating Unit(s), the Energy CBL and Non-Contracted Site GBL (hydroelectric) will be adjusted each Billing Year to reflect the verified impact of variable water inflows on actual hydroelectric self-generation output used to supply a portion of the customer's plant load during the Billing Year and on annual RS 1823 energy purchases from BC Hydro, as follows.

- If annual hydroelectric self-generation output used to supply a portion of the customer's plant load is less than the Non-Contracted Site GBL (hydroelectric) as a result of decreased water inflows, the Non-Contracted Site GBL (hydroelectric) will be decreased by the amount of the difference and the Energy CBL will be increased by the same amount.
- If annual hydroelectric self-generation output used to supply a portion of the customer's plant load is more than the Non-Contracted Site GBL (hydroelectric) as a result of increased water inflows, the Non-Contracted Site GBL (hydroelectric) will be increased by the amount of the difference and the Energy CBL will be decreased by the same amount.

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3.3.2 Upgrades to Hydroelectric Self-Generation Facilities

Where a customer has completed capital investments in an hydroelectric Non-Contracted Generating Unit resulting in a verified permanent increase in self-generation output for the same volume of water inflow, BC Hydro will verify the portion of hydroelectric self-generation output that is Incremental Self-Generation Output attributable to the capital upgrade project and the portion attributable to variable water inflows.

For the purposes of determining whether the Energy CBL for the customer's plant is reset under section [4.3](#) of the CBL Determination Guidelines, the customer's previous year's actual energy billed under RS 1823 will be increased by the verified Incremental Self-Generation Output from the upgraded hydroelectric Non-Contracted Generating Unit during the previous Billing Year, in accordance with section [4.4.1.4](#) of the CBL Determination Guidelines. The verified portion of hydroelectric self-generation output attributable to variable water inflows is treated in accordance with section [3.3.1](#) above.

3.4 Energy CBL Revisions

Pursuant to section [4.0](#) of the CBL Determination Guidelines, the Energy CBL will be subject to revision (adjustments and resets) annually, and at other times, to reflect the long term changes affecting the customer's plant as set out in that section. The Energy CBL will also be subject to adjustments to reflect the long term changes affecting a Non-Contracted Generating Unit which impact the customer's annual RS 1823 energy purchases, as described in this section.

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3.4.1 RS 1823 – Energy CBL Adjustment

The Energy CBL will be subject to adjustment between Billing Year anniversary dates in relation to a permanent change to the output of a Non-Contracted Generating Unit resulting in a permanent change in RS 1823 energy purchases. When the Energy CBL is adjusted under section [3.4.1.1](#) below, the Non-Contracted GBL and Non-Contracted Site GBL are also adjusted to ensure that the Non-Contracted Site GBL continues to represent normal historical annual self-generation output over a 365-day period from which Incremental Self-Generation Output may be determined.

3.4.1.1 Permanent Change in Self-Generating Equipment

BC Hydro will apply the following criteria to a permanent change in a Non-Contracted Generating Unit resulting in a verified permanent decrease in annual self-generation output and a proportional increase in the customer's annual RS 1823 energy purchases from BC Hydro:

- the customer's annual RS 1823 energy purchases must increase by at least 5 per cent of the Energy CBL or 10 GWh, whichever is less, as a result of the equipment change; and
- the equipment change must result from an unplanned failure of a component critical to the operation of the Self-Generation Facilities.

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To qualify, the customer must provide, within 90 days of the in-service date of the permanent equipment change, written notice to BC Hydro of the equipment change and an engineering estimate of the decrease in self-generation output from the Non-Contracted Generating Unit and associated proportional increase in RS 1823 energy purchases that has been signed by a Professional Engineer (P. Eng.), Certified Measurement and Verification Professional, or Officer of the company. BC Hydro will review the request in consultation with the customer, to verify the energy impacts. Acting reasonably, BC Hydro may also require that the impact on generation and purchases be verified by an Impact Study (as described in section [6.1.4](#) of the CBL Determination Guidelines).

If the customer has a qualifying permanent change in self-generating equipment, the Energy CBL and Non-Contracted GBL will be adjusted in successive steps as follows:

- The current year's Energy CBL will be increased and the Non-Contracted GBL decreased effective as of the in-service date of the permanent equipment change, in proportion to the verified increase in energy purchases and decrease in self-generation output, respectively, between the in-service date and the end of the Billing Year.
- At the start of the next Billing Year, the Energy CBL and Non-Contracted GBL will be adjusted to reflect the balance of the verified annual changes in energy purchases and self-generation output, respectively, attributable to the permanent equipment change.

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3.4.2 RS 1823 – Annual Energy CBL and Non-Contracted GBL Resets

If the customer's Energy CBL is reset under section [4.3](#) of the CBL Determination Guidelines, each Non-Contracted GBL will also be reset to the gross output of the generating unit used to serve an equivalent portion of the customer's plant load during the same 365-day period used to determine the reset Energy CBL.

If there is an aggregation of customer plants and the aggregated Energy CBLs are reset under section [5.2](#) of the CBL Determination Guidelines, the Non-Contracted GBL for each generating unit at the customer's plants within the aggregation will be reset as set out above.

3.4.3 Transfer to and from RS 1823A

In addition to the provisions of section [4.6](#) of the CBL Determination Guidelines, a customer taking service under RS 1823 will also be transferred to service under RS 1823A as a result of the permanent or partial shut-down or replacement of a Non-Contracted Generating Unit, as described below. Any decision to transfer a customer to service under RS 1823A will be subject to final approval by the Commission. For greater certainty, if a customer having a permanent or partial shut-down or replacement of a Non-Contracted Generating Unit proposes that its plant not be transferred to RS 1823A (i.e., that the plant remain on RS 1823), the process set out in section [6.2.2](#) of the CBL Determination Guidelines will apply to such proposal.

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3.4.3.1 *Permanent or Partial Shut-down of Self-Generation Facilities.*

A customer's plant will be transferred to RS 1823A at the time the Non-Contracted Generating Unit is permanently shut-down (including retirement or removal), for an initial period of 12 Billing Periods. This treatment will also apply if the Non-Contracted Generating Unit is partially shut-down (including indefinite shut-downs, de-rating and de-commissioning) and the customer has made a formal request to increase its ESA Contract Demand. Service under RS 1823A will commence on the date the Non-Contracted Generating Unit is permanently or partially shut-down. If the ESA Contract Demand increase request is withdrawn before the ESA change becomes effective, the RS 1823A treatment will continue to apply.

The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists after the permanent or partial shut-down of the Non-Contracted Generating Unit to reflect the new "normal operations" from which an Energy CBL can be reasonably determined pursuant to section [3.1](#) of the CBL Determination Guidelines.

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3.4.3.2 *Replacement of Self-Generation Facilities.*

A customer's plant will be transferred to or remain on RS 1823A, effective as of the in-service date of a replacement Non-Contracted Generating Unit, for an initial period of 12 Billing Periods. The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose is to ensure that sufficient energy consumption history exists after the replacement Non-Contracted Generating Unit is in-service to reflect the new "normal operations" from which an Energy CBL can be reasonably determined pursuant to section [3.1](#) of the CBL Determination Guidelines.

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4 CUSTOMERS WITH CONTRACTED GENERATING UNITS

The provisions of this section [4](#) apply to RS 1823 customers that have an Energy CBL and have or enter into a new or amended EPA and/or LDA in relation to self-generation output.

The Contracted GBL is an express or implied term of the EPA or LDA. Any adjustment and/or reset of the Energy CBL in accordance with the CBL Determination Guidelines and this Attachment B will have no impact on the Contracted GBL or any other term or condition set out in the EPA or LDA, as applicable.

4.1 Transfer to RS 1823A

Subject to section [4.2](#) below, if a customer enters into a new or amended EPA and/or LDA the customer's plant will be transferred to RS 1823A for an initial period of 12 Billing Periods effective as of the COD. The customer's plant may be maintained on RS 1823A beyond the initial 12 Billing Periods based on an assessment in consultation with the customer. The purpose of this assessment is to ensure that sufficient energy consumption history exists to reflect the new "normal operations" of simultaneous electricity self-generation and purchases from which an Energy CBL can be reasonably determined pursuant to section [3.1](#) of the CBL Determination Guidelines.

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4.2 Exceptions to Transfer to RS 1823A**4.2.1 EPA and/or LDA for New Self-Generation Facilities**

Where a customer did not previously have any Self-Generation Facilities and installs new Self-Generation Facilities pursuant to an EPA and/or LDA, the customer's plant will not be transferred to RS 1823A (i.e., the plant will remain on RS 1823), and the Energy CBL for the customer's plant will be adjusted in accordance with section [4.3](#) of this Attachment B.

4.2.2 EPA and/or LDA with a Contracted GBL equal to the Non-Contracted Site GBL

Where a customer enters into a new or amended EPA and/or LDA in relation to existing Self-Generation Facilities and the annual Contracted GBL is equal to the Non-Contracted Site GBL, the customer's plant will not be transferred to RS 1823A (i.e., the plant will remain on RS 1823), and the Energy CBL for the customer's plant will be adjusted in accordance with section [4.3](#) of this Attachment B.

4.2.3 EPA and/or LDA with a Contracted GBL not equal to the Non-Contracted Site GBL

If a customer entering into an EPA and/or LDA, where the annual Contracted GBL under the EPA and/or LDA is not equal to the Non-Contracted Site GBL, proposes that its plant not be transferred to RS 1823A (i.e., that the plant remain on RS 1823), BC Hydro will discuss the customer's proposal with the customer. In cases where BC Hydro agrees with the customer's proposal and it is consistent with BC Hydro's

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overall rate design principles, BC Hydro will file the proposed Energy CBL with the Commission in accordance with section [6.2.2](#) of the CBL Determination Guidelines. This process recognises that BC Hydro cannot anticipate precisely all circumstances where it might be appropriate for the customer's plant to remain on RS 1823.

In cases where BC Hydro does not agree with the customer's proposal and it is not consistent with BC Hydro's overall rate design principles, BC Hydro will propose to the Commission that the customer's plant be transferred to RS 1823A. The customer can file its proposed Energy CBL with the Commission and indicate that its CBL is under dispute following the process outlined in section [6.2.2](#) of the CBL Determination Guidelines.

4.3 Energy CBL Adjustment for EPA or LDA

If a customer enters into a new or amended EPA and/or LDA and the customer's plant is not transferred to RS 1823A pursuant to section [4.2.1](#) or [4.2.2](#) of this Attachment B, the Energy CBL will be adjusted in accordance with the following sections.

4.3.1 Energy CBL Adjustment for COD of EPA and/or LDA

If the COD occurs on the same day as the beginning of the Billing Year, the current year's Energy CBL will not be adjusted in relation to the COD of the new or amended EPA and/or LDA.

If the COD occurs during the Billing Year, the Energy CBL will be adjusted as follows.

- The current year's Energy CBL will be adjusted (increased or decreased) by the verified change in annual RS 1823 energy

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purchases attributable to the weighting of seasonal, monthly or hourly Contracted GBLs between the COD and the end of the Billing Year.

- The Energy CBL resulting from the application of the adjustment made above continues to be subject to reset at the beginning of the next Billing Year in accordance with section [4.3](#) of the CBL Determination Guidelines. If the Energy CBL is not reset at the beginning of the next Billing Year, the Energy CBL will be adjusted for that Billing Year to remove the impact of the CBL increase or decrease made pursuant to the paragraph above.

4.3.2 Energy CBL Adjustment in relation to LDA

If a customer enters into a LDA, the Energy CBL for the customer's plant, including the Energy CBL adjusted pursuant to section [4.3.1](#) above if applicable, will be adjusted as follows.

- The current year's Energy CBL will be decreased in proportion to the verified LDA Energy generated between the COD and the end of the Billing Year.
- In each subsequent Billing Year, the Energy CBL will be adjusted in proportion to the verified LDA Energy generated in the Billing Year. If there is an increase or decrease in the verified LDA Energy generated in the Billing Year relative to the previous Billing Year, the Energy CBL will be decreased or increased proportionately, respectively.

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4.3.3 Energy CBL adjustments in relation to other events

For greater certainty, Energy CBL adjustments in accordance with section [4.1](#) of the CBL Determination Guidelines will also continue to apply.

4.4 Treatment of “Temporary” Contracted GBL Adjustments

If the Contracted GBL is temporarily decreased in accordance with the terms of the EPA or LDA, as applicable, there will be no adjustment to the Energy CBL in relation to the temporary decrease.

If the temporary decrease in the Contracted GBL results in a temporary increase in annual RS 1823 energy purchases from BC Hydro, the verified incremental amount of purchased RS 1823 energy will be deducted from the customer’s previous year’s actual energy billed under RS 1823 prior to the application of the annual Energy CBL reset determination pursuant to section [4.3](#) of the CBL Determination Guidelines. For greater certainty, there will be no change to the customer’s actual energy billings under RS 1823. This provision ensures that a temporary increase in RS 1823 energy purchases during a single year (and which may not arise in any subsequent year) is not incorporated into a reset Energy CBL.

4.5 Treatment of Non-Firm ESA Offset Energy and Non-LDA Energy

For the purposes of determining whether the customer’s Energy CBL will be reset under section [4.3](#) of the CBL Determination Guidelines, the customer’s previous year’s actual energy billed under RS 1823 will be increased by the verified amount of any Non-Firm ESA Offset Energy and/or Non-LDA Energy, in accordance with section [4.4.1.4](#) of the CBL Determination Guidelines.

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Non-Firm ESA Offset Energy and Non-LDA Energy will only be an energy bill adjustment for the Billing Year in which it is generated to prevent a downward Energy CBL reset pursuant to section [4.3.2](#) of the CBL Determination Guidelines.

Non-Firm ESA Offset Energy and Non-LDA Energy will not be incorporated into an Energy CBL that is reset to adjusted energy purchases pursuant to section [4.3.1](#) of the CBL Determination Guidelines. This provision ensures that Non-Firm ESA Offset Energy and Non-LDA Energy generated in a single year (and which may not arise in any subsequent year) is not incorporated into a reset Energy CBL.

4.6 Expiry of LDA or EPA

At the end of the LDA term, the Energy CBL adjustment in effect for the previous Billing Year will remain in effect for the current and subsequent Billing Years. For greater certainty, the Energy CBL will not be adjusted in relation to expiry of the LDA.

At the end of the EPA term, the Energy CBL will not be adjusted for the current and subsequent Billing Years in relation to expiry of the EPA.

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