

# **A Guide to the Large General Service Conservation Rate**

BC Hydro  
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## Executive summary

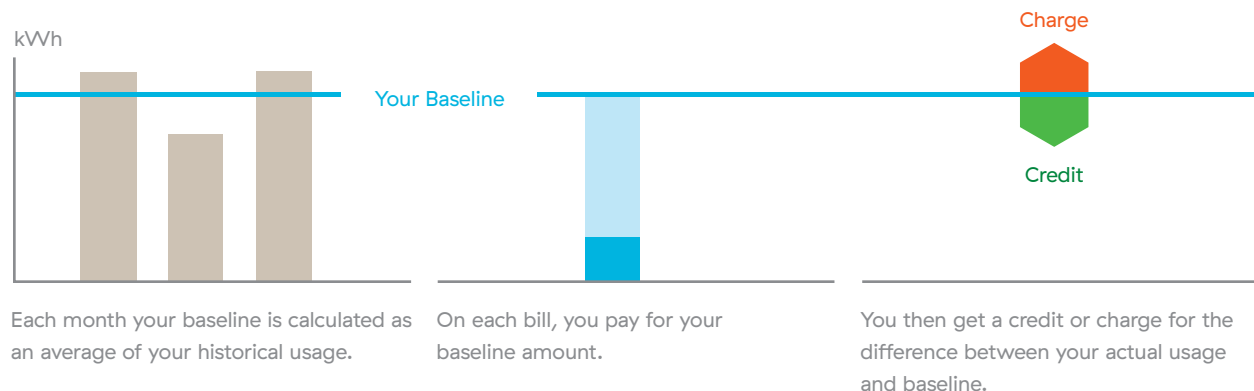
Large General Service (LGS) accounts pay for electricity according to the LGS Conservation Rate—a rate structure that encourages energy conservation and efficiency.

The LGS Conservation Rate encourages you to use less than your average historic usage, called your baseline. Using less than your baseline results in a credit on your bill and using more results in a charge.

More specifically, on each bill you pay for your total energy usage in two parts:

- In Part 1, you pay for your baseline amount of energy—your account's average energy usage during the month.
- In Part 2, you receive a credit for using less electricity than your baseline, or a charge for using more.

A portion of the Part 2 credits and charges will be at a higher price, giving your organization an opportunity to save more money with energy conservation.



This document details how the LGS Conservation Rate encourages energy conservation and efficiency. It includes information about how your baselines are calculated and special considerations for new accounts and those experiencing unusual energy usage changes.

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# Large General Service (LGS) Accounts

LGS is one of three rate categories for BC Hydro's business customers.

Each of your electricity meters is typically considered a separate account and is assigned a rate category based on total annual energy usage or annual peak demand (a measure of your highest rate of usage).

Accounts that use at least 550,000 kilowatt hours (kWh) of electricity per year or have an annual peak demand above 150 kilowatts (kW) are billed as an LGS account. If you have an LGS account, your rate schedule (the code that appears on your bill) is 1600, 1601, 1610 or 1611.

On each bill, customers with LGS accounts see:

- A basic charge to partially cover the fixed costs of service,
- An energy charge for their total electricity usage measured in kWh
- A demand charge for their peak demand, the highest rate of electricity usage, measured in kW
- If applicable, a power factor surcharge,
- And a rate rider, a small percentage applied to the total charges.

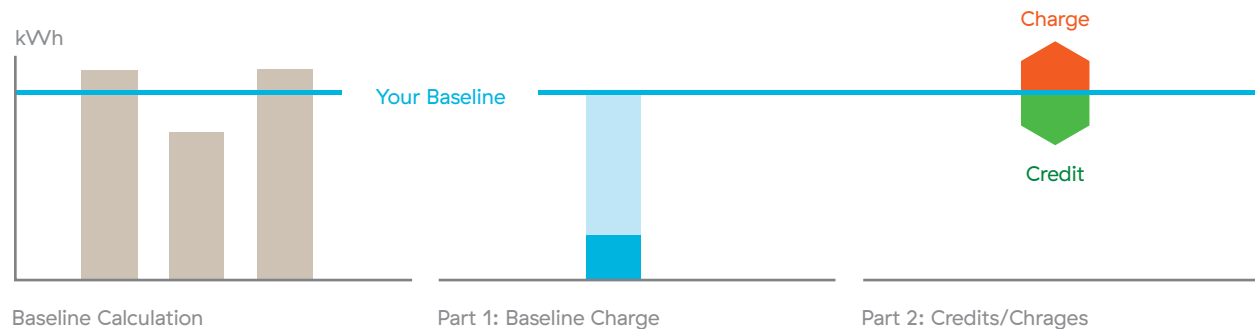
Other discounts and minimum charges may also apply.

For more details, see the online pricing table at [bchydro.com/rates](https://bchydro.com/rates).

# The LGS Conservation Rate

The LGS Conservation Rate encourages you to use less than you have in the past.

The LGS Conservation Rate encourages you to use less electricity than your average historic usage (called your baseline). Using less electricity than your baseline results in a credit on your bill. Using more than your baseline results in a charge.



## Baseline calculation:

The LGS Conservation Rate starts with your baselines. For each month, BC Hydro calculates your baseline—your average historic energy usage in the month. Your baselines are unique to your account and are updated every year to ensure they reflect your account’s most recent energy usage.

## Pay for your baseline (Part 1 of your Energy Charge)

The Energy Charge section of your bill, where you pay for your total energy usage, has two parts. In Part 1, you pay for your baseline amount of energy. You pay one price (Tier 1) for up to 14,800 kWh and a second, lower price (Tier 2) for any additional kWh in your baseline.

## Credits and charges (Part 2 of your Energy Charge)

In Part 2 of your Energy Charge, you get a credit or charge for the kWh difference between your actual usage and your baseline. You get a credit if you use less than your baseline and a charge if you use more.

There is no delay between when you pay for your baseline (in Part 1) and when you receive a credit or charge for the difference between your actual usage and baseline (in Part 2). If your actual usage is equal to your baseline, there is no Part 2 credit or charge.

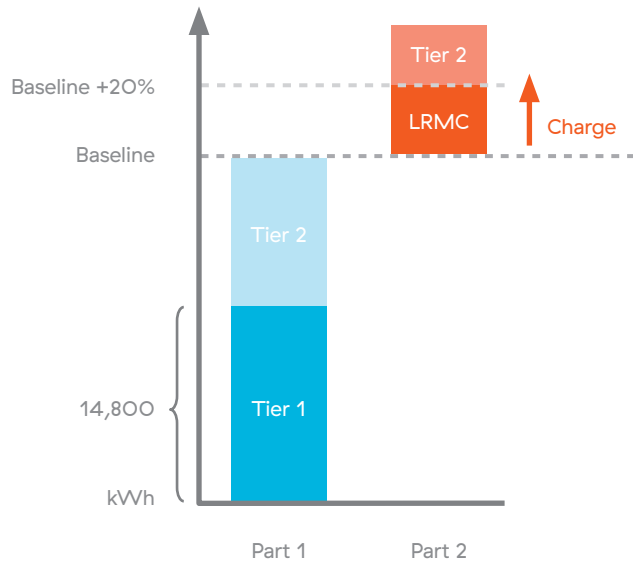
To encourage conservation, a portion of your credits and charges is at a higher price that more closely reflects BC Hydro’s higher cost of new electricity supply. This price is also referred to as the long-run marginal cost-based price or LRMC. This higher price makes your credits and charges larger—giving your organization a bigger incentive to save money through energy conservation and efficiency.

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### Pricing for charges

You pay for each kWh you use above your baseline. The LRMC price applies to each kWh up to 20% above your baseline (in terms of kWh).

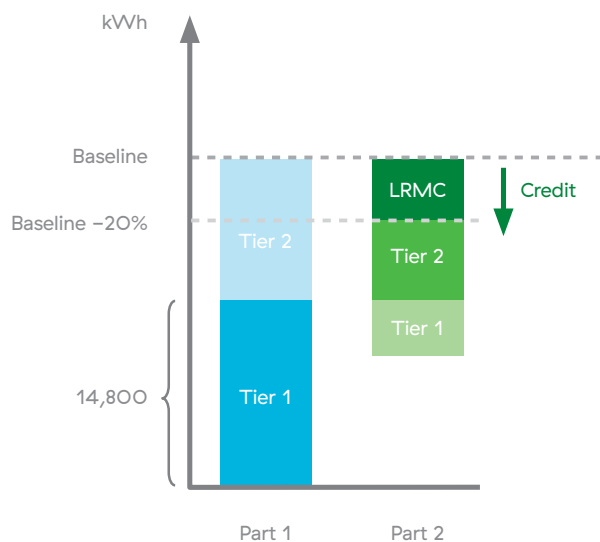
Tier 1 and Tier 2 prices apply to kWh beyond 20% above your baseline. The Tier 1 price applies until at least 14,800 kWh has been charged at Tier 1 and/or the LRMC price. Once at least 14,800 kWh has been charged at Tier 1 and/or the LRMC price, the lower Tier 2 price will apply to additional kWh.



### Pricing for credits

You get a credit for every kWh you save below your baseline. The LRMC price applies to kWh saved down to 20% below your baseline (in terms of kWh).

Tier 1 or Tier 2 prices apply to each kWh saved beyond 20% below your baseline. The credit for each of these kWh is equal to the price you paid for it in Part 1.



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## Your Baselines

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Your baselines are the starting point for the LGS Conservation Rate. Baselines reflect your average historic usage and are calculated for each month every year. How your baselines are calculated depends on how many years your account has been on the LGS Conservation Rate.

### Baselines for your first year on the LGS Conservation Rate

The calculation of your Year 1 baselines depends on the date your account opened.

If your account opened prior to July 1, 2009, your Year 1 baselines (for the 2011 calendar year) are based on your kWh usage in one of two historic periods:

- January 1, 2005 to December 31, 2007; or
- July 1, 2007 to June 30, 2010.

BC Hydro established your baselines using whichever of these two time periods your account had the highest total kWh usage. By using the period with the highest total usage, your baselines are higher—putting you in a better position to receive credits when you conserve energy.

If your account opened between July 1, 2009 and January 1, 2011, your Year 1 baselines (for the 2011 calendar year) were based on your kWh usage in 2010.

If your account opened after January 1, 2011, you will pay for your energy usage based on the special considerations for new accounts and your usage in your first year will become your baselines in your second year.

## Subsequent baselines

Every year, a new baseline is calculated for each month to reflect changes in your energy usage. Baselines for your second and subsequent years on the LGS Conservation Rate will begin to incorporate your usage since moving to the LGS Conservation Rate. In your fourth year on the LGS Conservation Rate, your baselines will become a rolling three—year average of your historic usage.

Baselines are calculated for each month. Using July as an example, your July baselines will be calculated as follows:

- Year 2 July baseline = (Year 1 July baseline + Year 1 July usage) / 2
- Year 3 July baseline = (Year 1 July baseline + Year 1 July usage + Year 2 July usage) / 3
- Year 4 July baseline = (Year 1 July usage + Year 2 July usage + Year 3 July usage) / 3

Moving forward, baselines become a rolling three—year average for each month.

Baselines are calculated three months at a time and updated online about six months before your account is billed on them.

When you login or register your account at [bchydro.com/login](https://bchydro.com/login), you can see your baselines and how they were calculated. Once you have registered, select the Baselines link on the Account Summary page.



## Baselines on your bill

Baselines are calculated for each calendar month, like January, February or March. Your bills, on the other hand, are based on your billing period—the time between the dates your meter is read. To fairly compare your baselines to your actual usage in the billing period, baselines are prorated to your billing period.

As an example, consider a billing period from March 9 to April 6.

To prorate the baselines, we first calculate the daily baseline amount for March and April.

- If the March baseline is 24,800 kWh, the daily baseline amount for March would be calculated as  $24,800 \text{ kWh} / 31 \text{ days of March} = 800 \text{ kWh/day}$ .
- If the April baseline is 21,000 kWh, the daily baseline amount for April would be  $21,000 \text{ kWh} / 30 \text{ days} = 700 \text{ kWh/day}$ .

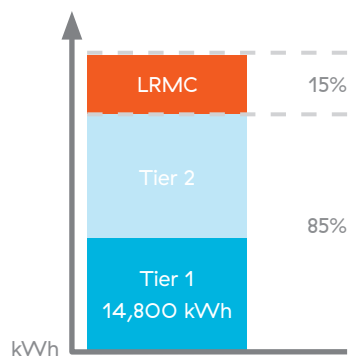
We then multiply these daily baseline amounts by the number of days of each month that are in the billing period. For this billing period of March 9 to April 6, there are 23 days of March and 6 of April.

- For the 23 days of March, the baseline amount is  $800 \text{ kWh/day} * 23 \text{ days} = 18,400 \text{ kWh}$ .
- For the 6 days of April, the baseline amount is  $700 \text{ kWh/day} * 6 \text{ days} = 4,200 \text{ kWh}$ .
- The prorated baseline for the billing period (the baseline that appears on the bill) would then be equal to  $18,400 + 4,200 = 22,600 \text{ kWh}$ .

## Special Considerations

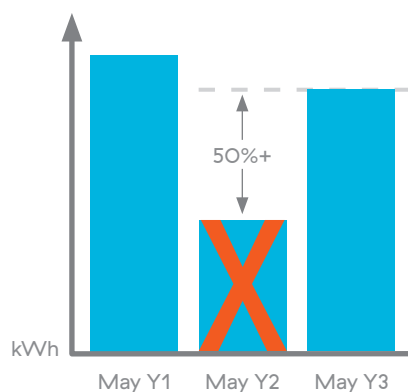
The LGS Conservation Rate has special considerations for new accounts, accounts experiencing significant energy usage growth and accounts with unusually low months of usage.

### New accounts



Until your account has a year of energy usage history to calculate baselines, you'll be billed differently. During this time, 15% of your usage in each billing period will be billed at the higher price that more closely reflects BC Hydro's cost of new electricity supply (LRMC). The remaining 85% of your usage will be billed at one price (Tier 1) up to 14,800 kWh and a second, lower price (Tier 2) for any additional usage. Once you have 12 full months of energy usage history, you will pay for electricity as described on page 5 (The LGS Conservation Rate section).

### Unusually low usage



Baseline calculations automatically exclude months with unusually low usage. When calculating each month's baseline, your usage in the same month for up to three years since moving to the LGS Conservation Rate is considered. The lowest month of usage is excluded from the baseline calculation if it is less than half of the second-lowest month of usage. This adjustment keeps your baselines higher—putting you in a better position to receive credits for conservation. This adjustment is permitted up to four times per BC Hydro's fiscal year (April to March of the following year).

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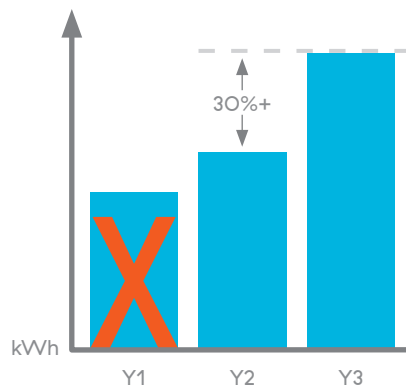
## Significant usage growth

The LGS Conservation Rate has special considerations for organizations using more electricity.

The higher price that more closely reflects BC Hydro's cost of new electricity supply only applies to additional usage up to 20% above your baseline. Usage beyond 20% above your baseline will be priced at Part 1 prices (Tier 1 and 2).

As a rolling three-year average of your usage, baselines will follow your changes in energy usage—growing with increases in your energy usage and declining with decreases. If your usage changes and then stays at a new higher level, the Part 2 charges on your bill will decrease as your baselines catch up with your usage. If your usage equals your baseline, there will be no Part 2 charges on your bill.

If your electricity usage increases more than 30% or 4,000,000 kWh annually, your baselines will automatically be calculated using the last two years of usage (rather than three). By removing the oldest year of energy usage, your baselines will reflect your increased usage more quickly—minimizing your Part 2 charges. BC Hydro will compare annual usage on a calendar basis, starting with a comparison between your third and second year on the LGS Conservation Rate.



Baselines are automatically adjusted if annual energy usage increases beyond 30% or 4,000,000 kWh.

## Increased electricity use due to capital investment (Tariff Supplement No 82)

Organizations who anticipate a significant, permanent increase in energy usage as a result of a capital investment in their facility may apply to BC Hydro for special pricing that may reduce their energy costs.

### Eligibility

To be eligible for this special pricing, your LGS account must meet all of the following criteria:

- You must apply before your capital investment is operating at full capacity.
- The forecasted increase in electricity use must be permanent and the result of a significant capital investment in your facility.
- The increase in your energy use must be significant:
- The forecast of average annual energy use after the Effective Date set out in your application must be at least 30% or 4 million kWh higher than the average annual energy consumption in the three-year period immediately prior to your application.
- If your expansion also addresses energy efficiency and/or the GHG effect of the capital investment and meeting all of the following criteria, the energy use increase threshold above may be reduced by the average annual kWh savings resulting from your energy efficiency project.
  - Your energy efficiency project must be part of the capital investment of your facility expansion.
  - Your energy efficiency project savings are expected to be more than 300,000 kWh per year on the account.
  - Your energy efficiency project savings are expected to persist for three years or more.
  - A higher energy-consuming investment alternative is available in the market.
  - Your energy efficiency project is subject to BC Hydro's Measurement and Verification processes.

### Special pricing structure

Once your application is approved, the special pricing will start on the Effective Date you selected in the application. This special pricing applies three years following the Effective Date.

Under this special pricing, your bill will have two main components:

1. Baselines for your pre-investment usage (three years prior to the Effective Date) will be calculated and billed at Part 1 prices. The same baselines will be held constant for three years after the Effective Date. (See the "Pay for your baseline" section on page 5 for details.)
2. All incremental usage that exceeds the pre-investment baselines will be billed similar to a new account (See the "New Accounts" section on page 10 for details).

During the three years of the special pricing, your account's energy charge is the sum of the two components described above.

After the third anniversary of the Effective Date, your account will be billed according to the LGS Conservation Rate. Consumption history for the previous three years, which includes pre-investment baselines and the incremental usage due to capital investment, will be used to generate the account's new baselines.

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## Application for special pricing

To be considered for this special pricing, you must submit an application to BC Hydro.

Applications to be considered for this special pricing must be made before your expansion begins operating at full capacity.

Your application for the special pricing must:

- Identify the account that is affected by your significant capital investment.
- Set out the date that the special pricing would take effect (the “Effective Date”), which must be between 90 and 365 days after your application date.
- Demonstrate that the significant capital investment is imminent, by including copies of press releases, newspaper reports, purchase orders, vendor invoices and other related documentation. A signed declaration proving the capital investment by an officer of your company will suffice.
- Report your monthly and annual energy consumption (in kWh) for the three years immediately prior to your application.
- Report your forecasted monthly and annual energy consumption (in kWh) for the three years after the Effective Date.
- If your expansion also addresses energy efficiency measures and/or GHG effects, additional information will be required.

If you would like to apply for this special pricing or would like more information, please contact your Key Account Manager or our Customer Service at **1 800 BCHYDRO (1 800 224 9373)**.

Upon receipt of your application, BC Hydro will contact you to discuss eligibility, possible cost savings and next steps.

## Failure to meet the electricity increase threshold

If you've successfully applied for special pricing, your energy increase must meet the required electricity increase threshold within a year of the special pricing taking effect. If your consumption does not reach the threshold one year after the Effective Date, your account will be determined to have not met the eligibility for the special pricing. Your account will be removed from the special pricing structure and will be charged for the difference between what you would have been charged under the LGS Conservation Rate and what you were charged under the special pricing provision since the Effective Date.

### Minimum energy charge

When energy usage is significantly below the baseline, the total bill could be zero or even result in a credit balance, despite electricity being used. To ensure that all customers pay for the electricity they use, a Minimum Energy Charge would replace Part 1 and Part 2 of your Energy Charge when the average price per kWh in a billing period (Energy Charge divided by total energy usage) is less than the Minimum Energy Charge price per kWh. The Minimum Energy Charge would equal the product of the Minimum Energy Charge price per kWh and the total kWh used during the billing period.

Other discounts and minimum charges may also apply.

For more details, see the online pricing table at [bchydro.com/rates](https://www.bchydro.com/rates).

## Moving between rate categories

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Business accounts can move between rate categories based on changes in annual peak demand and total annual energy usage.

Accounts move to different rate categories if certain thresholds for annual peak demand or total annual energy usage are met.

### Moving from LGS to MGS

LGS accounts that meet both of the following criteria move to the MGS rate category:

- Peak demand drops below 100 kW for 12 consecutive billing periods, and
- Total energy usage in that same 12 month period drops below 400,000 kWh

### Moving from LGS to SGS

An LGS account will move to the SGS rate category if peak demand drops below 35 kW for 12 consecutive billing periods.

### Moving to LGS from MGS or SGS

MGS or SGS accounts that meet either of the following criteria move to the LGS rate:

- Peak demand exceeds more than 150 kW more than six times in 12 consecutive monthly billing periods or three times in six consecutive bi-monthly billing periods.
- Total energy usage exceeds 550,000 kWh in any 12 month period

### Baselines

If an account moves to the LGS rate category from MGS or SGS, baselines will be calculated using the last 12 months of historic usage—reflecting the most recent usage that prompted the move.

# Glossary

Below are some of the basic terms used to describe electricity usage and other concepts in this document.

## Kilowatt (kW)

A kilowatt is equal to 1,000 watts and, is a unit of measure for the rate of electricity usage (also called demand). On each bill, MGS accounts are billed for their peak demand defined as their highest rate of electricity usage during the billing period.

## Kilowatt hour (kWh)

A kilowatt hour is a unit of measure for the total amount of electricity used. As an example, a 100-watt light bulb left on for 10 hours would use one kWh of energy. On each bill, MGS accounts are billed for their total electricity usage during the billing period, measured in kWh.

## Large General Service (LGS)

Large General Service is one of three general service rate categories for BC Hydro's business customers. Accounts that use more than 550,000 kWh of electricity per year or have an annual peak demand above 150 kW are billed as an LGS account. If you have an LGS account, your rate schedule (the code that appears on your bill) is 1600, 1601, 1610 or 1611.

## Long Run Marginal Cost (LRMC)

This is a price that more closely reflects BC Hydro's higher cost of new electricity supply. It is used in the LGS and MGS Conservation Rates to increase the financial incentive to conserve electricity. It applies to each additional kWh you use up to 20% above your baseline and to each kWh saved down to 20% below your baseline.

## Medium General Service (MGS)

Medium General Service is one of three general service rate categories for BC Hydro's business customers. Accounts that use less than 550,000 kWh of electricity per year and have an annual peak demand between 35 and 150 kW are billed as an MGS account. If you have an MGS account, your rate schedule (the code that appears on your bill) is 1500, 1501, 1510 or 1511.

## Rate category

Rate categories determine what rate structure your account is on. LGS is one of three rate categories for BC Hydro's business customers. Typically, each electricity meter you have is a separate account and is assigned to a rate category based on total annual energy usage or annual peak demand (a measure of your highest rate of usage).

## Rate structure

Rate structures define the way you pay for your electricity usage. For instance, an LGS account is billed for its electricity usage according to the LGS Conservation Rate.

## Small General Service (SGS)

Small General Service is one of three general service rate categories for BC Hydro's business customers. Accounts that have an annual peak demand below 35 kW are billed as an SGS account. If you have an SGS account, your rate schedule (the code that appears on your bill) is 1300, 1301, 1310 or 1311.

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