# All About Tariffs

Electricity tariffs are a way of measuring and billing electricity use. There are many different types of electricity tariffs. These differ in cost, and some may be more beneficial depending on when and how much electricity is used.

## Tariff Types

Residential users primarily have one or more of the following:

* Flat rate
* Time of use
* Demand
* Controlled load

### Flat Rate Tariffs

A flat rate tariff means that you pay the same rate whatever time of the day you use energy.  A flat rate plan could be a good choice if:

* You are at home a lot in the evenings from Monday to Friday
* You need to use your appliances (like your washing machine or dishwasher) more from Monday to Friday

Flat rate tariffs may show up on your bill as:

* Anytime Usage
* Tariff #
* Usage

You do not need a smart meter to get a plan with a flat rate tariff.

### Time of Use Tariffs

A time of use tariff means that the price of electricity changes at different times of the day.

Traditionally these time periods are:

* Peak: evenings on weekdays. This is when electricity is the most expensive.
* Off-Peak: anytime outside of Peak on weekdays and weekends. This is when electricity is cheapest.
* Shoulder: some retailers offer these times after Peak but before Off-Peak in the morning.

It is advised to check your plan to confirm your retailers' times.

 A time of use tariff plan could be a good choice if:

* You are out a lot in the evenings from Monday to Friday
* You are at home during the day or on weekends.
* You use your appliances (like your washing machine or dishwasher) on the weekend.

Time of use tariffs may show up on your bill as:

* Peak Usage /Off-Peak Usage
* Peak /Off-Peak /Shoulder

You will need a smart meter to get a plan with a time of use tariff.

### Demand Tariffs

A demand tariff is like a time of use tariff, however instead of measuring your usage overtime, demand is measured based on how intensely you use electricity at a point in time. Therefore, your demand will be high when you have many appliances on at the same time. Demand is measured in kilowatts or kW.

Demand charges are an additional charge on top of your electricity use. In exchange for this charge, Demand tariffs typically have the cheapest per KW/h rate for electricity.

Different retailers have different ways of applying demand charges, for example, you may be charged:

* For your highest demand in a period of time.
* An average of peak demand overtime.
* Different demand rates in different seasons.

You will need a smart meter to get a plan with a demand tariff.

### Controlled Load Tariffs

For some electricity heavy appliances – like electric hot water systems or pool pumps – you can be charged a controlled load tariff. This means that the retailer charges a rate just for that appliance and the energy it uses. Often that appliance has its own meter.

Controlled load rates are usually lower than other rates.  This is because they may not have power 24 hours a day and are constant in power use. The consistency of power use allows distributors to better predict energy needs on the grid and helps avoid overloads.

Controlled load tariffs may show up on your bill as:

* Dedicated Circuit
* Tariff #
* Circuit #

You might need a smart meter to get a plan with a controlled load tariff depending on the retailer.

### Daily Supply Charge

Each tariff has an associated daily supply charge. This charge is the cost to get electricity to the home and is used to cover maintenance and upgrade of the electrical grid. Supply charges are a daily fee. Controlled load tariffs have the lowest supply charge, followed by demand and time of use tariffs. Flat rate tariffs typically have the highest supply charge. While a supply charge may be small, over time the total can build up so it is important to consider when searching for new plans.

### Solar Feed in Tariffs

Additionally, if you have solar panels connected to the grid, or other small renewable energy generators, you may see a line in credit that represents the income received through feeding your excess renewable energy back into the grid.

These may show up on your bill as any of the following:

* Standard Solar Feed in
* Standard Feed-in
* Solar Credits
* Renewable Feed in

## How Tariffs Work

Tariffs can be confusing and ambiguous in their functions. Below are three examples of how tariffs can affect your bill.

Each example uses the same amount of power (10KW) a day but varies on when and how that energy is used. All examples exclude the supply charge. This amount does not impact on the figures significantly for day to day comparisons. This amount may be significant after several weeks or months.

### Examples

For these examples, the following applies for cost and times: Flat rate tariff of $0.34 per Kilowatt Hour (kWh)

Time of use tariff with the following:

* Peak time is 4pm - 9pm at a cost per kWh $0.44
* Shoulder time is 9pm - 9am at a cost per kWh $0.30
* Off-Peak time is 9am - 4pm at a cost per kWh $0.28

Demand tariff is $0.27 per kWh, with a demand charge of $5.98 per KW demand from 4pm - 9pm.

### Example 1

For the first example this family uses electricity at the following times:

* Peak 4pm – 9pm, 7 KW is used.
* Shoulder 9pm – 9am, 2KW is used
* Off-Peak 9am – 4pm), only 1 KW is used.

During peak period they use a maximum of 3KW at a time from the grid.

The total cost of a day using electricity this way would be:

* On a flat rate tariff, they would spend $3.40
* On a time of use tariff, they would spend $3.96
* On a demand tariff, they would spend $20.64. This amount consists of usage charges of $2.70, and a demand charge of $17.94.

### Example 2

For the second example this family uses electricity at the following times:

* Peak 4pm – 9pm, they use 2 KW.
* Shoulder 9pm – 9am, 2 KW is also used.
* Off-Peak 9am – 4pm, 6 KW is used.

During peak period they use a maximum of 0.5KW at a time from the grid.

The total cost of a day using electricity this way would be:

* On a flat rate tariff, they would spend $3.40.
* On a time of use tariff, they would spend $3.16.
* On a demand tariff, they would spend $5.69. This amount consists of usage charges of $2.70, and a demand charge of $2.99.

### Example 3

For the third example, this family uses electricity at the following times:

* Peak 4pm – 9pm no KW are used.
* Shoulder 9pm – 9am, only 2 KW is used.
* Off-Peak 9am – 4pm a total of 8 KW is used.

During peak period they have no energy usage from the grid, instead they used energy stored in their household battery, that was charged during the Off-Peak period.

The total cost of a day using electricity this way would be:

* On a flat rate tariff, they would spend $3.40.
* On a time of use tariff, they would spend $2.84.
* On a demand tariff, they would spend $2.70. This amount consists of usage charges of $2.70, and a demand charge of $0.