

Power Mover

Power Mover is intended to allow certain loads in your home or business to be load shifted in order to benefit from lower electricity pricing plans.

What does it do?

- It shifts non-essential loads in your home or business to lower-cost periods.
- It makes use of any free power times provided by Electricity Retailers.
- All of the controls are automatic and "set and forget."
- You can override any settings and turn a device on and off whenever you want.
- The more loads you shift, the lower your energy bills will be.
- All device status and overrides are accessible via a single app on your phone or tablet, which is free when connected to your home wifi network.
- A yearly subscription fee is required to use it remotely. (This is especially useful if you travel frequently.)
- Is a Home Automation system at its core, and you can later integrate CCTV, security systems, door locks, door intercoms, audiovisual, and more.

How does it work?

The Power Mover Controller is plugged into the ISP router (a switch may be required for additional ports), and the controlled devices are then wirelessly connected to the Power Mover Controller. When these are connected, the Power Mover Controller is set to load shift each controlled device. You then download an app that allows you to see the status of every controlled device and be able to perform a manual override if necessary.

Types of load Shifting

Hot water

A Power Mover-controlled contactor connects to the hot water, which automatically moves the load into cheaper tariff times. Because this is one of the largest loads in your home, it is the most effective in lowering your power bill.

Load shifting will automatically shift the majority of the load to the cheaper 11pm-7am time slot, with a boost in your free hour of power. Because having hot water is essential, there will be an additional boost after the usual morning showers at 9 a.m. for one hour to reheat. We recommend setting the free hour of power between 4pm-5pm. This way, we can boost the hot water just before the peak tariff kicks in and the hot water is turned off. There is also a hot water boost button on the customer's Smart App. This allows the customer to turn on the hot water for two hours if they believe their hot water isn't hot enough and needs to be heated up.

Air conditioning/heat pump

There are two ways to set up an air conditioner: automatic or manual.

Automatic means the Power Mover will control the air conditioner's times and power settings according to a predetermined schedule to reduce energy costs. On the app, there will always be an override button to turn the air conditioning on, off or adjust the temperature to your liking. The automation will take over when a new time setting comes into effect.

Manual means that the homeowner enters the app and configures the times and temperatures, as well as the power levels. They can also instantly turn it off and on whenever they want. The advantage is that they can set their own schedules to adapt to your own home environment and energy savings goals.

Swimming pools

Swimming pools are an excellent choice for load shifting because the time it takes to clean and filter is unimportant. Most pools range in size from 0.5KW to 1.5KW and operate for 6-8 hours per day. You can save a lot of money over the year by shifting this load into the low tariff period.

The control type will be determined by the pool's type of control system. We can connect it to the Power Mover and have it control the pool's on and off times. If that is not possible, we simply set the timer controls in the pool pump controls to low tariff times. The same is true for non-solar pool heating systems.

Eco Heaters

When compared to the cost of an air conditioner, eco heaters are an excellent way to warm up small spaces and bedrooms. These can be set to turn on during off-peak hours and turn off during peak hours. Again, if you require a heating boost, these are manually turned on via the app. Because these are primarily used in the winter, you will save money during this season. The advantage is that controlling Eco heaters has a very low initial investment in the control device. We strongly advise against automating the control of portable radiant heaters due to the risk of them starting without supervision and causing a fire.

Underfloor heating

Another great winter load that can be moved to cheaper times is underfloor heating. This is because the concrete mass is great at storing heat. Like all the other devices, we can set the underfloor heating to heat at certain times and at certain temperatures. You will still be nice and warm, but it will only cost you half as much.

Spas

Spas are a little more complicated because they have a lot of built-in steps. Some brands can be controlled by the Power Mover, but in the New Zealand market, there aren't that many. The best thing to do is use the spa's manual controls to set the time for heating and cleaning from 11pm to 7am, with a short burst during the free hour of electricity.

Freezers

Freezers are easy to control, but there are risks if the control system stops working or if the door is left open for a long time when the load control is turned off. But, like any other controlled device, you can easily turn off the automatic function and turn it on yourself from the app. Most modern freezers have more than enough "energy" stored in them to be turned off for long periods of time.