

Night Rate

There are lower price power tariff options that can save a considerable amount of money, of the order of 50% in some cases. The most well known of these is 'Night Rate'.

Night Rate is a (switched on /off) timed power source that is usually energized only from 11:00pm to 7:00am daily sometimes with a 3:00pm to 4:00pm energized 'afternoon boost'. This is different from 'Time of Use' tariff which charges at different rates but power is always provided (any existing cylinder with a Smart Controller can make use of this tariff)

These low cost tariffs are offered because there is surplus power available at night when most people sleep. Many generators need to keep running to some extent especially hydro power stations, geothermal and even steam (boiler) based generators.

Not all power companies offer night rate and it is not always available in all areas, also some power companies offer highly competitive Night Rates costs while others less so. This is the challenging aspect of Nigh Rate, especially when some customers might need to change power provider. This variation is most likely due to the traditional low uptake of Night Rate. The problem has been that most Hot water cylinders have been 180 litres or less and this is insufficient to guarantee running out of Hot Water.

We offer a better solution;

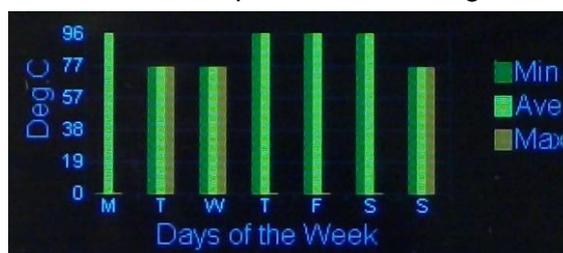
With a dual element Smart Cylinder you can take advantage of the cost effective Night Rate power and still not run out of hot water.

How the Smart Cylinder works with Night Rate;

The lower element is used exclusively for switched Night Rate power and the upper element is used with standard 24hour mains power.

The Smart controller runs in a special mode where it will favour the lower element during Night Rate times but reserve the upper element use to maintain a minimum of stored hot water according to your profile. It is unlikely the upper element will ever come on under normal circumstances.

Furthermore it is not always necessary to completely heat the cylinder during Night Rate hours, which can be a waste of energy, albeit at a lower tariff. The profiles and savings control of the Smart Hot Water controller will match your hot water needs, so that a partial night heat up might be all that is required, resulting in enhanced radiated heat savings and power cost savings. The week of data-logging available with the Smart Controller is a great tool for managing your best settings.



Savings;

Especially good value for higher hot water users, although it is still of use for lower users.

For higher users with cost per power unit savings of 50% + Smart Hot water savings (high use typically 10%) then 60% might be realised. That 'translates' into an equivalent of a 240% efficient system compared to a hot water heat pump.

BRANZ studied Hot Water Heat Pumps in NZ and their research concluded the average efficiency is 150% (Study Report SR237 The Energy Performance of Heat Pump Water Heaters by A.R. Pollard)

- A Smart Hot Water Cylinder is an excellent choice for cost effective hot water heating savings for both high and low hot water users.