

BAYSIDE BATTERY PROJECT

United Energy is installing two pole-mounted batteries for the local community to share. This is part of our efforts to develop a flexible network to make sure we can power customer choices.

By installing the batteries on our network, we will help sustain our 99.99% reliability for customers, support those with rooftop solar to get the most

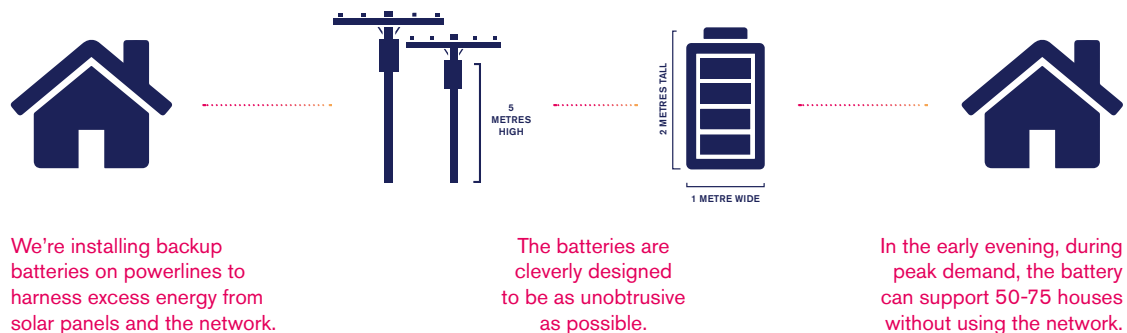
out of their investment, and enable customers to use these new technologies.

This is the first time in Australia that batteries have been installed on the low voltage network as an alternative source of electricity for homes and businesses.

How it works

Like household batteries and solar installation, our pole batteries will charge at lower demand periods when spare electricity is available. Then, at peak

demand times like early evening, it will discharge and assist powering the homes it's connected to and reduce the likelihood of outages.



Shared infrastructure for the community

Customers are changing the way they use, store and sell electricity. In particular, we expect the number of customers with rooftop solar to more than double in the next five years while the take-up of household batteries and electric vehicles also rises.

Using battery technology, particularly in association with rooftop solar, is becoming more common in Victorian homes. However, the cost is not yet affordable for the majority of people.

Pole-mounted batteries on our low voltage network will support up to 150 homes and businesses with stored energy. Two locations have been selected: Gordon Crescent, Black Rock and Telford Street, Highett.

These locations were selected based on a range of criteria including residential density, visual amenity, noise concerns and electricity demand. Both are in areas where there are constraints on the network. This means that on peak demand days there is a risk of outages because the network cannot physically move enough electricity to meet customer needs.

Installing batteries to provide an alternative source of electricity for these areas can therefore help sustain reliable supplies while deferring more costly network investment.

Careful design

In consultation with community stakeholders, the solution has been carefully designed to blend into the urban landscape with no impact on residents. The batteries are both contained in a cabinet which measures two metres high and one metre wide and contains all the equipment needed to safely operate.

They will be installed high on standard power-poles and painted eucalyptus green to blend in with other pole top assets. The cabinets feature noise reducing foam to insulate the community from any operating noise from the battery.

This design complies with all Australian and state standards for environmental protection.

Energy on demand

The batteries will charge at times of the day when there is low electricity demand from the network or when rooftop solar systems are exporting to the grid. Power from the batteries will then generally be used later in the day when demand is high and solar systems are no longer generating. Peak times are generally between 4.00pm and 8.00pm in the evening. We also expect they'll provide

extra capacity on extreme heat days when the temperature hits over 40 degrees and everyone is relying on their air conditioning.

The batteries each have the capacity to support between 50 and 75 customers for up to 2.5 hours each. Customers will not notice any difference in their electricity supply when the battery is operating.

Potential for more

The two batteries are being installed in February 2020 and their performance will be closely monitored until June 2020. This \$500,000 trial is being funded by United Energy and the Australian Energy Regulator's Demand Management Innovation Allowance.

This is our investment in developing a flexible network to power customer choices.

The batteries have an expected life of around 10 years. If the trial is successful, we will continue using batteries to support reliability for customers and help keep electricity distribution prices low.

About United Energy

United Energy is one of Australia's leading electricity distribution networks recognised for its cutting edge technology, high efficiency and low costs to customers.

We distribute electricity to around 685,000 customers, or more than 1.45 million Victorians, across Melbourne's south eastern suburbs and the Mornington Peninsula. Electricity is distributed in the region via a network comprising over 13,000 kilometres of wires supported by more than 215,000 poles and associated infrastructure.

United Energy offers 99.99% reliability of electricity supplies with customers experiencing power outages for around 44 minutes per year on average.

