

AusNet



Stand Alone Power Systems

RELIABLE POWER SUPPLY FOR REMOTE CUSTOMERS

AusNet

Working with remote electricity customers and communities to improve access to a reliable energy supply.



AusNet are building a better tomorrow for Victorians, striving to secure an energy supply that is sustainable and reliable. With innovative technologies such as renewable generation and battery storage solutions, this vision can become reality. With your help, we can revolutionize power delivery. By shifting your power from a Stand Alone Power System instead of the poles and wires, we can offer you even greater peace of mind with a system inherently resistant to outages.

Stand Alone Power Systems

For several decades AusNet has owned and operated the Victorian electricity transmission network and one of five electricity distributors. You don't pay your bills to us, but if you turn on a light or switch on the TV, we transport the power to you.

We understand that a dependable energy supply is essential for our customers in remote locations. That's why we're collaborating with our most remote customers to develop Stand Alone Power Systems that use renewable energy generated and consumed locally.

Stand Alone Power System offer an independent, off-grid solution.

Improve resilience and safety.

Stand Alone Power Systems remove dependency on the physical electricity network, providing customers at the end of the line with variable network connection with heightened reliability for their energy. These targeted areas also are typically in bushfire and extreme-weather-prone zones where the poles and lines are often affected, leading to outages.

Provide a sustainable energy alternative.

At all times, our systems aim to use solar energy as the primary source of electricity, only using the back-up generator when required, such as during long periods of cloudy or rainy days. Using a Stand Alone Power System will increase your uptake in renewable energy, reducing carbon emissions.

We're with you every step of the way.

AusNet will be responsible for all the operation and maintenance of each Stand Alone Power System, including any repairs, fault correction and refilling the diesel generator. In addition, remote monitoring technologies ensure all components are working correctly.



The future of energy in Victoria

The Australian energy landscape is rapidly changing, shifting away from fossil fuels towards renewable energy sources like solar and wind. At AusNet, we understand the importance of keeping up with these changes to maintain a reliable and resilient electricity network that meets the demands of modern life.

Our network is facing new challenges every day and to address these challenges, we are continuously assessing our infrastructure and implementing updates that improve reliability and supply resilience. We are also exploring multiple options for electricity storage, including flexible and accessible battery solutions that integrate seamlessly with the energy system.

Our goal is to establish a responsive electricity network that can efficiently move electricity from where it is generated to where it is used. To achieve this, we are embracing the expansions of large solar and wind developments while accommodating ever-increasing rooftop solar generation.



We're committed to creating a seamless customer experience, building trust and doing what's right for our local communities.

2022 average unplanned interruptions supplied by a long rural feeder

2.63*

Power outages per year over 3 mins

4.9* hrs

Total amount of time without power

2022 average unplanned interruptions supplied by urban feeder

0.89*

Power outages per year over 3 minutes

87* mins

Total amount of time without power

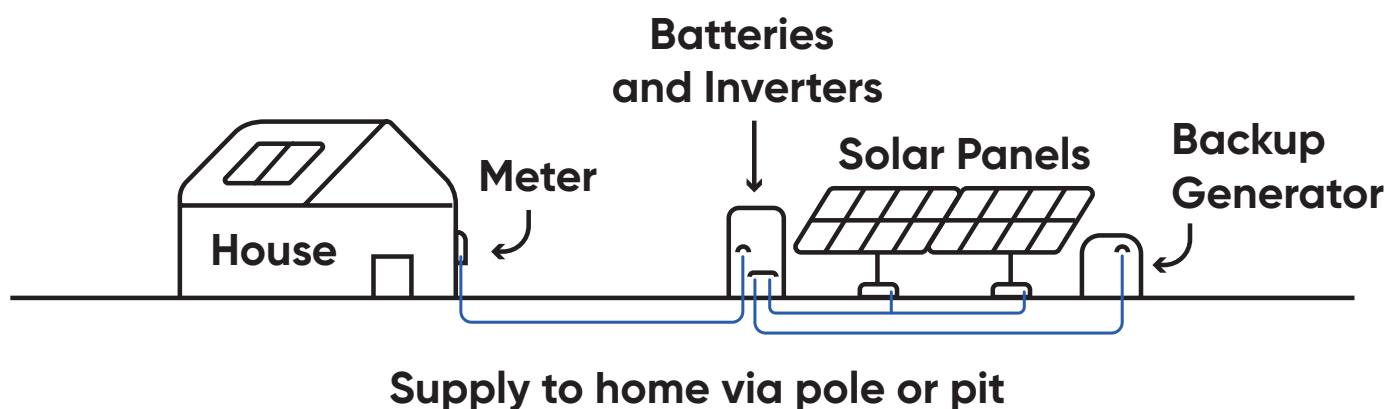
*Results 1 July 2021 – 30 June 2022 (FY22) www.ausnetservices.com.au/Electricity/Network-Information/Reliability

Stand Alone Power at our most remote locations

A Stand Alone Power System typically comprises solar panels, a battery, and a backup energy source, which provides individual property owners with a continuous energy supply without needing a physical network connection. The solar system converts the energy from the sun into electricity each day which directly supplies the home or business. Where that electricity is not needed, the power is then stored in the battery for use overnight or at times of

peak demand, like at mealtimes. If there are a sequence of rainy, cloudy or foggy days or periods of high-power usage, the generator automatically starts to recharge the battery. To limit impact on home or business owners, the generator is encased in sound reducing housing and the logic of the technology aims to charge the battery during the day to limit sleep disturbances. All this can be achieved to match the same size power supply already in place with the poles and wires connection.

Your Stand Alone Power System will look something like this



Each system includes:

- Ground-mounted solar panels
- Battery Energy Storage System (BESS)
- A back-up generator
- Mondo Ubi™ Smart Management System

These energy system elements are all installed within an enclosure of secure fencing to protect wildlife, livestock, family members and visitors. Typically, this enclosure will be a leveled area of 14m by 10m in size, then covered in gravel to reduce the risk of fire or damage to equipment.

In most cases, the Stand Alone Power System is seamlessly connected to an existing property supply pole. However, for specific situations where a direct connection would be beneficial it can instead attach straight onto your house or business meter.



Why a Stand Alone Power System?

Delivering power to the more remote parts of the state provides unique challenges as we strive to provide a progressively more reliable electricity supply. The combination of rugged rural landscapes, the fluctuating electricity requirements of modern homes/businesses and the volume of new solar generation is demanding more of the network. AusNet continuously assesses our remote electricity network and we implement upgrades that improve the day-to-day reliability of the system and enhance resilience during extreme weather events.

AusNet is embarking on a new journey to support our most remote energy customers. We are launching a new and novel approach to the supply of electricity for people living in eastern Victoria's most isolated locations. Using the strengths of renewable energy technologies, we can offer more reliable power with fewer outages and a heightened resilience to fires, floods and storms.

Stand Alone Power Systems are modular systems that can provide electricity when traditional grid power is difficult to maintain or cost prohibitive to restore after a disaster.

Working with you to choose the right system to suit your needs



The benefits of a Stand Alone Power System

AusNet's Stand Alone Power System offers the perfect solution for customers in remote, weather-prone regions. Without altering the options in retailer market offers or prices, you can enjoy a secure power system that has naturally increased resistance against outages - all without compromising on any of your current benefits.

	Traditional Poles and Wires Connection*	Stand Alone Power System
Supply managed by AusNet	Yes	Yes
Maintenance and costs covered by AusNet	Yes	Yes
Free choice of electricity retailer	Yes	Yes
Supply maintained during local network outages	No	Yes
High supply certainty during extreme weather and fire events	No	Yes
Dramatic cut in carbon emissions	No	Yes

*To serve our remote customers, the traditional Pole and Wire connection utilizes Single Wire Earth Return

What is the process when a customer agrees to consider a Stand Alone Power supply?

If your property is suitable for a new Stand Alone Power System, we'll be there to help you every step of the way. We've got a 6 stage process that's open and transparent, so you can be sure that everything is being done right. Plus, we'll assign a dedicated team member to work with you and answer any questions you may have.

Stage One

Introduction to the program

Our team would meet with you on-site to discuss the program's details, including where the system might be located, what it will look like, and any concerns you may have. We understand that your property is important to you, so we'll work hard to ensure that our system doesn't impact your livestock or activities. We'll also accommodate any existing or planned buildings, pipes, cabling, easements, and roadways.

To provide more information about the energy system, AusNet will publish frequently asked questions. Plus, a dedicated team member will be assigned to work alongside you throughout the process and respond quickly to any questions or ideas you may have.

Stage Two

Privacy consent

Once you are comfortable with plans, we'll need your permission to share property details with our third-party contractors who are specialists in the installation of Stand Alone Power Systems. This requires a property owners' specific written consent. Preliminary designs can then be drafted ready to pass to the contractors.

It's important to note that completing the privacy consent doesn't mean you've confirmed receiving the energy system. It just means we're able to start a more detailed study of your site.

Stage Three

Site assessment and design

Our contractors will reach out to the property owners and plan a visit to check the technical requirements for the system. They'll look at things like available flat ground near the supply pole (usually within 40m), shading, and other factors like wildlife, livestock, vehicle movement, and security. During this design phase, a surveyor will come to map out the Stand Alone Power supply fenced enclosure which is typically 14m x 10m.

Stage Four

Draft lease agreement

In the locations where a new Stand Alone Power System is to be installed, AusNet will establish a lease with the property owner. This area will be fenced to ensure people, livestock and wildlife are protected and to enhance security.

Stage Five

Consent to proceed

As a property owner, you'll receive final copies of the lease agreement and a participation letter. Once you've agreed to and signed these documents, the Stand Alone System can move forward. And don't worry - AusNet will provide a clear statement of obligations to ensure that your standard customer protections remain intact, even if existing poles and wires are removed.

Stage Six

Construction and commissioning

Our contractors will work closely with you to schedule construction of the Stand Alone Power supply.

This process includes:

- Ground and earth works to prepare the site
- Delivery of energy system hardware
- Construction of the solar panel array and connection of the prefabricated cabinets which contain the inverters, batteries and electrical equipment
- Commissioning of the energy system
- AusNet line staff to disconnect the connection to the existing poles and wires
- Ongoing remote monitoring, timed servicing and refuelling



Who is eligible for a system?

AusNet customers in remote locations with existing connections can benefit from a Stand Alone Power System. To assess eligibility for this program, our engineers review each customer's past usage data alongside physical network conditions to determine whether the system is right for them. If it passes the criteria, we'll contact those customers directly about potential installation options.

What happens with your bill and retail arrangements?

Our Stand Alone Power System ensures customers don't have to worry about losing their connection or customer protections. The existing "smart meter" remains in place, allowing for electricity usage data to be sent directly from the property to your preferred retailer—who can then bill you each month/quarter accordingly. You get all the benefits from a regulated system on-site which is owned and managed by AusNet.



Getting in touch

If you need more information, please email us at

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or have a look on our website

www.ausnetservices.com.au/stand-alone-power-systems



Ready to start your community energy journey?
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