CONFIDENTIAL

Standalone Power System Engagement Strategy

Safe and reliable energy for rural and remote families and businesses

26/04/2024

Ref: HP-9654

HORIZON POWER

Table of Contents

1. Context and purpose

1.1 Context

Horizon Power operates under an integrated regional licence that requires it to comply with various State Government regulations, including amendments to regulations which are introduced from time to time, one of which is *Electricity Industry Regulations Amendment (Stand-Alone Power Systems) Regulations 2021* (the Regulation Amendment).

This Regulation Amendment requires Horizon Power to:

1. have a Standalone Power System (SPS) engagement strategy that complies with requirements outlined in the regulation (the SPS Engagement Strategy);
2. comply with the SPS Engagement Strategy in relation to the provision of SPS to eligible customers;
3. have the initial SPS Engagement Strategy endorsed by the Minister for Energy;
4. review the SPS Engagement Strategy at least every two years; and
5. ensure that the current version of the SPS Engagement Strategy is publicly available on its website.

1.2 Purpose

The purpose of this document is to formalise the SPS Engagement Strategy and provide content for producing a strategy publication which will meet the requirements of the Regulation Amendment, which includes:

1. set out protocols for engagement with customers and potential customers;
2. set out protocols for engagement and coordination with retailers who sell, or propose to sell, electricity through SPS;
3. set out the following information for customers and potential customers in relation to the provision of SPS:
    a. the basic specifications of available SPS;
    b. a description of the process of installing an SPS and of the services to be provided by it;
    c. a description of a customer's obligations in relation to an installed SPS; and
    d. a description of a customer's consumer rights in relation to the provision of an SPS and the services provided by it.

4. set out indicative costs for upgrading an installed SPS;
5. set out the contact details of the following:
    a. the corporation's customer and fault services;
    b. the electricity ombudsman (as defined in section 92(1) of *the Electricity Corporations Act 2005* (the Act); and
    c. the corporation.

2. Acknowledgement of Country

We acknowledge and pay our respect to Aboriginal and Torres Strait Islander peoples as the First Peoples of Australia. We are privileged to share their lands, throughout 2.3 million square kilometres of regional and remote Western Australia and Perth, where our corporate office is based, and we honour and pay respect to the past, present and emerging Traditional Owners and Custodians of these lands.

We acknowledge Aboriginal and Torres Strait Islander peoples' continued cultural and spiritual connection to the seas and the lands on which we operate. We acknowledge their ancestors who have walked this land and travelled the seas and their unique place in our nation's historical, cultural, and linguistic history. Horizon Power uses the term Aboriginal and Torres Strait Islander (and Aboriginal on future references) instead of Indigenous. Therefore, within all Horizon Power documents the term Aboriginal is inclusive of Torres Strait Islanders who live in Western Australia.

3. Your property could transition to a SPS solution.

Horizon Power works hard to enable the delivery of safe and reliable power for its customers, recognising that living in rural and remote WA often presents unique challenges for those living in the regions.

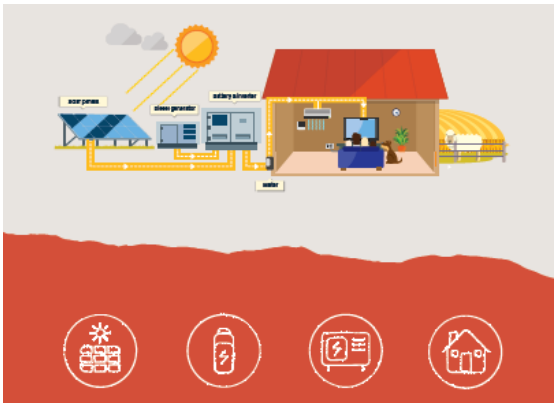
Horizon Power is offering selected customers a safe and more reliable source of electricity through the deployment of Standalone Power Systems (SPS). SPS units provide rural and remote customers with a more reliable electricity supply than that provided via older power lines which run through bushland and are easily damaged by storms, floods, and wildlife.

SPS units use solar and battery technology to generate and store electricity without the need to be connected to the overhead electricity network, using solar panels, batteries, inverters and in some instances, a back-up generator. The system supplies power 24 hours a day, regardless of weather conditions.

Horizon Power has identified sections of its network where using this SPS technology enables the enterprise to provide customers with safer, more reliable power than that delivered via the traditional poles and wires network. In addition to the many customer benefits, Horizon Power will also be able to reduce its need for land access to customer property, reduce the enterprise's overall environmental impact due to the use of renewable energy, reduce the risk associated with pole top fires and other poles and wires faults – all positive benefits of SPS installations.

4. The Solution

The SPS energy management system is configured to maximise energy utilisation from renewable sources.



4.1 Solar

Solar panels are the main source of power. They generate electricity when the sun is out. The SPS will include enough solar panels to service the energy requirements of the individual connection. During the day and when more energy is produced than is used by customers, the extra energy will be stored in batteries. These panels will be converted to usable electricity by solar inverters.

4.1.1 Batteries

Batteries provide power at night and when the sun is not shining for long periods of time by storing energy generated by the solar panels. The SPS will include enough batteries to ensure the backup generator, if installed, only runs when absolutely required; as with solar panels, these batteries will be converted to usable electricity by battery inverters.

4.1.2 Back-up

For SPS units designed to include a generator, the low noise, back-up generator will occasionally run when more power is needed than what the solar panels and batteries can provide, typically during periods of cloudy weather or high load. The back-up generator is designed to accommodate a customer's entire load should there be an issue with the SPS. Systems designed without a back-up generator will have adequate batteries to provide continuous power without the need for back-up and a portable generator connection inlet. Spare portable generators are available for deployment should there be an issue with the SPS.

4.1.3 Result

Delivering reliable clean power to customers.

5. How to benefit from a Standalone Power System

5.1 No additional costs

5.1.1

Customers will pay the same unit price for electricity as they would if they remained connected to the overhead power network.

Maintenance is taken care of

Management of the system including all maintenance services is fully provided by Horizon Power at no cost to customer.

Designed to meet individual requirements

The SPS is specifically designed to meet individual customer energy requirements. Should future energy needs change, the SPS can be modified to ensure it continues to meet customer demands.

Safe, reliable power

5.1.2 The SPS provides more reliable power supply because it is less affected by outages caused by line maintenance and weather events such as extreme wind, floods, wildlife and bushfires.

Reduced risk with no poles and wires

5.1.3 Removing poles and wires eliminates the risk of injury to people, and potential damage to network and property caused by farming activities, while also reducing bushfire risk. There also eliminates the need for Horizon Power crews to patrol power lines that may currently traverse a customer's property.

Benefit from clean energy

5.1.5 The SPS offers an energy-efficient solution harnessing the latest renewable energy technology and reduces greenhouse gas emissions.

Long-term peace of mind

5.1.6 The SPS is designed and installed in alignment with the latest standards. When components need replacing, Horizon Power will undertake this at no cost to customers.

6. The Process

The process starts when a property has been identified as one that could transition to a SPS solution. Horizon Power identifies this through detailed asset management planning.

When all customers in an area are supplied with a SPS, the enterprise can then remove the poles and long wires that their properties to power. Horizon Power encourages customers to discuss this opportunity with Horizon Power's local Customer and Community Manager.

Horizon Power will work with customers every step of the way. The enterprise's goal is to make the customer's transition to a SPS as seamless as possible.

Step 1 – Identification of SPS opportunities

6.1.1 Horizon Power performs routine and regular asset management planning; through this process it determines which areas are appropriate to progress SPS solutions. The enterprise then identifies and notifies all impacted customers. Typically SPS solutions become a viable option when a section of line is either too costly to install, upgrade, replace, or maintain, with the purpose being to remove sections of spurs that enable a reduction in our maintenance and replacement requirements, while providing a higher level of service to our customers.

6.1.2 Step 2 - Energy audit

Horizon Power will then conduct an energy audit, using data gathered from the advanced meter at the customer's property, combined with the information provided to the enterprise (via written questionnaire, phone calls, and during site visits), enabling us to better understand a customer's power usage and design a SPS solution that is tailored to their specific requirements.

The SPS will be sized to provide power equivalent to the existing overhead network connection. Standard SPS solutions for customer connections range from 16 – 24 kW for the replacement of 10 – 25 kVA transformers. The standard SPS solution is adequate for the majority of the properties in our service area, providing adequate power for several houses, workshops, shearing sheds and outbuildings. Horizon Power also installs some larger SPS solutions in the vicinity of 60 kVA for more complex connections. It's important to note the SPS size will be tailored to suit individual connection requirements.

A customer can request to upgrade the system to meet their future plans, by seeking a quote from Horizon Power. The quote will cover any additional equipment required, like solar panels, batteries, inverters, and other equipment, as well as additional time required to construct and commission the upgrade. The best time to enquire about an upgrade is when Horizon Power undertakes the energy audit, but an enquiry can also be made after the system is operational, noting it will cost more if Horizon Power cannot complete the upgrade at the time of initial SPS installation.

Step 3 - Site inspection

With a customer's permission, Horizon Power will conduct a site inspection at their property to identify potential locations for the SPS and gather information to finalise a design and layout that meets a customer's needs.

6.1.3

Step 4 - Sign up

Horizon Power will provide a customer agreement which guarantees the same level of service, reliability and the same tariff customers previously received while connected to the overhead network. Customers will need to sign this agreement before Horizon Power can progress with the SPS installation.

6.1.4

Step 5 - Site layout

6.1.5 Horizon Power will be provided with the final location, layout, and confirmation of specific customer requirements for final approval.

Step 6 - Access

6.1.6

Once approved, Horizon Power will work with customers to arrange access to their property for installation and to connect the power supply to the home. The installation process includes clearing the area, installing the electrical equipment, and commissioning ahead of preparing for installation and connection to the new SPS. A final cutover to the new SPS will only take place once all preparations are complete. The overall installation work will be staged over several months so it can be coordinated with other SPS sites being constructed in the area.

6.1.7

Step 7 - Removal of redundant poles

Removal of the poles and wires will allow a safer, more productive use of customer property. This will occur once all properties on the section of poles and wires have completed their transition to SPS. The removal of the redundant poles will occur at a time that is acceptable to both the customer and Horizon Power.

6.1.8

Step 8 - Ongoing care and maintenance

After installation, everything is monitored remotely, including the diesel required for the back-up generator (if installed), by the Horizon Power team. The SPS customer is provided the same level of service as a customer on the overhead network.

7. Obligations and Agreements

7.1 Consumer protection

A key principle underpinning the deployment of SPS is that SPS customers should not be disadvantaged compared to grid-connected customers. A thorough assessment found that customer protections that apply to grid-connected customers are equally applicable to SPS customers. These include:

- Electricity licensing regime, administered by the Economic Regulation Authority (ERA);
- *Code of Conduct for the Supply of Electricity to Small Use Customers 2018*;
- *Electricity Industry (Network Quality and Reliability of Supply) Code 2005* (NQRS Code);
- *Electricity Industry (Metering) Code 2012;*
- *Electricity Industry (Ombudsman Scheme) Regulations 2005*; and
- *Electricity Industry (Customer Contracts) Regulations 2005*

7.2 SPS Agreement

Obligations for both Horizon Power and the SPS customer are formally captured in the Horizon Power Standalone Power System Tenant and Owner Agreement Terms and Conditions. This agreement is available on request from Horizon Power and covers the detailed obligations for each party. It is based on the Horizon Power - Standard Form Contract used for normal residential and light commercial customers which is available on the Electricity Regulating Authority's website.

The key difference between our Standard Form Contract and our SPS Electricity Contract is that electricity under the Standard Form Contract is supplied to customers via the enterprise's distribution system (poles and wires that connect a customer's premises to Horizon Power's centralised generators).

High level obligations for each party covered in the agreement are summarised below.

7.2.1 Horizon Power obligations

Horizon Power obligations include:

1. being responsible for the costs of installing, operating, maintaining, and inspecting the SPS;
2. do as little damage to the site as is reasonably possible;
3. make good or otherwise pay adequate compensation for all physical damage caused by Horizon Power to the site or premises; and
4. provide an ongoing safe and reliable supply of electricity.

SPS customers and property owners obligations

SPS customers and property owners obligations include:

1. providing Horizon Power with all necessary access to the premise;
2. not interfering with the SPS;

7.2.2

3. reasonably maintain the area around the SPS;
4. keeping the SPS area free from all structures, buildings and improvements that may impede the performance of the SPS;
5. not install any generation (renewable or otherwise) on the premise without Horizon Power's written consent; and
6. pay for the electricity consumed.

SPS customers will continue to receive electricity accounts from Horizon Power and pay for the electricity consumed at the same rate as customers connected to the network under the Uniform Tariff Policy. Horizon Power SPS customers are not contestable and as such there is not an option for the customer to buy electricity from someone other than Horizon Power; they can, however, elect to install their own system (off grid) and operate independently.

For further information on the pricing and billing process for the supply of electricity, please visit http://horizonpower.com.au/ or ask Horizon Power for a pricing guide.

The enterprise may disconnect a customer's electricity supply in certain circumstances, including failure to pay a bill when due or for refusing to give Horizon Power access to the meter or SPS.

SPS customers may end the SPS supply arrangement at any time by giving Horizon Power five days notice. Under certain circumstances, Horizon Power can end its arrangement, including where a SPS customer breaches their obligations under the contract. The arrangement may also end if both the customer and Horizon Power agree. The SPS can be removed if no longer required to supply energy to the property.

7.3 Making a complaint

Horizon Power strives to always provide the best possible customer service. However, if a customer feels the enterprise has not managed their concerns adequately or met the service standards outlined in the Customer Charter, customers may lodge a formal complaint through Horizon Power's website here.

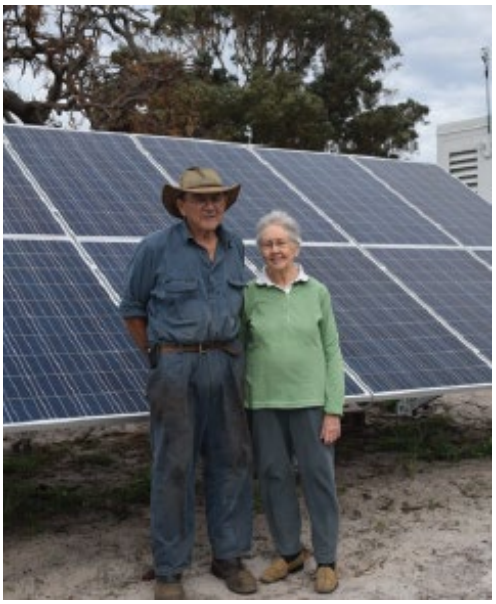
Complaints can be raised with the Energy and Water Ombudsman, which is a free and independent service. Refer to section 10.8.

8. What our SPS customer say

"We were one of the first customers in Western Australia to be connected to a Standalone Power System and we have no regrets about our decision. We have been supplied with a state-of-the-art system, made up of a bank of solar panels, lithium batteries stored in an air-conditioned pod, and a back-up diesel generator. We are no longer affected by power outages from storms or lightning that affect other farmers from time to time. Throughout the very long and cold winter in Esperance, the solar panels and batteries have supplied sufficient power for our home and farm.

We are now completely self-sufficient, but with the advantage of having Horizon Power on hand to maintain and service our system.

Horizon Power worked closely with us to ensure we were consulted every step of the way and if we needed, were just a phone call away. It is very comforting to have a local office for support and know that someone will be dispatched immediately if there is a problem. I have no hesitation in recommending a Standalone Power System to my fellow farmers in the region."



John and Val Locke, Beef Farmers

Merivale, east of Esperance in Western Australia

9. Frequently Asked Questions

9.1 The System

How does it work

9.1.1 The solar panels create electricity during daylight hours. If not as much electricity is used as the solar cells are generating, the excess electricity will charge the battery until it is full. When the sun goes down and the solar panels are unable to generate electricity, the battery provides power to the customer's home. If the SPS unit includes a diesel generator, it will provide back-up power if more energy is required than what is generated by the solar panels and stored by the batteries. This combination ensures a customer's power is uninterrupted regardless of weather conditions.

Who can get a SPS?

9.1.2 Currently, only selected properties will be given the opportunity to have a SPS installed. Other properties may be considered where it makes economic sense for Horizon Power to install a SPS and remove the overhead connection.

What's the cost?

9.1.3 Horizon Power will, where reasonable, cover the cost of upgrading an active connection installation, if required to enable connection to the SPS. Where installations are not connected or are found to have unsafe defects, the installation will not be connected to the SPS, and rectifications will be required to be carried out.

9.1.4 Who owns the SPS?

The SPS is owned and operated by Horizon Power.

9.1.5 Does installation of a SPS require participation from all customers on the line?

9.1.6 For the most part, yes. However, this depends on a customer's location along the power line. If the customer is at the end of the line, they should be able to transition to a SPS regardless of whether other customers on the line wish to participate. However, if there are other customers between an individual customer and the end of the line who do not wish to participate, it is unlikely a customer will be able to transition to a SPS.

Is the SPS safe?

The SPS will meet the relevant Australian Standards for its components and installation (for example, AS 3000:2018, AS 4509.1: 2009), including environmental regulations for diesel storage. These systems do not emit any higher electric and magnetic fields (EMF) than common household appliances such as microwave ovens and any EMF emissions will be undetectable within the home.

What happens to a customer's meter?

The SPS may come with a new main switchboard including a new meter. If so, the old meter will be removed as part of the connection works. Customers will have access to the new meter, and it will form part of the SPS upgrade works. Alternatively, the existing meter will remain in its current position with a new underground connection from the SPS.

9.1.7

9.2 Location

What does the SPS consist of and how big is it?

The SPS will consist of solar panels, batteries and if required, a diesel generator, noting SPS are modular and can be sized to suit customer requirements. Horizon Power will work with SPS customers to determine the optimal configuration of the SPS to maximise solar and battery storage and minimise

9.2.1 generator run times if installed. The SPS will be sized to provide power equivalent to the existing overhead connection, considering customer requirements obtained through customer engagement, site audits and the analysis of energy data obtained from the network meter. The SPS can provide 16 – 60 kW of power and 16 – 200 kWh of energy storage via batteries

How much area will it require on a customer's property?

9.2.2 The area required for the SPS will be approximately 100-250 square metres. The solar panels are ground-mounted, and the batteries will be located inside a cabinet to protect them from weather. The average number of panels is 24 and they are usually stacked in two rows, with 12 per row. However, different configurations can be applied. Horizon Power will consult with customers as to the most suitable arrangements for their property.

9.2.3 **Where will the SPS be situated on a customer's property? How close will it be to a customer's house?**

Horizon Power will work with SPS customers to identify the most suitable location for the SPS, taking into consideration several factors. Most importantly, Horizon Power should avoid any shady areas to ensure the best operation of the solar panels. Horizon Power also aims to avoid disturbing customer amenity with the location of the SPS, also ensuring Horizon Power can service the SPS where it is

9.2.4 located. Ideally the SPS will be located within 30-100 m of the existing site main switchboard.

Who is responsible for any land clearing needs?

It is essential that only authorised Horizon Power contractors undertake any clearing required for the SPS. Horizon Power has strict guidelines that align with its commitment to recognising the connections Traditional Owners have to Country and have responsibility to minimise the enterprise's impact on the environment. Customer support to ensure only authorised contactors complete this component of the project is greatly appreciated.

Can livestock graze around the SPS or does it need to be fenced?

For safety, all Horizon Power SPS units will either be fenced to keep livestock out or designed to prevent damage to or from livestock.

9.3 Operations

9.2.5 **Is the reliability of the electricity expected to improve with the SPS compared with the overhead network connection?**

Yes. SPS is not affected by severe weather or wildlife in the same way the overhead network is.

9.3.1 **How often will the back-up generator run?**

All SPS units are designed to provide at least 80% renewable energy. Some systems may be designed without a back-up generator as they will have adequate battery storage to provide 100% renewable
9.3.2 energy. Where a back-up generator is installed, it may kick in a few times a week and run for up to a few hours to recharge the batteries or if more energy is required than what is generated by solar panels and stored by the batteries.

Does the generator create noise or produce a smell?

9.3.3 The back-up generator will emit audible noise when operating, but this will be lower than the relevant State regulations for the intended use. It will produce emissions at levels similar to diesel vehicles on the road. To comply with noise and emission regulations, the back-up generator is manufactured with a low-noise enclosure, and it will be installed at the required minimum distance from the customer's home.

9.3.4 **What if it's overcast for long periods of time?**

SPS customers will still have power. The battery will be sized to ensure it can meet a customer's energy needs for a typical 24-hour period without any solar input. If it is overcast for a long period of time, the back-up generator will kick in to recharge the batteries. SPS units designed without a generator
9.3.5 will have adequate battery storage for extended periods of overcast weather.

Will the system cope if a customer needs substantially more power?

Horizon Power will provide SPS customers with a solution that meets their current capacity. If customers are aware that they may require more power in the near future, they will be given the opportunity to inform Horizon Power (additional capacity above what is currently being provided will be at the cost of the customer). This will help Horizon Power size the system.

Should demand substantially increase after installation, there may be a requirement from Horizon Power to augment the system at a customer's cost. It is recommended that when customers become aware of any changes to their consumption, they inform Horizon Power as soon as possible. Horizon Power will then be able to provide a quote for any upgrade works. The cost of system upgrades depends on the time the upgrade is requested (pre- or post-construction) and the type of upgrade required. The costs below are indicative only and do not form a quote.

Upgrading the amount of power the SPS can provide costs approximately $1875-3,625 per kW, noting that the system can only be upgraded in steps, dependent upon the inverter type available.

Upgrading the amount of energy the system can store before running the backup generator costs approximately $2333-2575 per kWh, noting that the system can only be upgraded in steps dependent upon the battery type available.

Will power quality be the same?

The SPS will increase the reliability of the supply, reducing both the number and duration of outages. Due to the way the SPS works, frequency may vary across the day within the limits of relevant standards. This may cause clocks that run on mains power to be either slightly slow or fast depending
9.3.6 upon the time of day.

9.4 Maintenance

What happens after the SPS is installed? Does the customer have to monitor the system?

No, not at all. The SPS recipient remains a Horizon Power customer and the enterprise team will
9.4.1 continue to provide support. Once the SPS is installed and operational, the enterprise will monitor the system remotely, including the diesel levels in the back-up generator (if installed) to ensure a safe and reliable power supply.

What happens if the SPS stops working?

9.4.2 In the same way customers report a fault, SPS customers should report it to the fault line by calling 13 23 51. A 24/7 fault management service will be provided to SPS customers, just like all other Horizon Power customers.

9.4.3 **What happens if the generator runs low on fuel? Will it be refilled or do customers need to arrange the fuel and pay for it themselves?**

The local Horizon Power team will take care of this for the customer. The enterprise will be remotely monitoring the generator's fuel tank and if it is running low, a local team will be dispatched to refill it.

10. Contact Horizon Power

Horizon Power will work with its customers every step of the way during their transition to a SPS. If a customer has questions, they may contact their local Customer and Community Manager, based in the following regions:

10.1 East Kimberly Region: 9166 4700

10.2 West Kimberley Region: 9192 9900

10.3 East Pilbara Region: 9173 8281

10.4 West Pilbara Region: 9159 7250

10.5 Midwest Gascoyne Region: 9941 6299

10.6 Esperance Goldfields Region: 9072 3400

10.7 General enquires

For billing and payment enquiries and complaints from residential customers, call 1800 267 926 during business hours.

For billing and payment enquiries and complaints from business customers, call 1800 737 036 during business hours.

For TTY users (hearing impaired customers) call 1800 461 499 during business hours.

For customers residing outside Western Australia call 1800 232 135 during business hours.

To report a fault or emergency, 24 hours a day call 13 23 51.

10.8 Energy Ombudsman

Phone: 1800 754 004 or 08 9220 7588

Email: energyandwater@ombudsman.wa.gov.au

Address: Level 2, Albert Facey House469 Wellington Street, Perth WA 6000

11. References

For additional information please reference:

Horizon Power Website	Horizon Power | WA's Regional Energy Provider
Regulations and Legislation	WALW - Home (legislation.wa.gov.au)
Economic Regulating Authority	Licence Holders - Economic Regulation Authority Western Australia (erawa.com.au)
Standard form contract	Horizon Power - Standard Form Contract
Horizon Power's Integrated Regional Licence	EIRL02 Regional Power Corporation (Horizon Power) effective 2018.07.01.pdf (erawa.com.au)
Energy Ombudsman	energyandwater@ombudsman.wa.gov.au