08 November 2017

Mr John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017 – Joint response to Draft Determination

Dear Mr Pierce,

Energy Networks Australia, the Public Interest Advocacy Centre (PIAC) and the Alternative Technology Association (ATA) welcome this opportunity to make a joint submission to the Australian Energy Market Commission's (AEMC's) Draft Rule Determination on the *National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017.*

Energy Networks Australia represents Australia's energy grid supporting all Australian customers with over 900,000 km of electricity transmission and distribution lines and almost 90,000 km of gas distribution mains.

PIAC is an independent, non-profit legal centre based in New South Wales. PIAC tackles systemic issues that have a significant impact upon disadvantaged and marginalised people. The Energy + Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in NSW, developing policy and advocating in energy and water markets.

The ATA is a national not-for-profit organisation that enables, represents and inspires households to live sustainably. ATA provides expert, independent advice on sustainable solutions to households, government, industry and corporate clients. The ATA engages with more than 250,000 people each year around Australia, working with more than 6500 members in a network of 14 active branches. Along with their extensive experience in energy policy and markets, this reach informs their national advocacy and research, making the ATA an important voice for energy consumers Australia-wide.

Our three organisations are pleased to note the AEMC's support for enabling off grid supply. We agree that in some cases, it is cheaper to provide off-grid supply than to maintain and replace long power lines linking remote customers to the national grid. Moving to off-grid supply may offer additional benefits such as improved reliability for remote customers and reduced bushfire risks.

Jointly, we are concerned that current regulatory arrangements in national electricity market (NEM) States lack the flexibility to enable solutions of benefit to consumers, in a timely way.

Our organisations agree that when a policy solution is proposed which would reduce costs for consumers, while also having the potential to improve reliability and safety, policy makers have a responsibility to ensure that this solution, or a better one, is implemented as expeditiously as possible. Requirements to make definitional

changes to allied legislation should not preclude timely action that benefits the long-term interests of consumers. Cognisant of this situation, PIAC and ATA join with Energy Networks Australia and its members in calling for speedy coordinated action on this matter in the public interest.

Western Power proposed changing the definition of "distribution service" in the National Electricity Rules (NER) to ensure such off-grid supply is classified as a distribution service, which would enable distributors to receive regulated returns for this service.

We note the AEMC's Draft Determination that it is not able to make this proposed rule change, as the proposed rule change would introduce conflict between the definition of "distribution service" in the NER and the term "electricity network service" in the National Electricity Law (NEL).

We accept the AEMC's position that a co-ordinated package of changes to a range of laws, rules and jurisdictional instruments may be required to address these issues fully.

We propose, therefore, that the AEMC should identify and present the required changes to the COAG Energy Council to inform its considerations. The AEMC's final Rule Determinations should include advice to the COAG Energy Council on appropriate changes to jurisdictional reliability and consumer protection instruments. Our three organisations have agreed that these changes should be limited to the following circumstances:

- The proposal only extends to customers who are currently grid-connected and the distribution network service provider (DNSP) identifies that an off-grid solution is a more cost-efficient alternative to continuing their grid supply.
- The proposal does not extend to customers who are currently off-grid, in a microgrid or are seeking to go off-grid of their own volition.
- It will not prevent customers choosing to disconnect from the grid and purchase their own off-grid solution.
- Off-grid supply would be provided as a distribution services and therefore be subject to the economic regulatory framework under Chapter 6 of the NER.
- DNSP expenditure on the stand-alone power systems (SAPS) will remain subject to scrutiny by the Australian Energy Regulator (AER) through the revenue determination processes (including ex post review of capital expenditure in certain circumstances).
- The DNSP would still be bound by the reliability standard and network performance incentives such as the service target performance incentive scheme (STPIS) for the SAPS.

Commencement of an AEMC Rule changing the definition of distribution services should be timed to coincide with the commencement of other changes relating to the definition of "electricity network service" in the NEL and jurisdictional reliability and consumer protection arrangements. This is in line with the AEMC's current role of making rules and on occasion, providing policy advice as requested.

Current arrangements are producing numerous overlapping reviews, which take many years to complete and for which consumer benefit may not be realised for some time.

Further detailed comment is provided in Attachment A below.

Yours sincerely,

Andrew Dillon
Interim CEO, Energy Networks Australia

Jonathon Hunyor

CEO, Public Interest Advocacy Centre

Donna Luckman

CEO, Alternative Technology Association

Drivers for the rule change

The continuing improvements in capability and efficiency of distributed energy resources provide significant opportunities for increased efficiency of electricity supply through microgrids and SAPS. These systems usually include a combination of solar PV, energy storage batteries and a diesel or gas generator. There are significant potential future benefits to customers associated with the deployment of lower cost off-grid solutions to some regions, communities or customers.

Despite the potential benefits, the existing regulatory arrangements mandate network businesses supplying electricity services to an area by the interconnected grid. In its rule change request, Western Power estimates that SAPS could be deployed as a more efficient service to approximately 2,702 Western Power customers over the next ten years, resulting in avoided expenditure of $388m compared to replacing existing network assets.

In addition to lower costs, Western Power considers that SAPS as alternatives to replacing poles and wires in these areas of the network would also provide more reliable and safer outcomes for customers.

Communities served by Western Power do not currently fall under the NER. However, similar opportunities exist in other regional and remote areas within the NEM, such as within parts of Queensland, New South Wales, Victoria, South Australia and Tasmania.

Roadmap evidence on potential consumer benefits

The Energy Networks Australia and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) *Electricity Network Transformation Roadmap* (the Roadmap) considered the potential role of off-grid supply as part of its modelled scenarios.

The Roadmap analysis found that in a number of circumstances, SAPS and microgrids are likely to become a lower cost alternative to traditional grid supply arrangements over the next 10 years. In addition, the Roadmap finds that this transition can result in extra benefits such as reduced bushfire risk.

Energeia found that microgrids are most likely to be cost effective in the areas with the highest cost to serve, which are also the areas most subsidised under ‘postage stamp’ network pricing arrangements. These arrangements provide the same network tariff to rural and regional customers as urban customers and are usually mandated in government regulation.

In urban areas, the introduction of alternative delivery models such as microgrids (for groups of customers) or SAPS (for individual customers) may be driven by a customer response to the economic cost of the network. However, where ‘postage stamp’ tariffs or uniform tariff arrangements provide significant subsidies to regional and remote customers, microgrid and SAPS solutions are unlikely to be adopted by individual customers.

Alternative delivery models like SAPS and micro-grids may still provide a more efficient solution and, with a flexible regulatory framework, such solutions could be employed by the network provider to reduce the total delivered costs to all customers.

General comments

We are pleased to note the AEMC's support for enabling off grid supply. We agree that in some cases, it is cheaper to provide off-grid supply than to maintain and replace long power lines linking remote customers to the national grid. Moving to off-grid supply may offer additional benefits such as improved reliability for remote customers and reduced bushfire risks.

The tariffs paid by most grid-connected remote customers do not reflect the high costs of supplying those specific customers. Instead, tariffs tend to reflect the average cost of supplying power to all customers in the distributor's area. Allowing network businesses to pursue the most cost-effective solutions in providing regulated network services reduces the network costs for all customers, not only for those who may be supplied through SAPS.

Definitional difficulties

Western Power proposed changing the definition of "distribution service" in the *National Electricity Rules* (NER) to ensure such off-grid supply is classified as a distribution service, which would enable distributors to receive regulated returns for this service.

We note the AEMC's legal advice that the proposed changes would result in inconsistencies between the NEL and the NER, by disrupting the mirroring between the term "distribution service" in the NER and the term "electricity network service" in the NEL. We note AEMC advice that this would make the proposed rule invalid.

We propose that the AEMC should develop appropriate draft revisions to the NEL for the consideration of the COAG Energy Council.

Reliability and consumer protections

There are substantial differences between the energy-specific consumer protections available to grid-connected customers and those available to off-grid customers. We maintain our position that customers moving to an off-grid supply should continue to benefit from the current regulatory framework mechanisms for the protection of grid-connected customers, such as:

- the obligation to supply the customer;
- reliability and quality standards(noting that in individual cases these may require flexibility in application due to the particular characteristics of the off-grid solution);
- dispute resolution procedures; and
- access to retail offers, including access to consumer hardship provisions.

Whether a customer is connected to the interconnected grid, or not, is not the right basis for assessing their need for relevant consumer protections. All energy customers should receive a clear set of consumer protections that are appropriate for their circumstances, through a nationally agreed and appropriately funded framework.

We note that changes to the definition of distribution service to allow off-grid supply measures such as SAPS or microgrids to replace current network assets is likely to cause a range of flow-on impacts on customer protection and reliability standards which these customers currently experience.

The *National Energy Retail Law* (NERL) (South Australia) Act 2011[1], states that insofar as the NERL applies to electricity, the NERL (South Australia) will only apply in relation to the sale of electricity to customers whose premises are connected, or to be connected, to the interconnected national electricity system within the meaning of the NEL.

Currently, only Queensland and the ACT have extended the NERL protections to microgrids. In other jurisdictions, were this decision taken, each state's NERL Application Act's will require amendment to extend the consumer protections currently available to interconnected customers to microgrids or SAPS customers. Similarly, some State based reliability and performance licence conditions for electricity distributors may also need to be revised to include provisions for microgrids and SAPS.

We accept the AEMC's position that a co-ordinated package of changes to a range of laws, rules and jurisdictional instruments may be required to address these issues fully.

The submissions by PIAC and the ATA to the AEMC's consultation paper outline the issues of consumer protections for customers who are supplied through off-grid systems under this rule change proposal. The submissions from PIAC and AusNet Services also outlined potential arrangements which would allow the customer to retain access to competitive retail market offers.

In addition, we question the consistency of the AEMC's position with regard to price and reliability claims. For example, on page i. the AEMC states that:

> *"in some cases, it may be cheaper to provide off-grid supply than to maintain and replace long power lines linking remote customers to the national grid. Moving to off-grid supply could potentially offer additional benefits such as improved reliability for remote customers and reduced bushfire risks".*

However, on page 12 the AEMC states that changes to the risk profile

> *"could result in consumers facing higher prices or receiving poorer service".*

The evidence provided by Western Power and other distributors is that for these remote customers reliability, safety and aesthetics are all likely to improve and that costs are likely to also be reduced. Distributors would only propose off-grid arrangements where the outcome was advantageous to their customers. Western Power has been undertaking a year-long trial where they installed SAPS on six rural farms to test the suitability of this technology. Positive results and feedback from customers has encouraged Western Power to continue using SAPS to supply these customers for at least the next 3 years. Key findings include:

- participants experienced significantly fewer power interruptions than customers on the network in the same area;
- participants reported greater satisfaction compared to the network service;
- the stand-alone systems were robust enough to survive extreme weather events; and

[1] National Energy Retail Law (South Australia) Act 2011 Division 2—Application of law—electricity 16—Application of law.

» more than 90 per cent of electricity generated during the pilot was generated from the sun.

Results are shown in the table below. The solar systems and batteries provided on average 92% of required electricity, with the remaining 8% of electricity provided by the diesel generator. Reliability improved from approximately 70 hours outage annually for grid-connected properties down to less than 5 hours outage for SAPS provided properties.

Site No	Solar / Battery %	Number of outages (grid)	Outage hours (grid)	Number of outages (SPS)	Outage hours (SPS)
SPS-01	95%	20	72.19	1	14.95
SPS-02	96%	20	72.19	0	0
SPS-03	95%	20	72.19	0	0
SPS-04	84%	19	71.87	1	6.73
SPS-05	96%	19	71.87	2	2.78
SPS-06	87%	10	57.24	2	3.48
Average	92%		69.59		4.66

Further detail is provided in Attachment B: A Western Power Brochure entitled *"Stand-alone Power System Pilot One Year On"*.

Cost-reflective network pricing

The AEMC states in page iii of the Summary that in order for off-grid supply to be provided efficiently changes required would include incorporating locational signals into cost reflective network tariffs so that customers have improved incentives to choose off-grid supply if it is cheaper than grid supply. The AEMC does not explain how this intention would be married with jurisdictional uniform tariff policies, sometimes known as postage stamp pricing arrangements. We are also concerned that if the AEMC is considering nodal pricing as an alternative, then it has misunderstood the intent of the rule change proposal: to allow network businesses to provide the lowest-cost option to provide regulated distribution network services.

Many jurisdictions have uniform tariff policies. These policies are set at the retail level to ensure that rural customers pay no more than urban customers', even though their cost to serve may be significantly higher. Any shortfall between the actual costs to the

network service provider and the amount paid for by consumers as network charges is subsidised by other, typically lower cost to serve customers, living in urban areas.

While such cross subsidies may deter customers adopting a technological solution that would have a lower economic cost, it must be recognised that:

- network customers are particularly averse to the notion of locational pricing;
- this policy results from a deliberate and binding determination by governments rather than any constraint introduced by the monopoly service provider; and
- while it is theoretically possible that governments could introduce measures to remove such locational cross-subsidies, and require the introduction of nodal pricing in existing distribution areas, we see no sign of this occurring in the short-term. Such changes would bring significant complexity, and raise issues of social impact and equity.

Further, PIAC has witnessed strong community opposition to the idea of locational network pricing in deliberative forums held by distribution businesses in metropolitan and regional NSW.

We consider that the Rules framework must provide sufficient flexibility to allow efficient service delivery and lower costs for all customers, within the tariff frameworks that are likely to continue in the near future.

Incentive and investment-related mechanisms

A range of existing and newly strengthened regulatory mechanisms incentivises networks to deliver off-grid solutions where this was distributor-led at the most efficient cost. For example, networks:

- must demonstrate that proposed capital and operating expenditure programs are efficient;
- have expenditure profiles that are subject to benchmarking to provide further assurance that proposed expenditure reflect efficient costs;
- are incentivised by multiple schemes e.g. capital expenditure efficiency sharing scheme and the efficiency benefit sharing scheme to deliver least cost solutions;
- are obligated to undertake regulatory investment test processes across a range of major new investments (noting recent AEMC rule change decisions that will broaden this range to replacement projects);
- remain subject to a recently expanded range of ring-fencing and cost allocation obligations that further support incentives for efficient and non-discriminatory service delivery options.

We note the *Replacement expenditure planning arrangements* rule finalised by the AEMC in July 2017 extends the distribution and transmission regulatory investment tests to network replacement expenditure decisions, which is when it is likely to be most relevant to consider options for off-grid supply.

Our organisations agree that the existing framework provides appropriate means for identifying when replacement of existing lines by an off-grid solution will result in a more efficient solution.

Benefits of DNSPs being allowed to own SAPS

The draft determination proposes that DNSPs cannot own SAPS, as they do not have natural monopoly characteristics and can therefore be provided by the emerging contestable energy services market. We disagree with this proposal as it has the potential to impose risks, costs and inflexibilities that would present a material barrier to the deployment of SAPS.

Our organisations support the use of third-party providers to provide and install both microgrids and SAPS. However, we consider that the AEMC's envisaged SAPS ownership model and associated repairs and maintenance process are likely to carry a higher risk of service provider insolvency events and will disadvantage customers through both higher costs and extended service times.

One possible model involves the SAPS being commissioned and built by a third party on behalf of the DNSP, but is then both owned and maintained by the DNSP. The DNSP will seek to maintain these systems in the most efficient manner relative to the local area – in some cases, local crews may be best placed to perform maintenance, whilst in other cases contracting with local expertise or the SAPS supplier may be more efficient. If a customer reports a fault, it is the DNSPs obligation to ensure service is restored, regardless of its operations and maintenance model. The DNSP maintains full control over the servicing and reliability of the system. Like a grid-connected customer, the customer has access to a reliable service provider with guaranteed longevity and an on-hand, local workforce to provide timely servicing.

Referring to the COAG Energy Council for further action

We note that the COAG Energy Council has an allied policy development process underway via the *Stand-alone energy systems in the Electricity Market* work stream, led by the Energy Market Transformation Project Team. Our organisations and members have previously provided input into this process. If the AEMC decides not to make a rule change in this case and refers the matter back to the COAG Energy Council, it is likely a further lengthy policy development process will ensue, significantly delaying any potential savings to customers that might otherwise be achieved.

It should be kept in mind that this rule change proposal was submitted in August 2016. By the time the AEMC makes its final determination, this matter will have already been under consideration for 16 months.

Our organisations urge the AEMC to identify and present the required changes to the COAG Energy Council to inform its consideration of this matter. Thus, at the time the AEMC makes its final determination, we propose that the AEMC also advise the COAG Energy Council on changes to the NEL and jurisdictional reliability and consumer protection instruments that would be required to enable progress on the intent of this rule change request.

Stand-alone Power System Pilot
One Year On

westernpower
It's ON

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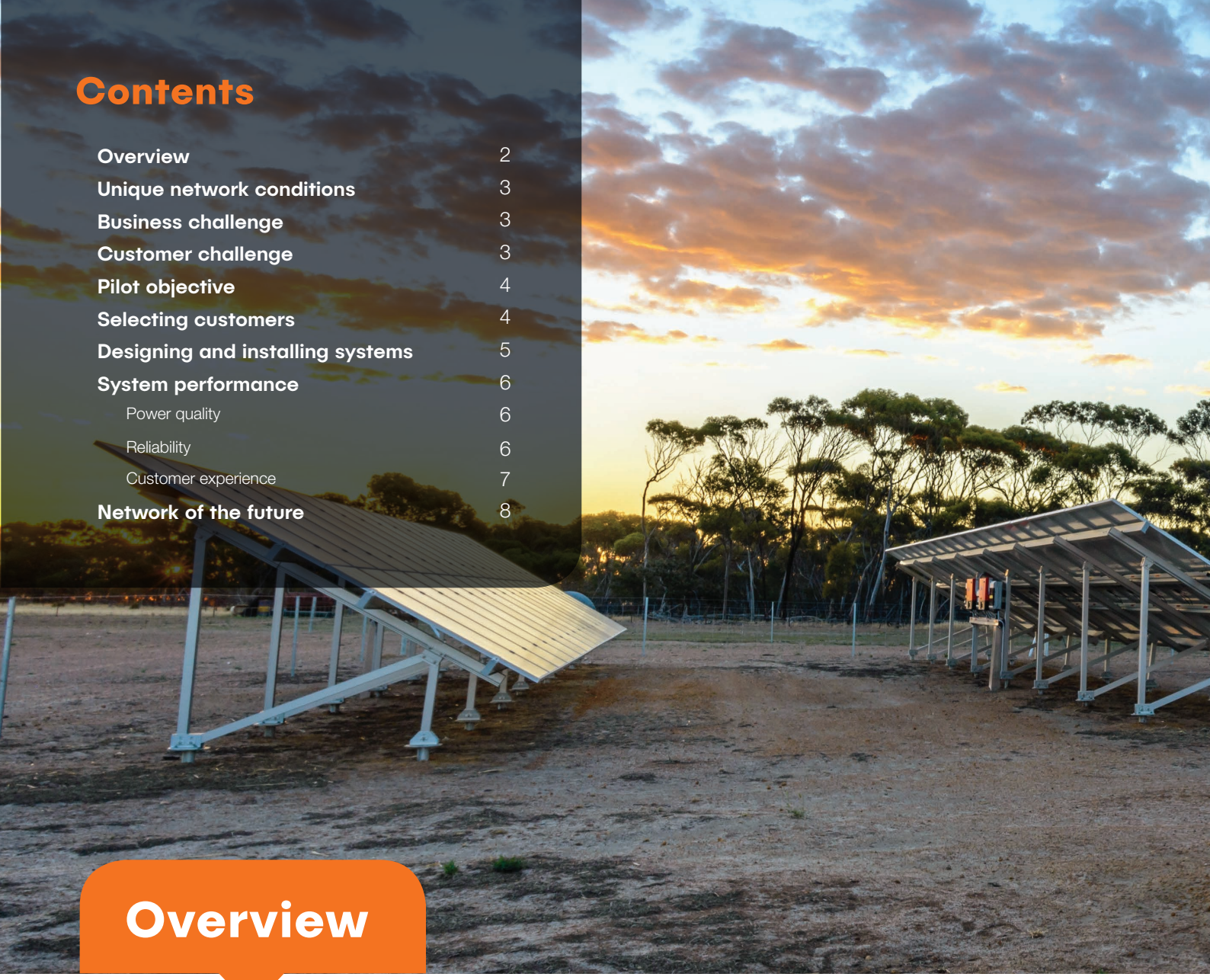


Overview

Like many electricity networks around the world, significant sections at the edge of Western Power's grid are progressively scheduled for replacement. Many are over 30 years old. We have been researching alternatives to replace traditional poles and wires in these areas. In some circumstances stand-alone power systems (SPS) provide an exciting new approach to energy supply, utilising renewable energy and battery storage to provide safer and more reliable electricity for our customers.

In July 2016 we installed stand-alone power systems on six rural farms as part of a 12-month pilot to test the suitability of this technology. Given current legislative restrictions on Western Power's operations, we worked with regional electricity provider Horizon Power and retailer Synergy to develop the strategy and designs for the systems.

Energy Made Clean (EMC) were engaged to procure, install and run the systems.

Positive results and feedback from customers have encouraged us to continue using SPS to supply these customers for at least the next 3 years. Some of those key findings are:

- participants experienced significantly fewer power interruptions than customers on the network in the same area
- participants reported greater satisfaction compared to the network service
- the stand-alone systems were robust enough to survive extreme weather events
- more than 90 per cent of electricity generated during the pilot was generated from the sun.

Our customers and unique network

- We service more than 1.1 million customers
- Our network spans an area greater than the size of the United Kingdom, with about one thirtieth of the population
- 85 per cent of our customers believe we should use emerging technologies to deliver improved customer outcomes.

Business challenge

Low customer density and relatively low energy use presents significant challenges to the operation, and upkeep of our network.

We currently have an obligation to connect customers to the network and maintain a network service. This means ongoing investment to maintain, replace and build network assets such as poles, wires, substations and transformers.

Our business objective is to apply technical learnings and safely deploy innovative non-network solutions as they become cost-competitive relative to centralised grid supply.

Customer challenge

The frequency and duration of outages for customers in remote locations is significantly higher than their urban neighbours. In addition, long feeder lines that traverse hundreds of kilometres also present a bush fire risk that ultimately may result in these customers experiencing longer outages than would otherwise be the case.

In rebuilding network infrastructure customers want more resilient power alternatives.

Pilot objective

The 2016 pilot sought to expand on learnings from a single property SPS trial in 2009. We acknowledge that customer perception and experience ultimately determines whether SPS can be a viable alternative to network replacement.

The objective of the pilot is to ensure customers have the same, if not improved, electricity experience compared to being grid connected.

Selecting customers

Given the importance of the customer experience during the pilot, a specifically designed engagement process was required. Engagement was split into two phases – recruitment and commissioning. The recruitment phase focused on selecting suitable customers living and working in areas of the network with ageing assets, low customer density and low energy use. Other candidate criteria included:

- sites had to be more than 50 per cent cheaper to install and operate a SPS when compared with traditional building and replacement methods
- customers had to be within medium to high bushfire risk areas where a safety benefit could be realised
- they had to be on short spurs on the same feeder to make the pilot meaningful, and consume less than 40kWh/day
- heightened reliability issues.

A total of 87 customers were identified in the Ravensthorpe, Lake King, Jerramungup, Lake Grace and Kondinin localities. Interval meters were installed at each of these sites in June 2015 to gather a wider range of energy consumption data across winter.

After assessing data, direct engagement began with 40 eligible customers, starting with people at the end of the spur lines. If those at the end of the line were not interested in participating, the line was no longer eligible for the pilot.

In addition to technical suitability, we considered customer willingness to be part of an ongoing research program.

Table 1: SPS participant details

Site No	Spur No	Spur Length to retire (km)	Average Daily Usage (kWh)	Locality	Average Asset Age	
					Pole	Conductor
SPS-01	1	13.8	42.4	WEST RIVER	34	31
SPS-02	1	13.8	47.9	WEST RIVER	34	31
SPS-03	1	13.8	28.0	WEST RIVER	34	31
SPS-04	2	5.9	28.3	LAKE KING	24	29
SPS-05	2	5.9	12.8	LAKE KING	24	29
SPS-06	3	10.4	28.7	ONGERUP	30	30

Figure 1: SPS participant locations

Designing and installing systems

We sized systems to customers' needs, as grid-independent energy-generating units with solar photovoltaic (PV) panels, lithium batteries, an inverter and backup diesel generator. They were located in a restricted area on each customer's property.

SPS units were deliberately sized with greater capacity than a typical SPS installation so that participating customers experienced a level of electricity supply consistent with the grid and to allow a contingency for increased customer demand.

Customers were charged the same rates for energy consumption as others within the South West Interconnected Network, so no direct incentive was offered for behaviour changes.

Different sized properties meant systems needed to meet a typical customer load of 10, 20, 30 and 40 kilowatt hours (kWh). Batteries were sized to supply customers for two days if the sun wasn't shining. PV array sizes were also varied to match to the load size and installed battery sizes (Table 2).

Table 2: SPS system size specifications

SPS Type	SPS 10	SPS 20	SPS 30	SPS 40
30 minute Maximum Demand (Amps/Phase)	32	32	32	32
PV Nominal Output (kW)	4.5	9	13.5	18
Usable Battery Capacity (kWh @ 20 hour discharge rate)	20	40	60	80
Diesel Generator (kW) Prime Rating	12	24	24	24

System performance

Systems were remotely monitored. A range of activities were undertaken to ensure that system performance met both customer expectations and the intention of the Technical Rules, regulated by the Economic Regulation Authority, including:

- customer surveys to gauge customer satisfaction with our service and provide a comparison with grid supply
- ongoing monitoring of the systems' performance and detailed analysis of defects and outages to avoid reoccurrence
- comparison of the reliability of supply (minutes of each outage) of SPS versus the known network outages affecting customers in the area
- analysis of voltage and frequency levels to confirm that SPS meets the requirements within the Technical Rules.

Power quality

The Technical Rules classify an SPS as an islanded system. Therefore, they must operate in a 49.5 – 50.5 Hz frequency band for 99 per cent of the time. In addition the systems must have an AC voltage operating range of +/- 6 per cent of the 240 V nominal voltage during normal operating states.

The base system met these requirements and the site voltage remained within tolerances at all times.

All sites remain connected to the grid, but did not draw power from the network.

Reliability

One simple but important performance metric for a power system is reliability of supply. Network outages are known outages on the same spur that SPS participants were on.

In January 2017 a major storm event occurred in the region with storms and flooding washing away major road arteries, isolating communities and causing power outages of up to 24 hours. The SPS sites were unaffected, albeit with significantly reduced renewable generation.

Table 3 shows pilot customers experienced a significant reliability improvement with an average outage duration of 4.66 hours for this period versus 69.59 hours had the same customers been network connected.

Table 3: Supply reliability of network vs. SPS (July 2016 - July 2017)

Site No	Network		SPS	
	Number of outages	Hours	Number of outages	Hours
SPS-01	20	72.19	1	14.95
SPS-02	20	72.19	0	0
SPS-03	20	72.19	0	0
SPS-04	19	71.87	1	6.73
SPS-05	19	71.87	2	2.78
SPS-06	10	57.24	2	3.48
Average		**69.59**		**4.66**

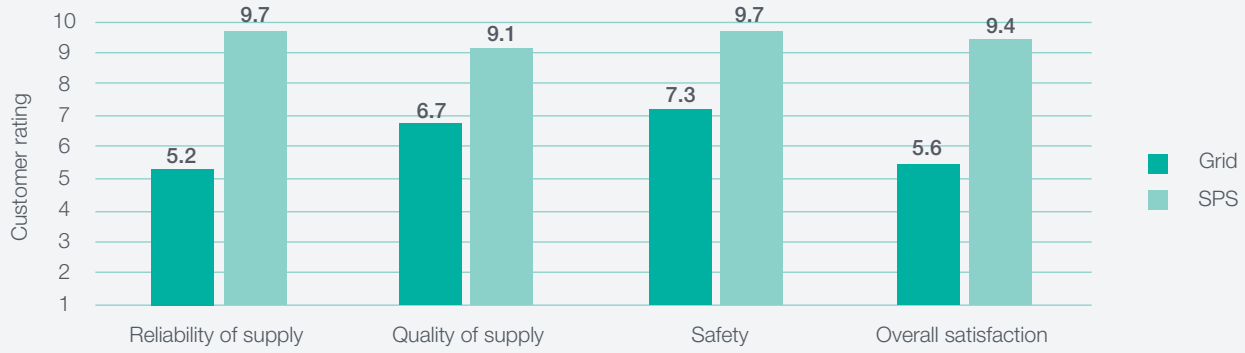
Tim and Sadie, Ongerup

Customer experience

In July 2017 we surveyed participants to compare their experience while connected to the SPS to their traditional network supply. Ratings indicate that customers have preferred their SPS experience with an overall satisfaction rating of 9.4/10 for the SPS supply.

Bernie, Amanda and Ros, West River

Figure 2: Customer satisfaction of SPS vs network supply



Owen, Aimee and family, West River

Network of the future

Many “meshed” or integrated networks around the world are evolving to become modular i.e. dynamically connected microgrids interacting with centralised electricity networks. We also consider islanded infrastructure solutions, such as SPS, to be another critical part of our network’s evolution.

Integrated network

Current SWIS model

- Central mesh network with radial transmission line branches
- Fully integrated, shared generation capacity
- All customers connected

Modular network

Future model with variable network types

- Supply is less homogeneous
- SPS and microgrids in the periphery of the network
- Thinner transmission lines to areas with local generation and storage

Applying learnings to support customer choice

Initial modelling by Western Power has shown we could install more than 3,000 SPS units to avoid spending hundreds of millions of dollars over the next 50 years replacing traditional poles and wires. The quantum of the savings may be bolstered as technology improves and costs fall.

We are already investigating the potential wider roll out of SPS, pending the resolution of statutory and regulatory barriers. Some of these barriers define a battery as a generator, which we – as a network operator – are not permitted to be.

This technology was not contemplated when the electricity legislative framework was developed.

The pilot plays a critical role in helping to boost the case for legislative changes for the deployment of these systems, as part of improving electricity supply in regional areas.

In 2016, we submitted a rule change request to the Australian Energy Market Commission for emerging technology solutions to be reclassified as part of the network planner’s solutions toolset. Similar discussions have taken place with Western Australian regulatory bodies, to allow our customers greater choice in how they receive energy in the future.

To learn more about how we’re embracing new technologies to improve service and reliability to our customers visit: www.westernpower.com.au/about/energy-solutions

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