



Sherine Al Shallah
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Our Ref: JC 2018-081

9 October 2018

Dear Ms. Al Shallah,

S&C Electric Company response to the AEMC Issues Paper – Review of the Regulatory Frameworks for Stand-Alone Power Systems (EM00037)

S&C Electric Company welcomes the opportunity to provide a response to the Issues Paper covering the Review of the regulatory frameworks for stand-alone power systems.

S&C Electric Company has been supporting the operation of electricity utilities in Australia for over 60 years, while S&C Electric Company in the USA has been supporting the delivery of secure electricity systems for over 100 years. S&C Electric Company not only supports the “wires and poles” activities of the networks, but has delivered over 8 GW wind, over 1 GW of solar and over 45 MW of electricity storage globally, including batteries in Australia and New Zealand. We have also deployed over 30 microgrids combining renewable generation, storage and conventional generation to deliver improved reliability to customers.

S&C Electric are particularly interested in facilitating the development of markets and standards that deliver secure, low carbon and low cost networks and would be very happy to provide further support to the Australian Market Energy Commission on the treatment and potential of emerging technologies and approaches.

Yours Sincerely

A handwritten signature in blue ink that reads "Jill Cainey".

Dr. Jill Cainey
Regulatory Affairs Director
Email: jill.caineysandc.com
Mobile: 0467 001 102



General Comments

SAPS and microgrids are not new. DNSPs in Australia have been operating SAPS and microgrids for tens of years and doing so successfully in terms of meeting customers' needs (price and reliability/security).

The recent trials by Western Power using SAPS indicate that reliability is much improved and that customers are very happy with the service they are receiving.

State regulation has ensured the success of SAPS and microgrids and while we strongly support a national framework to provide consistency and certainty to all customers and potential participants, there is no need to start from scratch.

The issues paper is disappointing in that it doesn't contain an in-depth analysis of what has or hasn't worked in state regulation of SAPS and microgrids. Rather, the issues paper seeks to broadly apply vertical separation requirements and competition requirements, which while suitable (in most cases) for the wider interconnected system, are not so appropriate for a small SAPS or microgrid.

Trying to impose the regulatory framework that currently serves the interconnected system reasonably well (but it is creaking at the seams due to technological advancements and will soon be not fit for purpose), on small isolated systems will deliver perversely expensive outcomes, when the intention of deploying SAPS is to reduce costs to customers.

Competitive markets, functioning or otherwise, do not always deliver the best outcomes for end customers. It would be easy to argue that the current competitive market frameworks have failed (e.g. ACCC Retail Pricing Inquiry, June 2018).

New technical approaches, that deliver benefits to customers, should not be over-burdened by regulation, such that the original cost benefits are lost. This is the very real risk of the frameworks suggested in the issues paper. The States of Australia have clearly demonstrated how SAPS can be regulated effectively and the AMEC must learn from the States before imposing unwieldy broader market structures on small systems.

The only outcome that matters is that **customers should have a reliable, low carbon electricity supply at lowest cost**. If the DNSP can do this in a vertically integrated approach, then the idealistic pursuit of separation should be set aside, while ensuring appropriate ongoing scrutiny of the operation of a SAPS or microgrid.

Definitions of Microgrids

Microgrids may be isolated (not interconnected), interconnected (all the time) and interconnected with the capability to island (sometimes not interconnected). A Stand-alone Power System (SAPS) is likely to be an isolated small microgrid with more than one party versus an Individual Power System (IPS), with a single party.

A microgrid that is (permanently) interconnected, may be considered to be an Embedded Network by the AEMC, although this is not clear and should be clarified, particularly if regulations are to follow.



A microgrid that is interconnected, but can island, for instance, during an outage on the interconnected system to maintain supply or pre-emptively islanded if interruption is likely, is at times isolated. This type of microgrid may also island to manage energy costs, both internally and at the request of the operator of the interconnected system (demand response). When this type of microgrid is connected, it has access to all the regulated options, such as retailer choice etc. However, when islanded, the customers on the microgrid are isolated from the interconnected system and so do not have access to regulated choices. This type of microgrid is not addressed in the Issues Paper. Again, it is not clear if an interconnected microgrid, that can operate in islanded mode, is an embedded network or not.

Interconnected microgrids with the capability to island are a standard approach to deliver resilience (e.g. New York), where islanding only occurs in response to a system stress or problem. It could be expected that the time spent islanded and isolated from the interconnected system would be only for a short period. And such short temporary periods of isolation may be deemed to be outside the regulations that would normally apply. Equally, in the case of severe damage to the interconnected system (e.g. Puerto Rico following Hurricane Maria), the time of isolation from the interconnected system could be prolonged.

We would welcome more clarity on the issue of how interconnected, but islanding-capable microgrids will be treated.

Retail in Isolated Systems

There are many examples of where SAPS / microgrids are working well under state jurisdiction. Including the management of retail in a DNSP operated SAPS / microgrid. We are strongly supportive of a nationally consistent framework for SAPS / microgrids as this provides comfort and certainty for customers and providers. However, rather than “starting again”, which appears to be the intent of this paper, the AEMC should explore the various models in each state jurisdiction for the approach that serves customers best. It may be that there are elements in several jurisdictions that work well, that could form the basis for the national approach.

Offering a choice of retailer, to the same level provided to a customer in the interconnected system is only “pseudo-choice”, that is, an attempt to provide choice where none can physically exist. The retailers in a SAPS would be responsible for predicting demand and matching with generation, in a small, remote isolated location and the party best placed to “balance” a SAPS, is the operator, which should be the DNSP.

It may be theoretically feasible to have a generator, DNSP and retailer in a SAPS, but the costs of ensuring that all of the current players in the interconnected system, have a role in a SAPS, are likely to far outweigh any perceived benefit in “competition” and “vertical separation”.

The generation in a SAPS is likely to be a mix of behind-the-meter (e.g. roof-top solar PV) and front-of-the-meter, so complicating the management of generation in a SAPS. The operator of the SAPS or microgrid will need to balance the system and this may be best achieved with direct control of behind-the-meter assets. This could be a service purchased from the customer by the DNSP, but buying such a service is likely to be offset against the costs for providing the SAPS.

The advent of peer-to-peer trading will negate the need for a retailer and is likely to facilitate the development of innovative supply models, including energy management, with SAPS and small microgrids



being ideal systems to test these innovative approaches. But regardless, there will need to be a party that will be responsible for operating the SAPS safely and it keeping it balanced (generation=demand) and the DNSP is best placed to achieve all the required outcomes at least cost to the customer.

System Operation

DNSPs are well-placed to maintain and operate a SAPS and SAPS should be treated as a standard control service, with the SAPS counting to the regulated asset base. Without this designation the cost-savings envisaged by using a SAPS in the place of traditional network assets will be lost.

A SAPS cannot simultaneously be a “standard control service” and a “non-network option” (non-wires alternative) as described in Section 3.2.1 for a single DNSP.

An individual DNSP may choose to procure a SAPS from a third-party as a non-wires alternative, but then the service to the customers in the SAPS would be covered by a contract (DNSP with third party), with the DNSP bearing the risk for the third party failing to deliver standards or going out of business. The risk in these non-wires alternative is not borne by the party responsible for delivering the service to customers in the SAPS.

Where a DNSP chooses to own and operate a SAPS as a standard control service, then any risks related to the operation of that SAPS are borne by the operator.

A SAPS will require balancing and DNSPs are well-placed to be the “system operator”, this will particularly be the case if DNSPs transition to Distribution System Operators, as is suggested under the Energy Networks Australia – AEMO Open Energy Networks project. Balancing could be achieved using assets owned by the DNSP or via services purchased from customers in the SAPS (demand response).

It is hard to see how requiring AEMO to balance a two-customer SAPS would be economic or appropriate (at that system scale).

Third Party Providers

Third party providers should only provide SAPS in response to a competitive tender request from a DNSP. DNSPs should have the option to deliver SAPS themselves, if this is demonstrated to be the least cost solution for all customers. Only the DNSP can accurately perceive the value to its broader customer base of implementing an SAPS for specific customers (e.g. as identified by Western Power). It is likely that the cost savings of deploying a SAPS can only be monetised by the DNSP, so it is difficult to see how a third party could accurately determine the savings (to the SAPS customers and the wider customer-base of the DNSP) independently.

It seems highly inappropriate for a third party to offer an SAPS to customers if it results in the stranding of DNSP assets. That is, it is not appropriate for the activities of a party to disadvantage the past investment decisions of a DNSP, particularly if stranding by a third party results in an increased cost to either the customer connected to the SAPS, any other customers connected to the asset that is to be stranded and the wider customer base of the DNSP.

DNSPs are already well-regulated and well-placed to own and operate SAPS (see earlier comments on retail above) and the States have demonstrated a variety of models that effectively deliver benefits to all



customers. Setting up a new (duplicate) regulatory structure to cover third-party operated SAPS will result in increased costs to end customers, which would not meet the requirements of the NEO.

Reconnection post Isolation

Reconnection of customers in a SAPS to the interconnected system should only occur if to do so would result in lower costs to all of the customers of the responsible DNSP.

A single customer changing their mind or moving into a property in a SAPS and objecting to the SAPS should not have the ability to demand reconnection to the interconnected system. Or if they do have the ability to request reconnection, it should only proceed if it can be demonstrated that to reconnect the SAPS to the interconnected system would result in reduced costs to the broader customers base.

If it is not cost-efficient to reconnect a SAPS to the wider system, then the cost of reconnection and operation of that interconnection to the wider system, for the life of that asset, should be borne by the requester or third party, not by the entire customer base of the DNSP.

Reconnection is likely to be extremely expensive. The right of reconnection for any customer in SAPS will act as a significant disincentive for any party (DNSPs or third parties) to deploy a SAPS, given the potential risk that a customer has a regulated right to a connection to the wider interconnected system.

Lowest Cost to All Customers

As stated before, vertical separation and competitive markets do not necessarily deliver the best outcomes for customers. Regulations only need to deliver electricity at lowest cost to customers and in some cases a degree of vertical integration, particularly in small systems, may achieve this more successfully.



Responses to Questions

QUESTION 1: JURISDICTIONAL OPT-IN PROVISIONS

(a) Should the arrangements supporting the transition to off-grid supply include an explicit mechanism to enable jurisdictions to determine when the national framework for SAPS would come into effect for DNSPs in their jurisdiction?

Any new national arrangements should take the best of the State regulations. If the national arrangements are perceived by States to offer worse customer outcomes, then States will not move to the national approach.

The decision should be made by the States on the basis of the best outcomes for their customers.

Other than ensuring best outcomes for customers, there should be no explicit mechanism to determine when a State moves to the national arrangements.

(b) Should this mechanism provide jurisdictions with the flexibility to opt-in to the national framework on a more bespoke basis e.g. on a regional or distribution area basis, rather than state or territory wide?

If a State “opts-in” to the national approach, then it should apply state-wide (after a suitable period of consultation in each jurisdiction).

QUESTION 2: EFFICIENCY PRE-CONDITION

(a) Is the RIT-D and supporting consultation process appropriate in the context of SAPS, including in respect of the different models of SAPS supply (that is, microgrids and IPS)?

SAPS could be a non-wires alternative (if supplied under contract by a third party to the DNSP) or could be a standard control service, where delivered directly by the DNSP. The investment test should allow the DNSP to explore both options and determine the option that delivers the best outcomes for the customer (cost, security, reliability etc.).

(b) To ensure they remain fit-for-purpose in the context of SAPS, what (if any) amendments may be required to:

- the RIT-D test (including to the classes of market benefits and costs)
- the RIT-D consultation process and information requirements (including in relation to the non-networks options report), and
- the AER’s application guidelines?

No comment.

(c) Is there a need to develop a light handed, targeted test to apply where the RIT-D is either not applicable or not proportionate? What might this test and/or assessment process look like?

It is possible that the cost of deploying a SAPS would fall under the threshold to trigger the RIT-D process. To apply the RIT-D process to ALL SAPS would be disproportionate.



QUESTION 3: CONSUMER CONSENT PROVISIONS

(a) Is a requirement for customer consent necessary? If existing consumer protections can be maintained for SAPS customers, is consent necessary? If so, should this be based on a unanimous or majority consent model? What are the implications and issues associated with each model?

Western Power have demonstrated that the performance of a SAPS is superior to overhead lines. They have also demonstrated that customers are happier with a SAPS than overhead wires. Given that reliability is improved it is difficult to see why customers in remote areas would not want to be in SAPS.

However, the DNSP must take time to educate customers that are likely to be placed in a SAPS. With appropriate protections and oversight, it would be expected that supply quality would improve. There will be vulnerable customers who will need additional help (e.g. struggling to pay, special health requirements) to understand the implications of transitioning to a SAPS.

Customer engagement should be a key focus for DNSPs in all areas of their business and explaining the importance of SAPS to customers who are about to be transitioned to a SAPS or to the broader customer base, should be part of that focus.

(b) Are customers equipped to make informed decisions, particularly with respect to understanding what they are agreeing to in terms of reliability and security, and potentially price, outcomes? Should explicit informed consent be required before DNSPs transition customers from the grid to supply via a SAPS?

No, most customers are not well-placed to make informed *technical* decisions. Explicit informed consent should not be required.

(c) Where consent is considered appropriate, could incentives be offered by DNSPs to secure the consent of affected customers? What might these be (and could the benefits of a SAPS be shared)?

The incentive is a safer (lower bushfire risk), more reliable and better quality electricity supply.

No customer should experience a worse performance in a SAPS than when they were connected to the interconnected system.

(d) What alternative mechanism(s) could be used to ensure the long-term interests of affected customers are met?

No need for alternative mechanisms. The performance of DNSPs in their interconnected system is monitored and so the majority of the same requirements, where appropriate, should apply to SAPS. Effort will be required to pick through current performance standards etc. to make sure they are fit for purpose for SAPS.

QUESTION 4: REGULATORY OVERSIGHT ROLE

(a) Is there a need to incorporate a formal oversight and/or approval role by the AER (or other appropriate body) in relation to the transition arrangements for DNSP-led SAPS?



SAPS and microgrids should be a standard part of the suite of solutions that a DNSP can apply in their network. Mechanisms, such as the RIT-D process, would apply if the cost of the solution was over the threshold. Where the cost is under the threshold for the RIT-D process, then that process can be ignored.

Oversight would be via the current AER approach on investment (Determinations, RIT-D etc.).

(b) Who would be best placed to perform such a role?

AER

(c) If the AER is the appropriate body, what additional benefits might be provided by giving the AER additional powers in relation to SAPS, given it is already responsible for monitoring, investigating and enforcing compliance with various aspects of the energy laws and rules?

SAPS and microgrids should be a standard control service and as such their operation and performance would fall under existing arrangements.

Currently, GSLs are administered and monitored by States, so clarity on this would be needed.

QUESTION 5: GRID-CONNECTION PRECONDITION

(a) Should new customers or developments without an existing grid-connection be eligible for SAPS provision facilitated by a DNSP? Why or why not?

Yes. If a SAPS/microgrid is the most cost-effective solution to connect new customers or developments, then that option should be taken.

(b) Would new customers always have a financial incentive to obtain SAPS from the competitive market? Could implementation of a SAPS for a new customer or group of customers by a DNSP result in network savings?

Surely a new customer would explore the options for interconnection versus a SAPS? It's not the role of the regulator to ensure that every customer goes to a competitive market (e.g. the level of switching of retailers in the interconnected system), unless that customer is operating on behalf of a wider group of customers (e.g. housing developer).

Until SAPS are well-established, the first choice of a customer is likely to be traditional network assets, which would mean they would approach the DNSP, who may then suggest a SAPS.

It is possible that a customer may tender for a SAPS, inviting parties in addition to the DNSP. It is likely that the creation of an entirely new regulatory structure to accommodate third party providers of SAPS will increase the cost burden to all Australian customers, which is contrary to the NEO.

Building a new line to new remote customers is likely to be a similar cost to upgrading or replacing aging lines, so a SAPS could very well result in network savings, along with the other benefits of increased reliability and safety.



(c) Would enabling DNSPs to consider and potentially implement a SAPS solution as an efficient alternative to grid connection for new customers damage the competitive market for SAPS? In answering this question, consider new customers located in remote areas where a competitive market for SAPS may not be established.

Why do we need a competitive market for SAPS? Third parties should be exposed to all the same regulatory restrictions that DNSPs experience (e.g. Power of Choice, Ringfencing etc.). It is not clear what benefit duplicating the regulatory structure we currently have for DNSPs, for third parties, brings to the customer, either those wanting a SAPS or the wider customer base of the DNSP.

Unless the AEMC is proposing a “DNSP-lite” approach (similar to the iDNO concept in the UK), which would see third parties operate in a less restricted environment than DNSPs? This would materially disadvantage the DNSPs and reduce protections for customers.

If third parties deploy SAPS and subsequently the third party business fails, who will pick up the pieces and ensure that the customers in the SAPS still have supply? It is highly likely that the DNSP will have to make good.

It is difficult to see how a third party SAPS differs from an embedded network.

(d) What are the potential issues associated with DNSP obligations to connect where SAPS are regulated under the national framework?

If a SAPS is a standard control service, then customers are being connected to the distribution system and the operator of the SAPS is covered and monitored by the current regulatory requirements for a DNSP operating a distribution network (with a few additional requirements specifically to be developed for SAPS).

If the SAPS is a non-wires alternative, protections will be weaker and the risk still resides with the DNSP (see above comments on the failure of a third party).

QUESTION 6: RIGHT OF RECONNECTION

(a) Should existing reconnection rights apply unchanged to DNSP-SAPS customers wishing to seek reconnection to the grid? Alternatively, should the SAPS arrangements include special rights for DNSP-SAPS customers seeking to reconnect/revert?

SAPS arrangements to reconnect (where they exist at all) should be different to those that apply in the interconnected system.

Giving every single customer the option to seek reconnection, is likely to result in a large disincentive to deploy SAPS or microgrids.

(b) Should the reconnection rights of DNSP-SAPS customers who have provided consent (where applicable), or new customers, differ from the rights of customers who have not provided their consent to be moved?



No.

(c) What might a “return to grid process”, including charges, look like for DNSP-SAPS customers?

It could be very similar to the process to connect new generation/demand. There should be an application fee to avoid spurious applications. They may be fees for studies to assess whether reconnection is cost-effective.

(d) Would a mechanism need to be designed to avoid any potential to burden other customers with the costs of reconnection?

DNSP (and requester, if a third party) must undertake an assessment that demonstrates that reconnection to the interconnected system results in a reduction in costs for all customers.

If the cost of reconnection increases costs to all of the DNSPs’ customer base, then reconnection should not go ahead unless the requester pays in full for the assets and maintenance of those assets. That is, the needs of one person should not disadvantage the many.

QUESTION 7: DEFINING THE SAPS SYSTEM SERVICE(S)

(a) Should the national framework be designed around one model of SAPS service provision which could accommodate various circumstances? What might this model look like?

No.

(b) If the answer to the previous question is no, should this review focus on establishing a framework that allows DNSPs to pursue a variety of approaches to SAPS service provision, depending on the circumstances at hand? Why or why not?

A framework that gives DNSPs the flexibility to pursue solutions that maximise benefits to customers, both in the SAPS/microgrid and the wider customer base.

The DNSP is best place to determine the value and efficiencies of transitioning customers from the interconnected system to a SAPS.

(c) In what circumstances (if any) might it be appropriate for a DNSP to own/operate a vertically integrated SAPS solution?

All. There are some questions around retail, but this is handled well in State regulations using a variety of approaches that support the DNSP offering retail services. With appropriate monitoring and regulation there is no reason why the DNSP shouldn’t provide a fully vertically integrated SAPS or microgrid.

At the small-scale (a few customers), retailers are likely not to be interested (insufficient value) in offering services to a SAPS. Energy management services are more critical in a SAPS than competitive retail.

(d) When (that is, at what stage point in the process) would contestability in the provision of SAPS be tested and by who?



The DNSP is already required to provide the least cost solution to customers. Delivering a secure, reliable, quality low carbon electricity service to customers at least cost should be the only focus, not the need for competition.

With effective oversight and monitoring during the operation of SAPS, customer will receive ample protection, as demonstrated by the use of SAPS and microgrids in the States.

QUESTION 8: ROLE OF THE DISTRIBUTOR

(a) Are the issues identified in the contestability of energy services rule change applicable in the context of SAPS?

Where a SAPS or microgrid is a standard control service, then the appropriate regulations should apply.

(b) Is it necessary and appropriate to restrict the ability for DNSPs to earn a regulated return on behind-the-meter and/or in-front-of-the-meter assets specifically associated with the provision of SAPS? Why or why not?

Ring-fencing may complicate the operation of a SAPS, where behind-the-meter assets need to be coordinated with front-of-the-meter assets to ensure a secure supply. DNSPs should have the “balancing” role in a SAPS or microgrid (particularly as they transition to System Operators), which may mean controlling a suite of mixed-ownership generation assets.

As mentioned before, trying to impose the vertical separation requirements that apply in the interconnected system is likely to be inefficient and result in increased costs to customers.

Theoretically, the DNSP could buy a service from a customer to access behind-the-meter assets, but that same customer will also be paying for services from the DNSP, so it then becomes an unnecessary accounting burden.

(c) In what circumstances (if any) might it be appropriate for a DNSP to own/operate a vertically integrated SAPS solution (that is, to seek an exemption (where relevant) from restrictions on asset ownership)?

If the DNSP can own and operate a vertically integrated SAPS that can be shown to reduce costs to all customers of the DNSP, while improving the service provided to those customer in a SAPS, then the DNSP should be able undertake all the regulated functions in the SAPS.

QUESTION 9: PROVISION OF RETAIL SERVICES

(a) Is it likely to be feasible to design arrangements to provide SAPS customers with access to retail competition? What might these arrangements look like?

If involving a retailer is necessary at all, then the DNSP could put the retail element of the SAPS operation out to competitive tender every year (or so). The retailer is limited in the source of generation it can access in SAPS and if the customers in a SAPS have their own generation, the potential for income for the retailer is limited.



It is possible that retailers would not be interested in offering retail services to SAPS-connected customers, due to limited income, in which case the role would need to fall to the DNSP anyway.

(b) What specific retail services would need to be provided to customers supplied via a SAPS model of supply?

It is highly likely that the customers would have their own generation (solar PV) and potentially a back-up generator (particularly if reliability on the conventional interconnect was poor). Customers are likely, therefore, to only need additional supply if the weather was bad. This would be provided by SAPS assets (diesel generation set, electricity storage). Excess behind-the-meter generation may go into the SAPS electricity storage for later use (this may be a tariff, may be free etc.).

There may need to be some form of energy management service, if capacity was limited (a prolonged period of bad weather, access prevented etc.).

But, as the States have demonstrated, the DNSPs can and do offer retail in their SAPS and microgrids, without issue.

(c) Is there a need for a separate retailer role (distinct from the provision of other services) within the SAPS model of supply? Why/why not?

Energy management is probably far more critical in a constrained system, than retail.

The only reason for a retail role is to comply with the notion of competition. Where it can be demonstrated that a vertically integrated approach (from the DNSP) delivers reliable electricity at lowest cost to the customers in the SAPS and the broader customer base of the DNSP, then the retailer offers no advantage.

Monitoring of the price charged for electricity supply would be needed to ensure that the price was consistent with the retail costs in interconnected areas of the same network (this would be no different if a retailer was involved).

(d) Should retail services be managed by an authorised retailer?

Not necessarily.

QUESTION 10: OTHER ROLES/RESPONSIBILITIES SPECIFIC TO STAND-ALONE POWER SYSTEM PROVISION

Who are the key stakeholders within a SAPS model of supply (other than the DNSP and the retailer) and, specifically, what would be their key roles and responsibilities?

Retailer may not be necessary in the case of peer-to-peer trading, which could be offered by a non-retailer (energy manager, aggregator etc.).



QUESTION 11: TREATMENT OF EXISTING MARKET PARTICIPANTS

(a) Which existing market participants (if any) may be impacted by a DNSP's decision to transition a customer (or group of customers) to a SAPS model of supply?

The retailer may lose customers, but customers in remote locations are likely to self-generate anyway, so the impact may be small until larger isolated microgrids are deployed (e.g. isolating an entire town).

(b) Should DNSPs be required to consider the impact of transitioning a customer (or group of customers) to a SAPS on these participants? Why or why not? Via what mechanism?

The DNSP should consider the impacts, positive and negative, of transitioning a customer to a SAPS. This would be part of the process to determine if a SAPS offers a better solution to the customer/s. The outcomes of any assessments should be shared with the customers as part of the education and consultation process prior to any transition (see answers to Question 3 on consent).

(c) Is it necessary to put in place special arrangements for market participants, including embedded generators or retailers, who may be affected by a DNSP's decision to transition customers to a SAPS model of supply? What might these arrangements involve?

As part of the transition process the DNSP should consult not only with customers to be transitioned to a SAPS, but any other impacted parties.

At the small-scale losses to other parties are likely to be small and in a rapidly changing technical world, where consumers have their own generation, this is just another risk in that environment.

QUESTION 12: ROLES OF AEMO AND THE AER

(a) What role could/should the AEMO play within the framework for SAPS provision by a DNSP?

None. The DNSP can manage the SAPS (e.g. balancing).

(b) What role could/should the AER play within the framework for SAPS provision by a DNSP?

The AER will have a role in ensuring that the DNSPs meet regulatory requirements (e.g. Service Targets).

QUESTION 13: RETAIL PRICE PROTECTIONS

(a) If retail competition is not possible in SAPS, what alternative protections may be appropriate (e.g. retail price controls) for customers receiving supply via SAPS?

Periodic review and monitoring.

(b) Would applying the pricing condition from the AER's retail exempt selling guideline to not charge more than the standing offer price that would be charged by the local retailer be appropriate for SAPS, if retail competition does not apply? Is there an alternative price control that would be more appropriate?



No comment

(c) In the areas that currently have price regulation, is extending that price regulation to customers in SAPS an appropriate approach?

Yes.

QUESTION 14: OTHER NATIONAL ENERGY-SPECIFIC CONSUMER PROTECTIONS

(a) The Commission has suggested a general principle that energy-specific consumer protections for customers being supplied via a DNSP-led SAPS should be equivalent to those for grid-connected customers. Are there any significant provisions that wouldn't apply, or would require amendment for customers under a DNSP-led SAPS model of supply?

Where a SAPS is a standard control service, then appropriate regulations should apply. Some modifications may be necessary.

QUESTION 15: CONSUMER PROTECTIONS SPECIFIC TO SAPS CUSTOMERS

(a) Are there any additional consumer protections that may be necessary for SAPS customers?

The standard of supply should no worse (equal) or better than that on the previous interconnection. Reliability should improve.

(b) In relation to detailed product information for the SAPS, what are the minimum provisions that should apply (if any)?

No comment.

QUESTION 16: OPTIONS FOR PROVIDING ELECTRICITY-SPECIFIC CONSUMER PROTECTIONS

To provide equivalent protections for consumers receiving electricity supply via SAPS is the most efficient approach to amend the jurisdictional Acts adopting the NERL, as well as amending the NERL and NERR? Is there an alternative approach which may be more effective?

Where there are applicable State regulations (e.g. safety, GSLs), they should apply, but do not need to be folded into national arrangements.

If the national arrangements are not fit for purpose or offer a worse customer outcome, States will not adopt these arrangements.

QUESTION 17: RELIABILITY, SECURITY AND QUALITY

(a) What reliability, security and quality standards are appropriate for DNSP-led SAPS? Should the same reliability and service quality levels apply as for grid-connected customers?

Western Power has demonstrated that customers in a SAPS have a better quality of supply, with increased reliability (over previous interconnection and surrounding equivalent feeders). Reliability standards (STPIS, GSL) should apply.



(b) Are there any existing network reliability, security and quality standards that would be difficult to comply with for SAPS? For example SAIDI and SAIFI requirements may have equivalent principles, but the practice for determining them may be different in SAPS.

Mathematics would suggest that if the customer base is only 2-3, then SAIDI and SAIFI may be much higher in a SAPS, but when compared to the performance of the original interconnect for those same 2-3 customers, these metrics might be helpful (but only in before and after comparison, rather than with the wider network). However, Western Power would be best place to comment, given their use of metrics to demonstrate the success of their SAPS trial.

(c) Should GSLs be determined for DNSP-led SAPS? If so, should the same standards apply as for grid-connected customers (why/why not)?

State set GSLs should be assessed to determine if they are appropriate for SAPS.

QUESTION 18: OTHER JURISDICTIONAL CONSUMER PROTECTION CONSIDERATIONS

(a) Are the other jurisdictional issues presented in section 5.6 less likely to be a concern for DNSP-led SAPS (why/why not)?

Price (retail) has already been discussed.

(b) Should any of these issues be examined in greater detail in relation to DNSP-led SAPS?

No.

QUESTION 19: THIRD PARTY STAND-ALONE POWER SYSTEMS – DECISION MAKING FRAMEWORK

Third parties are not well-placed to independently offer SAPS (as discussed previously). Developing an entire (duplicate) regulatory framework will be costly and increase costs to end customers, which is contrary to the NEO.

The DNSP is the only party who bears the risk for supply/service to customers. Should a third party fail, it will be the DNSP who will have to pick up the pieces. The risks should be allocated to the party that bears responsibility and has the ability to mitigate the risk (NEO).

(a) Which party should make the decision to transition customers to a SAPS and which party/ies should approve the decision?

Only the DNSP has access to the data that would indicate that transitioning to a SAPS would result in better outcomes for the transitioning customer/s and the wider customer base. Therefore, only the DNSP can make that decision.

(b) What should be the grounds for deciding to transition customers to a third party SAPS?

If the DNSP believes that a third party SAPS (as a non-wire alternative, that is a contracted service to the DNSP) is more cost-efficient than owning and operating the SAPS themselves (a standard control service), then it should pursue a third party option.



This would be assessed as part of the decision to transition customers to a SAPS (see earlier comments).

(c) Which mechanisms should be employed to seek approval and/or consent?

The DNSP would be paying for a service and would engage with the affected customers.

(d) If the consent of transitioned customers is sought, what is the proportion of customers that should provide their consent? Should consent factors be defined, and what should they be?

If the DNSP is not the responsible party through a contract with a third party to provide a non-wires alternative via a SAPS, then any third party should be required to seek explicit informed consent from all customers prior to transition (particularly where customers forego their right to reconnection). This could be achieved by a community vote.

(e) Should transitioned customers, either individually or collectively (in the case of a microgrid), retain the right to reconnect to the grid?

If a community or customers decide to disconnect from the interconnected system in favour of a third party SAPS or microgrid, then they should forfeit the right to reconnection at a later date, since this burden would subsequently fall on the DNSP and not the third party (including when a third party fails).

QUESTION 20: THIRD PARTY STAND-ALONE POWER SYSTEMS – ASSET TRANSFER AND STRANDED ASSETS

It is difficult to see how duplicating regulations, creating stranded assets etc. to allow independent third party owned and operated SAPS will result in reduced costs for all end customers.

Additionally, there is the very real risk that a third party may fail (to meet standards or financially) or abandon the SAPS if it becomes uneconomic or untenable to operate. This would then leave customers without supply. It is then likely that the DNSP would have to pick up the pieces, since those customers fall into their region.

(a) Is there a role for the AER, jurisdictional regulator or other body in setting or approving asset values and pricing methodologies as a result of the transfer?

(b) How should asset transfers be treated in the DNSP RAB?

(c) How should stranded assets be treated in the DNSP RAB?

(d) Should corresponding fees be charged to the transitioned customers and customers left behind on the grid?

(e) Is a dispute resolution framework design required for asset transfer and stranded assets? What are the key elements of the design?