



# AEMC REVIEW OF THE REGULATORY FRAMEWORKS FOR STAND-ALONE POWER SYSTEMS - PRIORITY 1 - DRAFT REPORT

## TEC submission

### Introduction

TEC is funded by Energy Consumers Australia to advocate for the role of distributed energy resources in the equitable decarbonisation of the NEM. As such, and as reflected in previous submissions on this process, in principle we are supportive of the AEMC's efforts to develop a regulatory framework that would assist consumers to transition to stand alone energy systems either where this is the most economically efficient solution, or where the transition has been initiated by individual consumers, communities or developers. Due to our limited resources we can only make a few high-level comments related primarily to network-initiated disconnections of individual customers.

### Scope of the issue

Stand alone power systems (SAPS) can refer to:

- Individual systems installed from scratch by customers.
- Individual systems installed as the result of grid disconnections for economic or bushfire safety reasons.
- Microgrids installed from scratch on behalf of community groups or developers.
- Microgrids installed as the result of grid disconnections for economic or bushfire safety reasons.

Obviously the appropriate regulatory settings for each of these scenarios will be quite different. In addition, not only the declining cost of batteries but also the escalating risk of severe bushfires make it extremely difficult to accurately forecast the size of the market to which this reform may apply in coming years and decades. If the 90 per cent drop in the price of rooftop PV systems over the past decade were to be repeated for batteries, it is quite possible that, whether individually or in microgrids, SAPS will be the lowest cost form of supply to hundreds of thousands of customers within a decade. This is especially true given that given that the AEMC recognises that low reliability and ageing network assets may mean that "the economic case for SAPS may not necessarily be limited to more remote areas."

With respect to remote areas, though, the AEMC should give greater consideration to the accelerating rate of severe bushfires and how this will impact on the cost of maintaining existing poles and wires and the number of customers who may be affected by a loss of supply. As the CSIRO/BOM State of the Climate 2018 report observes, "Fire weather conditions are mostly worsening, particularly in the south and east."

In our view it would be prudent for the AEMC to plan on the basis of a large range of uptakes of the various configurations of SAPS; in other words, to create a regulatory framework that is fit for purpose well into the future rather than being convenient to implement in the short term.

## Transition to DNSP-led SAPS

As a strong supporter of the AEMC's contestability rule change, TEC urges the AEMC to explore models for transitioning customers onto SAPS without extending the reach of monopolistic control of DER by networks—especially in perpetuity, as is apparently envisaged here.

The problem is illustrated by this quote from the draft report:

With respect to DNSP-led SAPS, an important objective of the regulatory framework should be to achieve an outcome where DNSPs pursue SAPS where these provide a more efficient model of supply for a customer (or group of customers) than continuing to provide them with standard supply via the interconnected grid (which requires maintaining, and at some point upgrading, the distribution network).

This seems to imply that the economic case for transitioning to a SAPS would necessarily lead to networks owning the SAPS and adding them to their assets. In our view these are two completely separate issues. If it is more economic for a customer to be supplied by a SAPS, then that should occur. Who should own the SAPS is another matter. The argument is sometimes made that unless networks are allowed to add SAPS to their assets, they have no incentive to transition customers onto them. But networks should be regularly required under the rules to identify customers who would be more economically and reliably served by SAPS, independent of the future ownership issue.

With regard to the minimum SAPS project evaluation requirements, for projects under the RIT-D threshold it is not clear in what circumstances this would be triggered, rather than the network simply replacing old poles and wires on a progressive basis. That is why, at the very minimum, we consider that the AER should publish a SAPS Guideline to clarify when networks are required to undertake a SAPS project evaluation; especially since it would be far preferable for third parties to work with the same project evaluation requirements across the NEM than for these requirements to differ from network to network.

It is also unclear why networks would issue a request for SAPS solutions from third parties, and why these companies would respond, when networks have an incentive to own SAPS assets themselves and add them to their assets. This this would only be a genuinely competitive process if the network does not have a vested interest in the outcome.

## Options for SAPS service delivery

Of the two models outlined in the draft report, the NEM consistency model might be the easiest to implement in the short term, but it makes little sense to impose a pseudo-market exposure model in perpetuity on customers who will never again be exposed to this market. TEC therefore favours the alternative the integrated service delivery model. Being “based around the concept of a single proponent providing a delivered energy solution”, it recognises the uniqueness of the offgrid supply delivery scenario. But it still involves payments to retailers and networks, again in perpetuity, for services they are no longer providing. And it still involves “allow[ing] DNSPs to provide a distribution service using a SAPS solution.” Instead, we see no reason why the SAPS should not be provided by third parties via regulated opex payments from networks.

However, both models risk unintended consequences. Imagine two neighbours living on a rural road. Neighbour A is currently served by a SWER line. Neighbour B is just setting out to build a new house. The network decides to decommission the ageing line and transition existing customers to individual SAPS, for which they will be charged no more than any other grid-connected customers under postage stamp pricing. A is guaranteed subsidised power in perpetuity. Not having the option to connect, B must pay the full cost of their SAPS, with none of the extra consumer protections. Is this fair? Now imagine this scenario repeated thousands of times across the NEM. If electricity is an essential service, should we allow the emergence of two classes of rural consumers on the basis of the date of their dis/connection? If, on the other hand, it is not an essential service, there would be no reason to not charge fringe of grid customers the full cost of their supply, whether through the grid or via SAPS.

With regard to the economic test for offgrid solutions, it is unclear over what timeframe the test is to be conducted. One might assume that if the network assets getting potentially decommissioned have an average economic lifespan of 30 years, then the offgrid alternative should also be costed over 30 years. Not only is this highly speculative in view of the technology and retail costs; it also begs the question, what happens after 30 years? Is there to be a regulatory requirement to go through the whole process again? And given that, in reality, the network assets involved are likely to have regulated lifespans of between 15 and 40 years, how often should the test be reapplied?

It is also unclear how bushfire risk should be factored in to the economic test: not only the increasing risks to network assets, but also the risk of network assets causing fires which could destroy property, livelihoods and lives. These are noneconomic issues which still need to be considered. Perhaps there needs to be a public interest test alongside the economic test.

We recognise that different solutions may be required where grid connections are replaced not by individual SAPS but by microgrids. In such cases the tariff should reflect the capital and operating costs of the microgrid.

Given the complexity of this issue and the rapidly evolving economics and technology, TEC recommends that SAPS regulation be placed in the hands of dedicated SAPS Coordinator to develop you appropriate regulatory responses to each of the four scenarios outlined above, with sufficient flexibility to respond to changing market, technology and climate change conditions.

For further information please contact Mark Byrne, TEC's Energy market advocate ([markb@tec.org.au](mailto:markb@tec.org.au)).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Jeff Angel', written in a cursive style.

Jeff Angel  
Executive Director