



8/08/2019

Mr John Pierce
Chairman
Australian Energy Market Commission (AEMC)
PO Box A2449
Sydney South NSW 1235

Via electronic lodgement

To John,

Review of the Regulatory Frameworks for Stand-Alone Power Systems – Priority 2

Thank you for this opportunity, to provide feedback on the AEMC's Review of Regulatory Frameworks for Standalone Power Systems (SAPS) – Priority 2.

As well as contracted transmission and distribution assets, Mondo also deploys DER and provides community-based energy services. Mondo strongly supports the development of affordable and renewable energy. As technology develops, we believe SAPS will play an increasing role in both of these objectives. Establishing a clear regulatory framework for SAPS is essential to protect consumers, ensure safety and to provide investor confidence, and we consequently welcome this review.

Choice

As noted in the draft report, a key point of difference for Priority 2 SAPS is the presence of consumer choice. This choice is not only a result of commercial arrangements, but is in fact a feature of the technology itself. We encourage the AEMC to protect this choice while establishing the SAPS framework.

SAPS Priority 2 customers will have new options in terms of where, how and from whom they receive supply. Additionally, the small-scale nature of SAPS will allow customers to select the level of reliability and system capacity they want. Some customers may prefer cheaper low capacity systems, while others will need more capacity to run high power appliances. We propose that customer choice regarding capacity and reliability should be protected, however we also note that balancing cost, capacity and reliability is a complex issue. There may be merit in providing consumer protections and information in

Bright future.

relation to this choice. This may include licensing SAPS vendors or standardising SAPS product disclosures.

The SAPS priority 2 framework also creates an opportunity to better reflect underlying costs through pricing. Cost structures for SAPS, especially for smaller Category 2 and 3 SAPS, will exhibit cost characteristics which are very different to large scale power systems. Allowing SAPS to develop pricing and service models that reflect these different underlying costs will be essential to facilitating a competitive and efficient market for SAPS. Consequently, we encourage Australian regulators both national and jurisdictional, to carefully consider these differences when developing consumer protections.

Safety

Safety is an important issue to both workers and consumers. We note that consumers are typically unable to effectively evaluate the safety of a SAPS system themselves and this supports an argument for stronger consumer protections.

Failing to establish and enforce a high level of safety also creates hazards for electricians and tradespeople, especially where they are unaware of the specifics of a particular SAPS they may be asked to work on. This risk is particularly acute where the operational responsibility for a SAPS is transferred, as is imagined under the Operator of Last Resort (OoLR) mechanism. In these cases, a responsible new operator would be required to stop work on the SAPS, potentially resulting in a loss of supply, until a safe work environment could be established.

SAPS safety would be enhanced by a mandatory registration and licencing regime for installers and operators. The register would record basic system information, including related electricity distribution assets and underground cables, and the contact details of parties responsible for the installation. This would ensure that SAPS operators, networks and tradespeople had access to basic information on the SAPS present in their work environment, and allow them to have a safe work practice.

Achieving safety in the SAPS industry may require stronger enforcement than is present in the electricity distribution industry. The existing industry consists of a small number of distribution companies with a high commitment to safety and little financial incentive to compromise safety, due to them being regulated monopolies. The SAPS industry, however, is likely to consist of many smaller providers, similar to the solar industry. Weak enforcement in this commercial environment will tend to raise costs on compliant SAPS providers only, leaving them at a competitive disadvantage and encouraging non-compliance.

SAPS Category Definitions & Connection Type

Small scale power systems will face particular technical challenges such as the need for small scale grid forming functionality, system stability and generally low load diversity. These challenges are likely to affect how SAPS are designed and this in turn may challenge conventional definitions of what it means to be a distinct power system. Considering and allowing for these differences within the framework, especially within the SAPS category definitions, will reduce the scope for regulatory shopping and potential barriers to innovation.

A particular area where design difference is likely relates to energy scarcity and the connections between SAPS and other power systems. Unlike grid connected customers, SAPS must rely on their own local energy sources. Typically, energy sources would include at least solar and battery storage. However, in the event that the batteries are depleted a SAPS may resort to more expensive diesel or petrol generation. One alternative to this is to weakly connect a SAPS to another power system and then opportunistically charge batteries when spare generation is available. Unlike a traditional network arrangement, the SAPS would not need to rely on the other power system to support its power consumption but would rather only use the connection to charge batteries. In this arrangement the essential service of electricity is effectively provided by the SAPS itself and not the connected power system.

Similar issues may also arise at the grid fringe for DNSPs, where a customer wants to connect a SAPS to the network but the network is unable to provide a reliable supply and network investment is imprudent. In this situation, a SAPS weakly connected to the network but otherwise self-sufficient and able to operate independently may provide a better economic outcome for all consumers.

In the above situations, there is a risk that larger SAPS or regulated networks would decline to supply a weak connection to a smaller SAPS simply because it would risk exposure to higher regulatory requirements. For the larger SAPS the addition of a weak connection may change the treatment of the SAPS from a Category 3 to a Category 2 SAPS. For a regulated network, the connection may impose an unneeded and unachievable reliability standard. This outcome would reduce customer choice and harm innovation.

To overcome the challenge of weak connections the framework should develop SAPS 1,2 and 3 category definitions that reflect the range of potential SAPS configurations, including areas of emerging innovation. This may be as simple as extending the definition of a SAPS to include power systems that are capable of functioning independently (standalone), rather than being standalone in all circumstances.

Please feel free to contact Daniel Brass, our Market Insights Lead, (daniel.brass@mondo.com.au, ph:04 88135557) if you have any questions in relation to this submission.

Regards,



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