



5 February 2019

Mr John Pierce
Chairman
AEMC
PO Box A2449
Sydney South 1235
NSW

Lodged via the AEMC portal

Tuesday, 5 February 2019

Dear Mr Pierce,

RE Review of the Regulatory Frameworks for Stand-Alone Power Systems (SAPS) – Priority 1

ENGIE appreciates the opportunity to comment on the Framework for Stand Alone Power Systems in the NEM. ENGIE has international presence and in Australia has a retail channel, Simply Energy, and an energy services business, ENGIE Services ANZ.

ENGIE has an interest in supplying SAPS equipment to customers and retailing to these customers. The design of the regulatory arrangements for SAPS will have a major bearing on ENGIE'S ability to compete for these customers.



1. Contestability of SAPS installation

The arrangements for stand-alone power systems can be complex and costly. In some cases, these systems need to be purpose designed for specific installations. ENGIE asserts that competition for these SAPS installations is the best way to foster innovation and to drive down costs. Due to information asymmetry and conflict of interest, distribution networks should be prevented from providing SAPS equipment and services. Ring fencing provides a distant second-best solution.

There is a range of potential designers and suppliers of SAPS equipment as well as ongoing support/maintenance in the market place. ENGIE services ANZ is experienced in this area globally and is also interested to compete for this market sector in Australia.

To enable effective competition for the supply of SAPS, it is imperative for the DNSPs to provide clear, transparent and detailed technical specifications. These would cover, but not be limited to, the quality of supply, system reliability and guaranteed service levels

Without clarity and transparency, information asymmetry between a DNSP or ring-fenced business and other competitors would constitute a barrier to entry for suppliers and service providers.

ENGIE seeks for these requirements to be covered by the code and a tender process be stipulated.

2. Preferred implementation model

As a matter of principle, customers should have a choice of retailers so they can benefit from competition and innovation using market-based mechanisms.

It is important that SAPS customers aren't disadvantaged in comparison to wider retail customers in the NEM, once they are disconnected from the distribution network. Specifically, it is important to ensure that SAPS arrangements are compatible with retailing arrangements in the NEM so that effective competition can be delivered.

In the "postage stamp" model of transmission and distribution charges, it is important that SAPS customers maintain an appropriate quantum of subsidies from the wider network users to ensure they are not disadvantaged over time.

As technology advances, it is expected that SAPS systems may become cheaper and the level of cross-subsidy would be reduced over time, provided effective competition in supply and delivery of SAPS is maintained.

2.1. The NEM consistency model

It is important to maintain competition in the retail sector for SAPS customers so that they aren't restricted to taking supply from monopoly service providers (the DNSP). The SAPS installation needs to be economically viable and would receive revenue in three separate categories.

- Energy
- Equivalent network revenue
- Explicit subsidy (as is the case with networks currently) to make the arrangement economically viable

The NEM consistency model appears to be an elegant way to address the separation of energy, network component and top-up transmission payment and to do so in a workable and transparent manner.

Retailer could effectively price and hedge the SAPS load as if it was part of the NEM. The issue of hedge liquidity is not seen as material at this stage, as the instruments are financial and various entities can take position in the market without the need to source backup generation to lay off the price/volume risk.

The proposed arrangement with the AEMO providing a settlement function is considered effective and would not require any direct interaction with NEM pricing and dispatch. The settlement process would simply use the NEM regional prices to settle the SAPS electricity production.

In case of a single SAPS connected customer, the entire generation output would be instantaneously consumed by the customer. To avoid multiple metering costs, and to be able to utilise the current settlement process, a SAPS generation meter could be used to settle generation revenue, and a logical meter with a customer NMI could simply reference to the generation meter data.

In this way there would be no electrical losses or discrepancies between generation and customer metering.

2.2. Integrated services model

This approach is based on total revenue required to support the SAPS installation and would be regulated.

Under this arrangement competition benefit would stop at the supply of SAPS systems stage. Over time it can be expected that the regulated costs could significantly deviate from costs to customers connected to a distribution network in the NEM.

Under this model retail services would be bundled into the overall supply costs (energy, network and retail). Therefore, SAPS connected customers would not have the benefits of retail competition and innovation and would be treated differently to other customers in the NEM.

This may become an increasing issue as more customers choose SAPS supply arrangement.

The integrated service model:

- is not compatible with the NEM market-based competition principles
- requires a “one-way” step change for some customers to change to SAPS
- doesn’t allow customers to access retail competition
- requires a regulator to oversee the complete SAPS supply arrangement
- exposes service providers to additional/new regulatory risks

For these reasons ENGIE doesn’t support the integrated service model.

3. RIT-D issues

The regulatory investment test for distribution (RIT-D) considering a SAPS installation would require many assumptions to be made which would need to hold true over a long timeframe. Since perfect foresight would be needed to determine such assumptions, they remain highly uncertain, are subjective and prone to bias, making meaningful quantification of net benefits extremely difficult if not impossible.

Some of the reasons for this are as follows:

- Network assets are capital intensive, long lived and risks of stranded assets are passed onto customers
- Technology can change rapidly, and influence the least cost option.
 - SAPS costs are likely to become much cheaper over time
 - Market price maybe much lower over time due to technological changes and improvements in the wider NEM
- The economic assessment of SAPS installations would also include energy costs, not just a network replacement alternative.
- Energy supply costs from a SAPS over a life of a network alternative need to be considered. Hence energy costs in the market also need to be determined.
- Government policies are not enduring (both energy and environmental aspects) and policy changes impact the costs and net benefits

- The net economic benefits are a difference of two highly uncertain cost streams (SAPS lifetime costs, network and pool energy costs)

The NEM consistency model is linked to the pool prices for settlement purposes. It thus effectively separates the network equivalent cost component of the SAPS. For consistency, this energy supply arrangement could be modelled using existing AEMO scenarios and technology assumptions.

ENGIE advocates the application of AEMO scenarios and assumptions for RIT-D benefits assessment.

ENGIE maintains that since the market benefits are very unclear (much less certain than network asset investment), a higher discount rate (market rate) must be used when quantifying any potential benefits.

4. Risks to customers

Customer disconnected from the grid could face a range of risks over time as their SAPS may become more expensive than grid supply, quality of service and reliability of supply could suffer, and they may be excluded from innovative solutions available to retail customers in the NEM.

It is therefore imperative that effective standards are applied to the SAPS installation and that the retail arrangements are compatible with the wider NEM to ensure competition and innovation to minimise such risks to SAPS customers.

5. New connections vs existing

For existing customers disconnecting from a distribution network, the costs of the distribution network are already known as is the magnitude of a cross subsidy from other network users.

For existing customers this includes their connection to the shared distribution network which will not apply to new customers.

However, in case of a new customer connecting to a SAPS instead of a distribution system (real or notional), the network costs and level of subsidy would need to be determined.

A new customer would be required to meet costs of connecting to a distribution network. Such a cost may be significant and will depend on the terrain, connection type and fire regulations. However, a new customer should not be required meet costs of the shared distribution network beyond the “postage stamp” cost allocation to network users in general. This additional cost of local network must be quantified and allocated by the DNSP towards the cost of a SAPS.

This could be even more challenging if parts of the shared distribution network are removed because of existing customers moving to SAPS. In this case a benchmark may need to be established using data from existing customers to determine the quantum of cross subsidy allowed for the new.

ENGIE recommends that the regulatory framework for SAPS needs to ensure that as a principle the shared network subsidy for a given network location is available to both existing as well and new customers.

6. Service quality and reliability

To ensure the SAPS customer receives a supply of similar quality to that if they had stayed connected to the distribution network, it is essential that the same technical and reliability standards apply to the SAPS as they apply to the distribution network. The SAPS regulation must include detailed arrangements to be applied.

ENGIE trusts that the comments provided in this response are of assistance to the AEMC in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 0417 343 537.

Yours sincerely,

David Hoch
Regulatory Strategy and Planning Manager