18 December 2020

General Manager, Consumers and Markets Branch
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

ALAN MAJOR
Managing Director

alan@energydemocracy.net

www. energydemocracy.net
@ed_co_op

An Energy Democracy powers and empowers.

Submission on updating the Electricity Distribution Guideline

Please find below Energy Democracy's response to the questions from Section 1.5 of the Issues Paper.

We do not intend to respond to Individuals question but offer instead the statements below.

Starting with an analogy, our phones transitioned into a digital telephone system in the last decade of last century. This accelerated with the release of the Apple iPhone in 2007.

The modern-day telephone of the 21st century is a combination of the cellular phone, internet, a digital camera, and a digital gateway to a data fuelled world. The phone is owned by the user. The simplified role of the network is to facilitate access.

A similar digital transition is underway in the electricity system. The modern-day home energy network of the 21st century is rapidly evolving into a combination of self-generation (solar PV for many, micro-wind for some), energy storage, smart meters and smart devices, EVs and digital access to a data fuelled world.

Edge of grid regions should be considered exactly the same way as regional and remote communities are in the transition in the telephone sector. Telcos provide edge-of-network customers access to digital services on a customer's phone.

Self-generation by its very name is generation owned by the user. The simplified role of the network as this transition accelerates is to facilitate access.

Many will view network ownership of SAPS as being necessary to facilitating access to the electricity grid, but it is not adapting the electricity system to a digital future. A network owner should not inadvertently become a competitor with its residential customers or a community as an owner of SAPS, be that generation or storage.

Due to ring-fencing, an NSP installing, owning and operating SAPS may not be viewed as a regulated industry expanding their asset base at the expense of their customers. However, is it a regulated industry gaining an ability to stifle competition and then limit the digital transition in grid-edge locations as they create commercial value, potentially, and very likely, at the expense of edge-of-grid customers?

There are many examples occurring now in Australia where networks, recognising the value of SAPS, are substituting or supplementing sub-transmission through to SWER lines with SAPS in edge-of-grid situations.

Network operators are best positioned to facilitate the location and use of network-located batteries and SAPS due to their knowledge and understanding of their network needs. However, network solutions also need to be market focused to ensure good value is achieved for customers.

Owning SAPS and storage on the networks may best be undertaken by third-party non-network option providers, or through co-investment from customers and communities.

However, granting a banket exemption to network operators to install and manage SAPS is unadvisable. What was supposed to be a solution to a grid stability issue, created in part by the transition in the electricity sector, has the potential to become a new regulated profit centre for the network. This is not a cost-effective solution to an edge-of-grid stability issue.

The Regulator should consider additional questions when contemplating amending the Ring-fencing Guidelines or granting blanket exemptions:

At which point is an energy storage system on a network an asset utilised for grid stability solutions and when does it become a retail customer's access to the digital transactive grid of the future?

Will customers on the network be prevented from installing or owning residential and community energy storage systems because the network owns and operates energy storage systems in competition?

Will customers on the network be prevented from accessing the full value stack to be derived from a residential or community energy storage system because the network owns and operates energy storage systems in competition?

Should retail customers pay higher NSP tariffs for SAPS or energy storage systems to be installed on the network whilst also being prevented from, or penalised for, installing a residential or community energy storage system?

There are many grid-edge and off-grid situations where network SAPS is a necessary solution – see Horizon Power and King Island for examples. The transformation in the electricity system however, means customers and communities, not just networks, should be benefiting from investments into SAPS.

A community that owns SAPS will benefit from future savings and revenues on a transactive electricity grid. This is a far better outcome for the system as a whole and certainly is better for the transition occurring in the grid.

Alan Major
Energy Democracy Pty Ltd
Tel: 0412 389 351