27 April 2018

Dear Mr Pattas,

Thank you for the opportunity to comment on the AER's preliminary Framework and Approach for SA Power Networks 2020-2025 regulatory period. Renewable Energy Policy Group wishes to elaborate on its concerns regarding incentive schemes which have been proposed for 2020-2025. We note that the AER's initial position is to apply the Demand Management Incentive Scheme (DMIS), the Efficiency Benefit Sharing Scheme (EBSS), the Capital Expenditure Sharing Scheme (CESS) and the Service Target Performance Incentive Scheme (STPIS). In addition, the AER proposes to continue paying SA Power networks the incentive formerly known as the Demand Management Innovation Allowance (DMIA). Schemes which are designed to provide incentives for networks to behave efficiently must be carefully prepared and monitored for efficacy. We see no reason to believe that ANY of the proposed incentive schemes would result in efficiency, but would instead simply hand cash to networks without mechanisms for assuring that those funds are earned or spent appropriately.

The AER is unable to validate estimates made by SA Power Networks under the DMIS, thus the DMIS is exploitable.

We note that the DMIS has been recently updated, however the AER still appears to lack the power to audit the networks' claims and estimates. The DMIS scheme ultimately relies on a *declaration from the delegate of the CEO* that the theoretical savings justifies actual project spending.[1] That's just not good enough.

Previous results are indicative of future performance.

SA Power Networks' track record of projects which have been worthless or even harmful to consumers should be enough proof that it is not incentivised to create consumer efficiency, but is still happy to take the money that we offer. Specific examples include its study of Demand Tariffs (ignoring more efficient options, "writing around" the obvious invalidity of its case), its Demand Tariff trial in North Adelaide (causing harm to trial participants, burying results because they show how bad Demand Tariffs can be), and more recently its Salisbury battery trial.

The Salisbury battery trial illustrates the disparity between what SA Power Networks claimed to want to study, and what actually occurred in the trials. Paul Roberts, Manager Stakeholder Relations, stated in a May, 2016 press release,

> "In the next few years we will need to act to meet localised demand growth in Salisbury. We want to work with customers to avoid the need to invest in new poles and wires. Instead of building a new power line, we would like to see whether we can defer or avoid that by tapping into local solar PV generation and combining this with energy storage."
>
> -Paul Roberts, Manager Stakeholder Relations.

We were clearly promised a study of how to unlock the potential for batteries to benefit the network by reducing long-run costs. Instead, household batteries were used for playing the

[1] AER. "Demand Management Incentive Scheme, 14 December 2017" Clause 2.2.2(1)(b). Page 10.

generation spot market and as a backup power supply. Results which were presented to the Electric Energy Society of Australia show how the central battery operator created spikes in demand, resulting in "minimal" overall decrease in maximum aggregate demand.

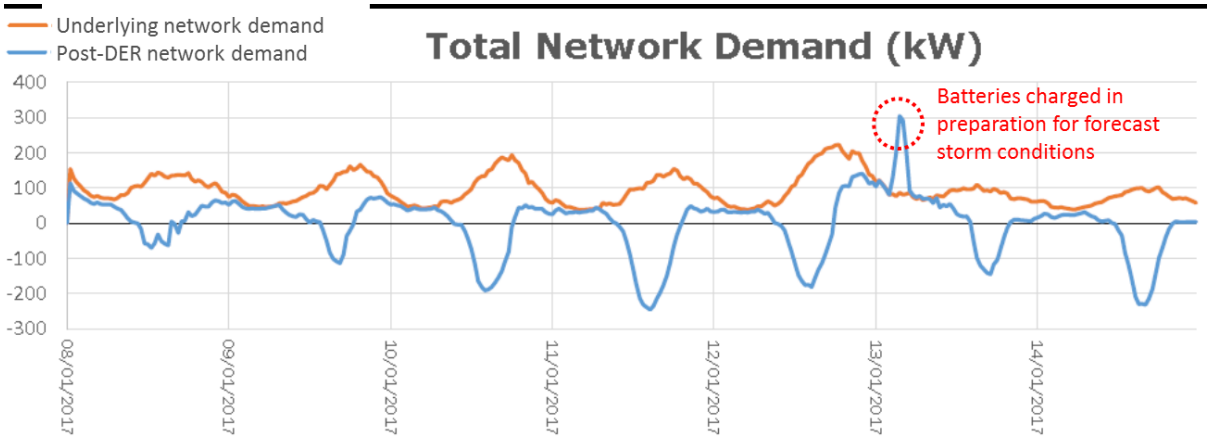

Figure 1: Salisbury Battery Trial: Initial Insights. 7 November 2017, M Vincent, Slide 17. SA Power Networks deliberately created this demand spike by charging batteries quickly during what appears to be a peak time. Similar demand spikes occurred when batteries ran flat before the end of the peak period, also a controllable issue.

Other demand spikes occurred near the end of some peak periods, as all batteries ran out of charge. It is possible that batteries were running flat because customers had been selling power through the peak via Reposit, due to higher than average spot prices on hot days. Aside from these few spikes, the information available suggests that batteries were able to reduce peak demand by roughly 50%. SA Power Networks has provided consumers with minimal information on the potential value of batteries to the network, which was an important stated goal of the project. The conclusion that batteries had "minimal impact on peak demand (15% vs 10% with solar alone)" is disappointing and looks insincere.[2]

The "study" of cost-reflective tariffs

In the 2010-2015 regulatory period, SA Power Networks was meant to use DMIA/DMIS funding to study cost-reflective tariffs, which should result in pricing which incentivises consumers to use the network efficiently. SA Power Networks chose to study Demand tariffs[3], ignoring better options such as time-of-use and critical peak tariffs. The decision was never justified on paper, and is not justified by economic theory, since Demand Tariffs clearly do not send correct price signals for minimizing network costs.

In justifying its push for Demand tariffs, SA Power Networks redefined the term "price signal" in regulatory documents to mean something different than the economically rigorous definition. Instead of providing consumers with a price signal for reducing *long-run total network costs* (the ONLY valid price signal), SA Power Networks re-defined a "price signal" as a signal for reducing *long-run costs per kWh*. The scheme is easily dismissed as demand-stimulating, thus inefficient and invalid. It is equivalent to arguing that an all-you-can-eat buffet stimulates efficient behaviour from its customers (rather than stimulating gluttony).

The exclusive focus on Demand Tariffs, as it watered down its time-of-use tariff's cost-reflectivity, was an obvious attack on efficiency from a consumer perspective (the only definition of efficiency

[2] Vincent, M. Salisbury Battery Trial: Initial Insights. Presented 7 November 2017, Adelaide. Slide 18.
[3] SA Power Networks Annual Pricing Proposal 2013/14. p42.

which is allowed under the Rules). The "study" of Demand Tariffs for small customers, followed by the embarrassing trial in North Adelaide, shows just how far the network is willing to go in attempts to stimulate demand rather than promote efficiency.

The arguments in favour of the Demand tariff are flawed at the most basic level, and the AER should now be fully aware that Demand Tariffs are not cost-reflective for small customers.

We paid SA Power Networks to study Demand Tariffs. What will we pay them to study next?

The AER has the responsibility to protect consumers from inefficient and exploitative tariffs, and to reject project proposals which will not promote the NEO. The new DMIS and Demand Management Allowance do not give the AER enough power to reject proposals which are observably inefficient or otherwise violate the NEO at any stage after preliminary project approval. This loophole should be fixed before implementation of either scheme for SA Power Networks.

What about dynamic efficiency?

It appears that SA Power Networks can now profit from dynamic *in*efficiency, and therefore would be incentivised to avoid study of more cost-reflective tariff structures and new technology, as long as the AER allows it. It is difficult to resolve this dynamic incentive problem until we have fixed benchmarks rather than relative ones, so that inefficient networks can no-longer claim to be "on the frontier of efficiency" simply because they are approximately as inefficient as their peers.

Policies which networks claim to be "revenue neutral" (such as overcharging solar customers and reducing fixed costs for others) may still be plainly inefficient when we consider the effect on future period revenues and the overall size of the future network. The strength of SA Power Networks resolve to overcharge solar customers reveals that it is putting profit ahead of efficiency. Holding back consumer investments through policy bias, overcharging or creating uncertainty will result in an oversized, inefficient future network, which will drive up SA Power Networks' profits as it drives up consumers' costs.

It is more important than ever that the AER gets the economics right. Electricity users have much more leverage and elasticity of demand than ever before, and therefore the responses to inefficient tariff designs could be extremely inefficient and costly.

The EBSS and future OPEX

Finally, we again question the benefit of the EBSS, which threatens to create a "step change" in OPEX in 2019, and again in 2024. It is not clear whether SA Power Networks will take advantage of the scheme, but a rational network would only use the scheme if it is in the best interest of the company. Our opinion is that the EBSS gives networks a "worse than doing nothing" option, which therefore does not promote the NEO.

We appreciate your diligence in assuring that all incentives paid to networks would be expected to produce more value than the payments themselves. We believe that far more work needs to be done to assure that the NEO is promoted by incentive schemes, particularly in auditing the value of, and sharing the knowledge from, projects which are paid for by consumers through these schemes. We support incentives that bring about real value and investment in non-network alternatives, however we do not think SA Power Networks is incentivised to be efficient, and will simply take our money if the AER decides to offer it up.

Please feel free to contact the author by phone or email to discuss this submission. Thank you again for considering our views.

Best regards,

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