DISTRIBUTED ENERGY RESOURCES INTEGRATION - UPDATING REGULATORY ARRANGEMENTS

Dear AEMC,

Three rule change requests seek to change the environment for integrating DER. One process to explore this idea unites them, yet the proponents have come to different conclusions about what is needed. This is telling and I argue that more understanding of the issues is probably required before the rule change goes ahead. From that perspective, the proposal by TEC and ACOSS charts the most cautious path forward and this is the one I would support.

One of the problems with the other two proposals is that their identification of the issue is not commensurate with the proposed solution.

St Vincent de Paul has been consistently concerned that solar owners have pulled too much value out of the electricity pricing arrangements. Charging for exports may only incentivise solar owners to self-consume to a higher extent. There is no readily accessible data for the volume of SA Power Networks revenue that is linked to export power. In the past year 12.5% of South Australia's electricity consumption was linked to rooftop solar so 5% of SAPN revenue could easily be in exchange for transporting solar across its network. Self-consumption of this power would lead to a 5% rise in prices for other consumers in South Australia. This is not to trivialise the concerns of the social sector that solar policies have been regressive and must be fixed. Instead I am arguing that the problem is not to be found in the export power, which *does* make a contribution to grid operation. If the fairness of electricity tariffs has been compromised by lower power purchase levels which save solar owners money and consumption profiles that are no longer cost reflective then the AEMC needs to get serious about the economic levers it should pull to redress this problem. We all need to acknowledge publicly how difficult it might be politically to move away from postage stamp pricing or to treat the solar owner cohort as a different customer class and allocate resources to alternative non-punitive approaches.

SA Power Networks main concern is that they have no certainty in funding for grid investment needs in response to integration. The fault for this lies both with SAPN and with the regulatory environment. The system has an efficient approach to understanding capacity building in response to growth in load. Long Run Marginal Costs (LRMC) are generally agreed by the sector. The lumpiness in investment that comes from adding capacity is justified by load growth which fills the new capacity over time. All of these approaches are built on an understanding of the future which is no longer relevant. Efficient pricing is a silly goal if the numbers are calculated based on a future that will never emerge. This can provide a benchmark for investment goals but there is a real danger that it leads to investment in the wrong places. Our electricity networks are stuck. They create reset proposals for an old system because that is what the businesses and the regulators are confident about. They pay lip service to "future networks" but ask for extra funding at the same time. Some of the investment flows that will occur during the 5 year period before the next reset will provide DER integration services and will be at the discretion of the network businesses. In considering these rule change requests, we have no transparency from SAPN about the value, costs and alternatives of distributed energy, partly because they don't know themselves. Not enough work has been done to explore this important part of our electricity future – and the reset environment is not the right place to do it. Market approaches and directed price signals can easily become perverse if we don't understand the costs and benefits they unlock. We need to recognise that we are in a learning phase and approach these rule changes with a cautious experimental mindset.

Issues to consider:

- SAPN should already have an incentive to invest in the LV network and help rooftop solar flow. How much investment does this already drive and what are the organisational barriers that stop it?
- The incentive to solar owners is broader than a single price signal and includes constraints on the system size, system exports, newer obligations for the solar panel to be dynamically controllable and traditional fault protection which is making panels in some locations less productive. The proposed incentive needs to be explored in this larger context.
- Local DER assets offer collective goods. It is one thing to compare the market value to that of distant renewables (as the TEC/ACOSS proposal has done) and show the individual good that would be achieved with better access to market (essentially competing with big renewables). The real economic value that a network rule change should target is better utilisation of network assets. The capacity that serves a group is a collective good. The diversity they offer to be able to use more and less at times is a collective good. Storage and flexibility can both be applied to the group's assets to achieve better utilisation of the network asset and achieve a better economic outcome.

Networks have limited success with non-network solutions, demand management programs, investment deferral and improving the utilisation of network assets. Before putting in place a mechanism that is likely to reward networks for investing in new capacity we need to think about all the parties that might contribute to the economic outcomes that this rule change is seeking to unlock.

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