

Ed Chan
Director
Australian Energy Market Commission
By email to Ed.Chan@aemc.gov.au

8 May 2020

Feedback on draft DER Access and Pricing Reform Package

Dear Ed

I am writing to give Renew's feedback on the draft DER Access and Pricing Reform Package. Thanks for the opportunity to be involved in this work.

Renew (formerly known as the *Alternative Technology Association*) is a national, not-for-profit organisation that inspires, enables and advocates for people to live sustainably in their homes and communities. Established in 1980, Renew provides expert, independent advice on sustainable solutions for the home to households, government and industry, is a prominent advocate for Australian residential energy consumers in the energy policy development process. As a member of the *National Energy Consumer Roundtable*, Renew works closely with other consumer advocacy organisations, providing expertise and experience in energy policy and markets. We also conduct independent research into sustainable technologies and practices.

In recent years, Renew has increasingly focused research and advocacy on understanding and meeting the challenges of integrating high levels of distributed energy resources (DER) into the grid. This has culminated in our *DER Enablement Project* in which we worked with DNSPs, other energy industry bodies, consumer advocates and an expert consultant to document the numerous technical issues associated with DER injections into distribution networks and assess the most effective remediation strategies. We look forward to sharing our final report with you in the next few weeks.

The draft report

Renew considers that the draft report canvasses the issues appropriately and, overall, presents a strong approach going forward to developing a robust framework for managing DER integration. We offer the following feedback on specific recommendations. Our feedback relates to the Recommendations as they are described and numbered in Chapter 4 of the report.

Recommendations 1 and 2

These need to be based on a consistent and defensible methodology to determine the value to network consumers of enabled DER. This value should include both the value in providing network services or other network benefits, and that proportion of the energy value that can be realised by all network consumers. Without such an approach to valuing DER, it is not possible to assess with sufficient accuracy the efficient cost for networks to enable it.

Recommendations 3-5

When calculating the magnitude of price signals or setting prices for DER beneficiaries to contribute to costs, it's critical that the value of DER, determined by a consistent and defensible methodology, is also considered – such that any costs levied on DER owners or payments made for network services are based on the net cost or benefit. If net costs or benefits are material, they should be paid; but if they are trivial it may be a false economy to try to remunerate them.

Additionally, it must be recognised that price signals may not be sufficient in themselves to encourage desired behaviour or investments in small consumers. Consumers find the value proposition of DER investments (and much other expenditure) difficult even to estimate, let alone calculate. Clear information or targeted programs, underpinned by supportive pricing, are more likely to work.

Recommendation 6

Tariff reform has proven to be difficult to implement effectively because of broad community concern about the possible impacts on vulnerable households. To fully realise its potential it is critical that clear and detailed analysis of these impacts is undertaken. Customer impact assessments looking at the customer base as a whole is not enough. Analysis needs to show not just the proportion of the customer base that will see higher or lower costs from cost-reflective tariffs, but also:

- the magnitude of typical impacts;
- the magnitude and incidence of significant impacts;
- case studies of households facing significant price impacts and reductions;
- case studies of the impacts on different types of representative vulnerable households; and
- characteristics and distribution of the types of load profiles likely to experience significant impacts.

This type of analysis is needed to indicate the types of impacts likely to be experienced, and to give guidance as to the types of complementary measures that will be effective at remediating those impacts.

The tariff reform process also needs much more clarity about how network tariffs will play out through retail tariffs. This might include clarity around who tariffs are aimed at (e.g. retailers or end-users), and how tariffs aimed at retailers are likely to manifest to end-users, with reference to the amount of risk able to be absorbed by different types of retailers.

Recommendation 7

The technical impacts of DER injections on distribution networks depend on a range of factors including (but not limited to) the type of LV network infrastructure the DER is connected to, the DER penetration and load profile of network nodes, relationship between the delivered voltage and the voltage parameters. Analysis by Energeia for Renew's DER Enablement project¹ and data recently collated and analysed by UNSW² shows that voltage excursions outside the operating envelope are frequently due to delivered voltage being toward the top of the range to start with. Optimising voltage within the operating envelope is necessary if other measures to manage voltage issues are to be fully effective.

We look forward to continuing involvement in this important area of work. Should the working group wish to discuss further, please contact Dean Lombard on +61 414 930 391 .

Sincerely yours,



Dean Lombard
Senior Energy Analyst

¹ Report forthcoming

² Anna Bruce et al. 'Voltage Analysis of the LV Distribution Network in the Australian National Electricity Market', UNSW & CEEM, May 2020