



Tasmanian Renewable Energy Alliance

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TREA submission to the AEMC's Consultation Paper: National Electricity Amendment (Register of distributed energy resources) Rule 2018

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About TREA

The Tasmanian Renewable Energy Alliance represents solar sales and installation companies in Tasmania, as well as other developers of small scale renewable energy project. We provide services to members and a united voice for the renewable energy industry in dealing with government and regulatory agencies. Our aims also include promoting the development and use of renewable energy in Tasmania.

Summary

TREA welcomes the opportunity to provide feedback on the consultation paper on the National Electricity Amendment (Register of distributed energy resources) Rule 2018.

Our submission primarily addresses the concern that the operation of the proposed register should:

- ensure that information is collected in the most effective way possible
- encourage comprehensive collection of information
- minimise the cost and effort required by industry participants to provide this information.

Feedback is provided at end of this document in the format requested in the stakeholder feedback template. Only those questions on which we have provided feedback are included in this format.

In summary TREA's position is that:

- It is better to obtain detailed technical information about DER equipment from manufacturers and equipment distributors rather than at the point of installation.
- The information sought from installers should be the minimum necessary and should be integrated in other work processes (eg connection application to DNSP or tariff change request to retailer) rather than as an additional task.
- More accurate and more comprehensive information will be obtained if there is some benefit to the installer or customer in providing information.

- Safety concerns are better handled by existing arrangements such as signage on meter boxes and Hazchem placards, rather than a new database which is unlikely to be comprehensive.
- Data collected should be freely available publicly to assist research and public debate about energy policy (subject to protection of personal information). The CER public release of PV installation data by postcode and system size strikes a good balance between granularity for policy purposes and protection of privacy of individual installations.

The need for a DER register

The consultation paper identifies the following areas in which a DER register is expected to provide benefits:

- avoiding inefficient market and network investment
- load forecasting
- the response of load
- safety considerations.

Avoiding inefficient market and network investment

There is general agreement that the electricity system is moving from a model of highly centralised generation and dispersed consumers to a far more interactive system in which both generation and storage are distributed throughout the network and demand management plays a much greater role in balancing supply and demand.

There is far less agreement on how fast this transition will happen. Having accurate information about installation of DER as it happens and using this to make the best possible prediction on future installations will inform future planning and investment decisions and avoid unnecessary investment in networks and centralised generation.

Load forecasting

Understanding the amount and nature of DER installed will be of some assistance in forecasting load, however as long as the right incentives are provided to owners of DER, an increasing uptake of DER is likely to make load more predictable rather than less. Incentives such as time of use and demand tariffs, as well as payments for demand management services can encourage the operation of DER in ways which make network operation more predictable, more stable and more efficient.

The response of load

The consultation paper raised the possibility of cascading outages due to the automatic response of DER to disturbances of voltage or frequency (p.15). We believe this is best dealt with by technical standards such as AS 4777. Information on the parameters set in inverters and other DER equipment is best sought from equipment suppliers and distributors. Expecting installers to enter this information into a DER register would be onerous and unlikely to result in more accurate information. Installers will rarely alter preset parameters in equipment.

Safety considerations

We do not believe that a strong case has been made that the collection of information on DER and making this available to emergency services on a real time basis is the best way to address safety concerns. The DER Register will never be completely accurate and reliable. We think that the existing mechanisms of Australian Standards (in particular AS/NZS 4777) and the requirement that only compliant equipment is eligible for STCs are the best way to ensure that DER equipment is safe and of a high quality.

The requirement for on-site signage is the best way to provide information to emergency services about site specific hazards. These requirements could be updated if there is a demonstrated safety issue with DER installations (in particular certain battery chemistries).

Efficient collection of information

As is noted on page 30 of the Consultation Paper “Regardless of who is collecting and reporting data for a register, it is likely that incentives and/or penalties would need to be introduced to achieve an appropriate level of compliance.”

TREA strongly believes that a high level of compliance is best achieved by a combination of

- appropriate incentives,
- ensuring that the process of entering information is as easy as possible
- data collection is integrated with existing processes.

STC rebates provide a strong motivation to register the installation of solar PV and hence have led to comprehensive data on PV installations. Other examples of incentives include the [Queensland proposal](#) to pay \$50 to owners who register their battery installation, and the proposed TasNetworks discounted off-peak rate on their demand based tariff for customers that register DERs.

Responses to selected questions in the stakeholder template

Questions		Feedback
Chapter 5 – Section 5.1.1 – Benefits of a register		
3	What are the likely uses of a distributed energy resources register?	A more comprehensive understanding of the nature and number of DER resources as they are installed will assist in policy development as well as assisting in day to day management of the electricity network.
4	How, and to what extent, could the static information provided by a DER register meet the objectives outlined by the COAG Energy Council, namely:	
	a) more accurate load forecasting?	See above
	b) improving AEMO's ability to manage power system security during credible contingency, protected and non-credible contingency events?	
	c) improving AEMO's ability to set the bounds of the technical envelope at an efficient level?	
	d) improving efficient market and network investment?	Accurate information will inform planning that avoids unnecessary investment in peak generation and network infrastructure.
Chapter 5 – Section 5.3 – Data collection and compliance		
13	How often does the data need to be collected and updated to achieve the objectives of a DER register?	Collection of data at the time of installation or tariff changes will meet most of the objectives of the proposed register. Requiring notification of subsequent changes by customers would be difficult to enforce and of limited additional benefit.
14	Do you agree that there is a need for consistency across network regions in what data should be collected?	Yes consistent national requirements will lead to the most cost effective collection of information and will supply nationally consistent data for planning purposes.

Questions		Feedback
18	Will a register be beneficial if the levels of compliance in relation to providing information are similar to the low levels of compliance with the DNSP connection application processes? What levels of compliance are needed?	No unless a high level of compliance is achieved (say over 80%) the information will not be regarded as reliable and will not form an agreed basis for planning.
19	How else can compliance levels be improved?	By collecting the minimum amount of information necessary and integrating the collection of DER information with existing processes. By ensuring that there are incentives for customers and installers in complying with these processes.
Chapter 5 – Section 5.5 – Safety issues and emergency response		
24	Would the sharing of data collected under a DER register be useful to emergency services, and if so, how?	We do not believe that a case has been made for this.
26	Is the proposed DER register the most practical mechanism to provide emergency services with the required information?	Probably not – it would require new IT systems and work processes.