16th April 2018

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Subject: ERC0227/RRC0011 Consultation paper: National Electricity Amendment (Register of distributed energy resources) Rule 2018

SA Power Networks welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC) consultation paper on the rule change request made by the COAG Energy Council in relation to the creation of a national distributed energy resource (DER) register, issued on the 6th March 2018. The following summary outlines SA Power Networks position.

In general, SA Power Networks supports the creation of a national DER register that:

- Is administered by the Australian Energy Market Operator (AEMO).
- Requires distribution network service providers (DNSPs) to collect information about DER connected to their network, and provide this information to AEMO.
- Allows AEMO to develop guidelines, in consultation with stakeholders, to specify the types of DER and data that should be collected.
- Allows AEMO to share information in the register with appropriate parties, subject to privacy laws.

We believe that capturing more accurate and consistent information on installed DER will deliver value in the form of:

- More accurate load forecasting to assist in network capacity, DER hosting capacity, and offload planning.
- Forecasting potential quality of supply issues.
- The potential, working with AEMO, to optimise distribution network load shedding.

We believe that to be effective a national DER register must strive to:

- Ensure compliance and validate data.
- Maintain appropriate privacy and access controls.
- Collect useful data including which DRM modes or export limiting capabilities are available.

To support the proposed national register we would need to:

- Develop IT systems to facilitate the collection and storage of data.
- Develop new processes to ensure data quality and compliance.
- Develop new interfaces with a national register.

Our responses to the specific questions raised in the consultation paper are included as Attachment 1, where we have provided responses where we have a view.

Should the AEMC require further clarification of any of our comments, please contact Bryn Williams, Future Networks Strategy Manager, on (08) 8404 5502.

Yours sincerely,

Mark Vincent

General Manager Network Management

Attachment 1 Stakeholder feedback template

The template below has been developed to enable stakeholders to provide their feedback on the questions posed in this paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper.

Organisation: SA Power Networks
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Questions		Feedback
Chapter 4 – Assessment framework		
1.	Is the assessment framework appropriate for considering the proposed rule changes?	Yes
2.	Are there other relevant considerations that should be included in the assessing the proposed rule changes?	No
Chapter 5 – Section 5.1.1 – Benefits of a register		
3.	What are the likely uses of a distributed energy resources register?	We agree broadly with the identified uses in the consultation paper; those being efficient network asset investment for peak demand and DER hosting capacity management. We believe there's additional opportunity to characterise and optimise distribution network load shedding as well as forecasting potential quality of supply issues.
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:	

Questions		Feedback
	a) more accurate load forecasting?	More accurate load forecasting assists planning distribution feeder offloads, targeting demand management programs, and forecasting potential quality of supply issues.
	b) improving AEMO's ability to manage power system security during credible contingency, protected and non-credible contingency events?	Known installations and response capabilities of DER can assist to characterise and optimise load shedding. For example, prioritising shedding of feeders with less distributed generation to lower the impact and severity of load shedding. There is opportunity to work with AEMO to agree on a framework to allow 'smarter' load shedding that considers distributed generation. Increased visibility of DER should enhance AEMO's capability to manage system stability during times of high solar generation and low load.
	c) improving AEMO's ability to set the bounds of the technical envelope at an efficient level?	
	d) improving efficient market and network investment?	A less conservative approach to asset investment can be taken with an accurate knowledge of installed DER. Essentially assisting in right-sizing assets. Knowledge of DER VPP and market affiliations will improve networks' ability to procure targeted network support services.
5.	Are there any other ways that a distributed energy resources register could benefit the National Electricity Market?	
6.	What features does a register need to have in order to meet the objectives outlined by the COAG Energy Council?	Data collected should include supported DRM modes/import export limiting capabilities.
Chapter 5 – Section 5.1.2 – Expected costs		

Questions		Feedback
7.	What costs do you believe would likely be involved in the collection of useful data about DER?	The data proposed is reasonable and consistent with what we request today from installers, although the current quality is variable. Additional costs would arise from ensuring compliance, enhancements to IT systems, and development of an interface to a national register.
8.	Do you agree with the costs identified by Jacobs for different stakeholders? If not, why?	We've not undertaken independent review of these costs.
9.	Are stakeholders able to provide data or case studies that would support further quantification (in monetary terms) of any of costs likely to manifest?	
10.	How might the nature and magnitude of these potential costs change over time?	
Chapter 5 – Section 5.2 – Governance		
11.	Please comment on the suitability of the following:	
	a) Should 'small scale' systems be limited to generation systems below 5 MW? Should any further limitations be imposed (e.g. a minimum capacity or a threshold in MWh for energy storage)?	We currently, and expect to continue to, collect information for the connection of all embedded generation to our network. We don't have a view on whether a national register should have a minimum threshold.
	b) Is the NER definition of 'connection point' an appropriate spatial demarcation for 'behind the meter' DER? If not, what is an appropriate spatial demarcation for 'behind the meter' DER?	We're not aware of any reason why this definition is not suitable.
	c) Is a 'distributed energy resource' "*an integrated system of energy equipment co-located with consumer load*"? If not, what else could it be characterised as?	The definition should ensure generation which is not co-located with load is not exempt. For example, a PV generator should be registered even if there is 'no-load' at the site.
12.	Regarding the management of a DER register:	
	a) To what extent should the types and capacity of DER eligible for inclusion in the register be defined in the NER or in an AEMO guideline?	We believe it suitable for AEMO to manage eligibility in consultation with stakeholders.

Questions		Feedback
	b) Should the nature of the information being collected and recorded in the register and any other requirements, such as how often parties need to report the data, be determined in an AEMO guideline?	Yes.
	c) What types of principles, factors or other criteria should AEMO be required to consider when developing guidelines on the collection and recording of information on DER?	The guidelines should at a minimum be consistent with the NEO.
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?	To accurate and effective we believe data would need to be collected upon installation and updated upon modification.
14.	Do you agree that there is a need for consistency across network regions in what data should be collected?	Yes.
15.	If DNSPs' connection application processes are considered a good method of collecting data, what changes are needed to existing processes?	We would need to implement new processes to ensure data quality and compliance as well as develop interfaces and systems to interface with a national register. Processes would need to be streamlined and automated to simplify compliance.
16.	Should obligations on parties other than DNSPs be considered to support data collection? If yes, which parties are best placed to collect and report this data?	Aggregation parties could be responsible for updating affiliation of DER with enrolled programs.
17.	How would an obligation on the parties identified above best be applied and enforced? Please provide details.	
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?	In our view the level of compliance will need to be improved. Further consideration will be required around how to ensure installers are complying with requirements, and how DNSPs can meet their responsibilities if they are not.
19.	How else can compliance levels be improved?	Automating the registration process as much as possible.

Questions		Feedback
20.	How can compliance best be maintained over time as technology changes?	
Chapter 5 – Section 5.4 – Transparency and confidentiality		
21.	Given the nature of information that may be required to be provided by registered participants under the proposed rule change, are existing regulatory arrangements (such as the protected information provisions under the NEL and Privacy Act 1988) regarding the collection and disclosure of information adequate to protect market participants and consumers whose DER systems are included in the register?	
22.	If not:	
	a) What are the likely nature, and magnitude, of potential consequences of insufficient protection of such information?	
	b) Should the NER limit, on the basis of confidentiality concerns, the information that registered participants or others would be required to provide to AEMO under the DER Register Guidelines? If yes, how?	
	c) Should the NER limit, on the basis of confidentiality concerns, how AEMO may use or disclose information provided to it under the DER Register Guidelines? If yes, how?	
23.	Are there any competition concerns raised by the establishment of the register?	
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?	
25.	Are there existing mechanisms currently in place (e.g. requisite IT systems) that could facilitate the practical sharing of data with emergency responders on a real time basis?	We have no such systems today.

Questions		Feedback
26.	Is the proposed DER register the most practical mechanism to provide emergency services with the required information?	
27.	What important features does a register need to have in order to meet the needs of emergency services?	
28.	To what extent is energy related information already shared between relevant bodies (e.g. AEMO/CER) to emergency services for safety reasons?	
Other comments on the rule change request or consultation paper		
29.	Do you have any other comments on the rule change request or the consultation paper?	