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**Register of distributed energy resources – Consultation paper, 6 March 2018
[ERC0227/RRC0011]**

Jemena Electricity Networks (**JEN**) thanks the Australian Energy Market Commission (**AEMC**) for providing the opportunity to comment on the rule change request seeking to improve the collection and sharing of information about distributed energy resources (**DER**) installed behind the meter.

Key messages

JEN supports a rule change that requires:

- AEMO to administer a DER register. The register should not impose excessive regulatory and administrative burden on participants; and
- DNSPs to collect information on DER systems provided by installers through the connection process and update AEMO's DER register.

JEN does not support DNSPs applying "random auditing protocols on premises / DER systems"¹ to support the collection of information on DER systems. JEN currently has no authority to report non-compliance and cannot enforce remedial actions. Instead JEN considers the safety regulator can play a role through the licencing /authorisation powers in ensuring installer of DER systems provide the requisite information to the DNSPs.

JEN's responses to the questions posed in the consultation paper are set out in Attachment 1. If you have questions in relation to the submission, please contact Siva Moorthy on (03) 9173 8774 or at siva.moorthy@jemena.com.au.

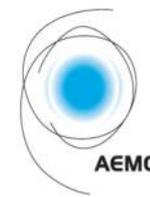
Yours sincerely

[signed]

Matthew Serpell

Manager Asset Regulation and Strategy

¹ AEMC, Consultation paper on Register of distributed energy resources , 6 March 2018, p 29.



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.

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Questions		Feedback
Chapter 4 – Assessment framework		
1.	Is the assessment framework appropriate for considering the proposed rule changes?	JEN considers the assessment framework and the factors identified for consideration are adequate.
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 consider the likely uses would be for improved load forecasting and network operations.
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?	We agree a DER register would be a good source of information to AEMO and DNSP's for more accurate short and long term load forecasting.

Questions		Feedback
	b) improving AEMO's ability to manage power system security during credible contingency, protected and non-credible contingency events?	JEN offers no comment to this question.
	c) improving AEMO's ability to set the bounds of the technical envelope at an efficient level?	JEN offers no comment to this question.
	d) improving efficient market and network investment?	Consistent with demand forecasting improvements the register is likely to improve network investments for DNSP's.
5.	Are there any other ways that a distributed energy resources register could benefit the National Electricity Market?	JEN offers no further comment to this question.
6.	What features does a register need to have in order to meet the objectives outlined by the COAG Energy Council?	JEN supports collection of the information on DER specified in Table 2.2 of this consultation paper. Further, we propose the information collection on DER be expanded to include the capacity of the inverter, capacity and type of generation installed, and any export limit imposed at each connection point.
Chapter 5 – Section 5.1.2 – Expected costs		
7.	What costs do you believe would likely be involved in the collection of useful data about DER?	JEN is currently not in a position to provide any comments on the expected costs in the collection of data. For a meaningful feedback the industry needs to agree on a firm list of data requirements.
8.	Do you agree with the costs identified by Jacobs for different stakeholders? If not, why?	JEN is currently not in a position to provide any comments on expected 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?	JEN is currently not in a position to provide any comments on expected costs.
10.	How might the nature and magnitude of these potential costs change over time?	JEN is currently not in a position to provide any comments on expected costs.

Questions		Feedback
Chapter 5 – Section 5.2 – Governance		
11.	Please comment on the suitability of the following:	
	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)?	JEN considers 'small scale' systems should be limited to generation systems below 5 MW. That is because the NER already requires systems larger than 5 MW to be registered with AEMO, and we consider that sufficient information is provided through that process. Further, we do not believe there needs to be a minimum capacity threshold imposed in MWh for energy storage. The proposed DER register needs to capture all sizes of battery storage equipment that has export capability.
	a) 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 agree and consider proposed definition is an appropriate spatial demarcation of 'connection point'.
	b) Is a 'distributed energy resource' " <i>an integrated system of energy equipment co-located with consumer load</i> "? If not, what else could it be characterised as?	Sometimes a connection point may not have a load. It may wholly be a generator. We suggest the reference to " <i>co-located with consumer load</i> " be deleted.
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?	JEN considers the relevant information for a DER register should be outlined in the AEMO guideline The information requirements in the guideline should be very descriptive and prescriptive. Without some level of prescription, the compliance, quality and consistency of data will suffer, thereby diminishing the value of the register. We consider a template for the collection of the information should be included in the guideline because it would provide for the greatest level of data consistency and ensure the highest net benefit of the register.

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?	JEN considers there is value in specifying the nature of information and frequency for updating the register in an AEMO guideline as it ensure consistency across the NEM. However, we consider parties should not be required to update the register more frequently than once a month.
	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?	We acknowledge AEMO's information needs noted in Box 5.1, as well as the data collection proposed in Table 2.2, of this consultation paper We consider the principles and factors set out in section 4.2 of this consultation paper are equally relevant for AEMO when developing guidelines on collection and recording of information on DER. Further, AEMO should also review and consider the data currently captured in the various DNSP connection processes when developing the guideline.
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?	JEN considers the data should be collected and updated no more frequently than once a month. Monthly update is sufficient to achieve the objectives of a DER register. Also refer to our response to question 12(b).
14.	Do you agree that there is a need for consistency across network regions in what data should be collected?	We agree that there is value in having consistency across the jurisdictions as to what data should be collected. As noted in our response to question 12 a), we consider inconsistencies would diminish the value of the register.
15.	If DNSPs' connection application processes are considered a good method of collecting data, what changes are needed to existing processes?	We agree connection application processes are a good method of collecting data for on DER. Part D of Chapter 5A of the NER sets out the connection processes and information requirement to enable a new connection or connection alteration. We suggest this rule be reviewed to accommodate any new information to be collected as required by this DER register.

Questions		Feedback
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?	<p>DNSP's are best placed to collect and provide data to AEMO.</p> <p>JEN's current connection process requires connection applicants to submit a connection application and a certificate of electrical safety (CES) issued by a REC for connection of a generator, even if the generator and/or battery storage equipment is less than 5 KW.</p> <p>However, after the initial connection, it is difficult to monitor additions and alterations to the generator and/or battery storage equipment.</p> <p>NER amendments requiring customers to apply to DNSPs of additions and alterations to their generator and/or battery storage equipment would be welcomed.</p>
17.	How would an obligation on the parties identified above best be applied and enforced? Please provide details.	<p>JEN does not support COAG's proposal that DNSPs apply random auditing protocols on premises / DER systems to support the collection of information on DER.</p> <p>JEN considers the installers of DER systems, appropriately licensed by the jurisdictional safety regulators, should be required to submit the requisite information of the installed DER systems (including alterations) through the connection application process to the DNSPs.</p> <p>DER systems should be installed to the relevant safety standards/regulations and it is the jurisdictional safety regulators who are responsible for enforcing compliance.</p> <p>We currently see a skills gap for the design, installation, maintenance and inspection of DER systems and believe that the work associated with these systems requires a specialised skill set. Improved training and licensing of installers of DER systems developed and administered by the jurisdictional safety regulators would raise awareness and educate relevant parties on the importance of data reporting.</p>

Questions		Feedback
		JEN considers the safety regulator can play an important role, through their licensing/authorisation powers, in the enforcement of data reporting.
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?	Notwithstanding the low level of compliance, we consider a DER register would still provide significant beneficial insights for demand forecasting and network reliability and security. It will also provide a level of understanding about how DERs respond to network disturbances, which will improve load modelling even if only applied at a broader level.
19.	How else can compliance levels be improved?	Refer to our responses to questions 17 and 20.
20.	How can compliance best be maintained over time as technology changes?	Awareness of compliance can be maintained through public campaigns and, as noted in our response to question 17, ongoing improvements to education, training and licencing. Victorian DNSPs are required to provide a customer charter at the time of connection, upon request or at least once every 5 years. Including customer obligations to provide DER information to the DNSP in the charter can promote compliance 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?	JEN supports sharing of information in a DER register with third parties, subject to existing privacy laws. We propose the AEMC investigate and settle all matters regarding access, transparency and confidentiality of information in a DER register.
22.	If not:	
	a) What are the likely nature, and magnitude, of potential consequences of insufficient protection of such information?	JEN offers no comment to this question.

Questions		Feedback
	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?	JEN offers no comment to this question.
	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?	JEN offers no comment to this question.
23.	Are there any competition concerns raised by the establishment of the register?	<p>The proposed rule change seeks to allow AEMO to share information in a DER register with third parties, subject to existing privacy laws. These parties are listed as including both registered participants, such as DNSPs and retailers, and a range of other parties.¹</p> <p>We propose the AEMC to seek expert advice on whether there are any potential impacts on competition in markets for new energy services associated with the establishment of the register. This should include whether existing energy retailers may be able to confer an advantage over some competitors by accessing and using information from a DER register to promote products outside their traditional energy retail business, whilst competitors in new energy service markets who are not energy retailers would not have access to the same information.</p>
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?	Sharing of data collected under a DER register would be useful to emergency services. We expect the benefits to emergency services would be as per dot points in section 3.3 of the consultation paper, but consider the register would only serve to supplement other means of gathering required information.

¹ AEMC, Consultation paper on Register of distributed energy resources , 6 March 2018, p 31.

Questions		Feedback
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 do not have any existing systems that could be extended to sharing of information on DER. JEN communicates with emergency responders via telephone and email in the event of emergencies involving fire, floods and or other extreme conditions.
26.	Is the proposed DER register the most practical mechanism to provide emergency services with the required information?	JEN believes the DER register is a practical mechanism to provide emergency services with the required information. However we question the usefulness of the information to emergency responders. A more practical way would be to require premises that have storage systems to have signage showing the type of DER installed and its location though the Australian standard for storage system installation AS/NZS 5139. ² The requirement to have adequate signage can be prescribed in the jurisdictional safety standards and duly enforced by the safety regulator.
27.	What important features does a register need to have in order to meet the needs of emergency services?	JEN offers no comment to this question.
28.	To what extent is energy related information already shared between relevant bodies (e.g. AEMO/CER) to emergency services for safety reasons?	JEN offers no comment to this question.
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?	JEN has no other comments on matters covered in the consultation paper.

² AEMC, Consultation paper on Register of distributed energy resources , 6 March 2018, p 36.