

Stakeholder Feedback Template

This template has been developed to enable stakeholders to provide their feedback on the DER Register Information Guidelines Consultation Issues Paper.

AEMO encourages stakeholders to use this template, so they can have due regard to 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.

Stakeholder submissions will be published on AEMO’s website unless they are clearly marked as being confidential. Submissions should be sent to DERRegister@aemo.com.au by Thursday, 07 March 2019.

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Questions	Feedback
Section 3.1 – Information requirements	
<p>1</p> <p>Do you agree with the suggested format and method of data submission?</p>	<p>SA Power Networks does not support the proposed method. DER information is not held within our National Market Systems that interact with MSATS. Significant investment would be required by SA Power Networks to align with the proposed method.</p> <p>SA Power Networks strongly prefers a solution that is not linked to MSATS and prefers the concept of interfacing data with AEMO via an API outside of MSATS where data can be provided in bulk format rather than via individual NMI/MSATS transactions.</p>
<p>2</p> <p>Are there adequate access arrangements for Installers and installation software providers to submit data on behalf of NSPs into the DER Register? If not, how might this be improved?</p>	<p>SA Power Networks plans to receive DER installation information from installers from the state Office of the Technical Regulator (OTR) who is provided data via their online electronic Certificate of Compliance (eCOC) process. SA Power Networks believes it will be possible to obtain existing information and expand some eCOC fields to capture new information to satisfy the national DER register requirements.</p>

Questions		Feedback
		From experience SA Power Networks believes it will be technically and financially challenging to integrate a new system into AEMO's MSATS to allow installers to provide information directly to AEMO.
3	Are there any risks associated with the different submission frequency between the <i>DER generation information</i> and <i>DSP information</i> ?	It is SA Power Network's experience installers do not submit information to SA Power Networks or the OTR on the day of installation or day a system becomes operational. Often applications are submitted to SA Power Networks days, weeks, or months before installation and to the OTR days or weeks after work has been completed.
4	What is an alternate approach to the frequency of data submission? How would this be implemented?	It is suggested DER information is not provided piece-wise as this is unlikely to accurately reflect operational DER. An alternate suggestion is monthly to balance both early and late information provided to SA Power Networks. SA Power Networks will need to perform data cleansing activities which will benefit from monthly submission of data.
5	Are there any other relevant issues that have not been considered?	SA Power Networks believes NSP connection rules should be utilised to define requirements to capture information as they're enforceable and readily changeable. It is not completely understood how the date system works in the data structure, but it should be able to consider systems being operational at different dates from the submission date.
Section 3.2 – DER register storage		
1	Are there any issues associated with the separate storage of <i>DSP information</i> and <i>DER generation information</i> ?	
2	Are there any other relevant issues that have not been considered?	
Section 3.3 – DER register information access to NSPs		
1	What <i>regulatory obligations or requirement</i> do NSPs intend to use DER register data for?	SA Power Networks initial use of the data will be for network planning and operations, as well as regulated reporting. Including improving load and

Questions		Feedback
		generation forecasts, fault and outage investigations, as well as quality of supply investigations and low voltage planning.
2	Do you have a preferred process for accessing <i>DER register information</i> ?	SA Power Networks do not support an MSATS solution and therefore would not expect to be using MSATS reports to access data from the DER register. SA Power Networks would prefer to access data via the same API interface that is used to post data.
2a	Is existing NMI discovery (adding in DER) useful?	
2b	Are existing C1, C4 and C7 reports (including DER) suitable? Is an additional report required? If a new report is required, what should it include?	
2c	What are your views on using an API to develop custom reports?	SA Power Networks prefers this method.
3	Do existing C1, C4 and C7 reports need to be provided if an API is provided?	
4	Are there any other relevant issues that have not been considered?	
Section 3.4 – AEMO reporting and publication		
1	Are there additional variables that should be published in the <i>DER register report</i> (see Appendix B for list of data)? Why?	
2	Is aggregation at the post code level suitable? If not, what is an appropriate aggregation variable and why?	
3	Do you agree with monthly updating of the <i>DER register report</i> ? Why/why not?	This aligns with SA Power Networks preferred frequency of publishing data.
4	Are there any other relevant issues that have not been considered?	
Section 4.0 – Proposed Data		

Questions		Feedback
1a	What are the costs and impacts of AEMO’s proposed data requirements? Please break down and describe the costs based on: Upfront once-only costs vs ongoing costs	SA Power Networks has not yet undertaken an exercise to scope the effort and resources required to implement the data model. SA Power Networks would require much more information on the selected solution before being able to provide cost estimates.
1b	What are the costs and impacts of AEMO’s proposed data requirements? Please break down and describe the costs based on: Separation of internal labour costs, contracted labour, system improvement	
2	Do you agree with the proposed data requirements? Why/ why not?	<p>SA Power Networks believes careful consideration should be taken to the volume and necessity for such large and detailed data requirements. SA Power Networks believe data should only be captured if it is directly used to determine forecasts, system response, and DER effect on the system. Data should be where possible auto-filled from standard sources like Australian standards and the Clean Energy Council (CEC). DER responses should be derived where possible rather than relying on installers to accurately complete tedious data which, from experience, will lead to unreliable erroneous data capture.</p> <p>SA Power Networks understands the DER register will capture resources up to 30MW, including hydro and internal combustion generation. It appears the current data structure is focused on inverter-based systems and it is unclear how some details of non-inverter-based systems will be captured.</p>
3	Do you agree with the proposed data structure (see appendix B, figure 3)? If not, please explain why it would not work and propose an alternative.	<p>The proposed model is similar but not the same as the data model SA Power Networks uses internally. It is possible to map the existing SA Power Networks model into this format however it will take additional processing.</p> <p>SA Power Networks believes AEMO should use a Common Interface Model (CIM) based on international standards to define data types, formats, and units.</p> <p>It is unclear to SA Power Networks the purpose of level 2 in the data structure. SA Power Networks is concerned the level 2 trip (frequency and voltage)</p>

Questions	Feedback
	settings are both duplications of trip settings captured in level 3 devices and not complete enough to capture the complete response of sub devices.
4 Should data variables that have default values prescribed by the AS4777 standards (e.g. Under-frequency protection, Over-frequency protection, Undervoltage protection, Overvoltage protection, etc) be requested as discrete inputs? Why/ why not?	SA Power Networks highly recommends using default values prescribed by relevant standards. Default values both reduces the data volume and erroneousess. There should be a mechanism to provide discrete inputs if they deviate from the standard settings.
5 For the AC connection table (appendix B), is it relevant to include protection modes for non-inverter DER? If so, what is the relevant information that should be captured?	
6 Do you agree with the data source/ providers for the physical collection, listed in Appendix B? If not, explain why and who else or what other data sources should be involved.	SA Power Networks believes the data sources/providers are reasonable however the data should first flow to the NSP before being sent to AEMO as described in section 3.1 above.
7 Are there any other requirements that have not been considered? Why are these important? Which table are they relevant to?	
8 In terms of the examples given, are their other DER installation configurations that AEMO should consider?	
9 Are there any other relevant issues that have not been considered?	SA Power Networks believe additional fields should be captured to vet and qualify the quality of data. Two proposals: 1) Confidence flags that indicate level of confidence in the data and the source. This should capture where settings are assumed (based on a standard), from a template, have been confirmed/commission checked, or have been digitally checked (for example via an API to a manufacturer). 2) A flag to indicate whether a DER device is under feed in management control by a NSP. For example, to capture if the solar generation output can be ramped for system stability.
General Comments	

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<p>1</p> <p>Do you have any other comments?</p>	<p>Some general feedback and concerns:</p> <ul style="list-style-type: none"> SA Power Networks has concerns that some data in the data model is too detailed and may not be entirely useful for operational forecasts. It may be possible to extrapolate DER behaviour and avoid tedious and erroneous data capture which in turn may increase compliance. <p>For example, it appears the trip settings at level 2 can be derived from the trip settings of devices at level 3. As well as the solar panel technology type which is not currently collected or planned to be collected by SA Power Networks and will likely not help operational forecasts.</p> <ul style="list-style-type: none"> SA Power Networks has concerns legacy data will not fit into the proposed model. SA Power Networks believes the “Nominal Export Capacity” data field label in level 4 of the data model is incorrect, it appears the data captured by this field is simply ‘nominal capacity (kW)’. <p>For information purposes SA Power Networks has included Attachment 1 – SAPN internal DER register architecture (draft). On this attachment can be seen data sources from SA Power Networks current Customer Information System (CIS/OV) as well as Small Embedded Generation (SEG) database.</p>