### R1 capability assessment request form



#### Use of this form

- This form is to be completed by a Connection Applicant seeking to commence the capability assessment under National Electricity Rules (NER) 5.3.7A to register as a Generator or an Integrated Resource Provider (IRP).
- This form is intended as a prompt to support Connection Applicants to provide initial data and information as identified in the R1 Capability Assessment Guideline that would be used by the Network Service Provider (NSP) and Australian Energy Market Operator (AEMO) to scope the capability assessment. Contact the relevant NSP and AEMO, if further guidance is required.

#### **Connection Applicant details**

Connection Applicant details	[Specify company name]
Generating system (GS) or integrating resource system (IRS) details	[Specify GS or IRS name]
Production unit(s) / load details	[Specify number of production unit(s), capacity of each production unit(s), relevant load details for IRSs]
Contact person details	[Specify name, title, telephone number, email address]
Initial data and information submitted to:	[Specify NSP contact and AEMO Onboarding & Connections contact]
Date of initial data and information submission for capability assessment	[Specify the date of initial data and information submission to NSP and AEMO]

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### Initial data and information requirements

Type of information	Requirement	Included? (Yes / No / N/A)	Relevant filename(s) and section(s)
Resolution of conditions in 5.3.4A letter	<ul> <li>Connection Applicant to provide: A detailed description of how conditions in the 5.3.4A letter and any unresolved issues have been addressed including the corresponding changes for each item. Where relevant, they should be supported with evidence such as simulation studies, Original Equipment Manufacturer (OEM) documentation, detailed design information and reports.</li> <li>List relevant documents and/or simulation models that are impacted and have or will be updated, specifying when the update will occur.</li> </ul>		
Plant alterations and performance standard changes	<ul> <li>Describe alterations to plant design since agreement of performance standards.</li> <li>Describe, and where possible quantify, the changes including the likely impact to the existing performance standards.         <ul> <li>For example, cable impedance reduced by 5%, no change proposed to the performance standards.</li> </ul> </li> <li>Flag any alterations where the likely impacts have not been quantified at this stage.</li> <li>Include a marked-up version of the performance standards.</li> </ul>		
Performance standards not previously assessed	Identify elements of performance standards that were not assessed during the connection application phase and provide an update of their status. For example, this is likely to include some protection and secondary systems related performance standards such as S52.5.8 and S5.2.5.9. It may also include run-back schemes and anti-island schemes in relation to S5.2.5.12.		
Voltage control strategy	Provide an updated voltage control strategy document. This should reflect:		



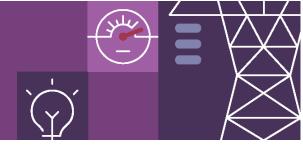


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Type of information	Requirement	Included? (Yes / No / N/A)	Relevant filename(s) and section(s)
	<ul> <li>Any changes to the voltage control philosophy.</li> <li>Any additional details on controls, operational arrangements, special protection schemes, and details for wind free or reactive power at night operation.</li> <li>Highlight key changes since the agreement of performance standards.</li> </ul>		
Models of the GS/IRS including Registered Data (R1 pre-connection) and associated documentation	<ul> <li>Provide the models of the GS/IRS in PSS®E and PSCAD™/EMTDC™ format, incorporating the most up-to-date information available. The models should include any changes to address any outstanding modelling issues held over from the connection application phase or conditions in 5.3.4A letter.</li> <li>Provide the associated model documentation:         <ul> <li>PSS®E Releasable User Guide (RUG).</li> <li>PSCAD™/EMTDC™ User Guide.</li> <li>PSS®E to PSCAD™/EMTDC™ parameter mapping sheet.</li> </ul> </li> </ul>		
Dynamic model changes	<ul> <li>Changes to plant dynamic models since agreement of performance standards.</li> <li>Provide OEM information about model changes including model version history and change log.</li> <li>Identify all model changes that could impact the plant's performance standards. Include a description of each change and how it will impact the existing performance standards.</li> </ul>		
Dynamic model outstanding changes	Identify any known changes that have not yet been incorporated into models or settings. For example, as-built quantities which are not yet finalised, such as		

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	transformer impedances from factory acceptance tests. Where possible, quantify the maximum extent of changes.		
Dynamic models or firmware known issues	Identify any specific known issues that could affect the plant's ability to meet its performance standards and were not considered at the time of connection application.		
	For example, known issues may relate to:  OEM models of the plant and controls.		
	<ul> <li>Protection systems of the plant.</li> <li>Known firmware issues (whether or not represented in the models).</li> </ul>		



#### Where can I find more information?

Title	Weblink
R1 Capability Assessment Guideline	https://aemo.com.au/consultations/current-and-closed- consultations/registration-information-resource-and-guidelines

For any further enquiries please email <a href="mailto:contact.connections@aemo.com.au">contact.connections@aemo.com.au</a>.

Applicants are responsible for ensuring they understand the relevant provisions of the NER and other applicable instruments, which prevail in the case of any inconsistency.