National Network Connection Guidelines

December 2017





Electricity Network Transformation Finding – DER Connection Process

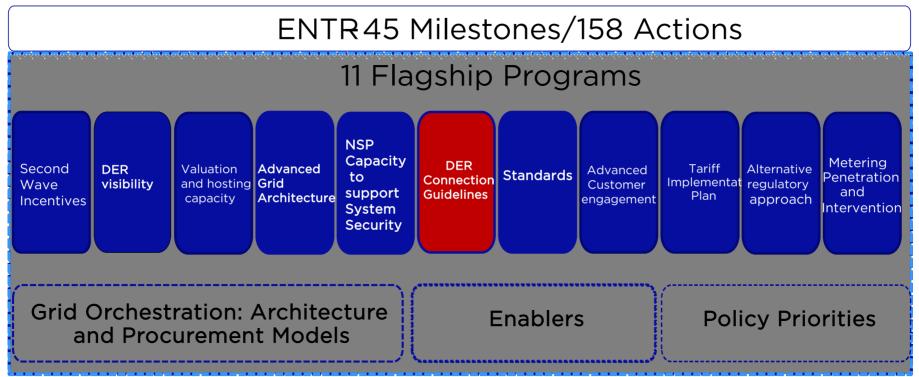
Perception that the current process is costly and time consuming for DER proponents due to a combination of :

- » Requirements being **too onerous** and not achieving the right balance between:
 - Mitigation of network risks / network costs
 - Efficiency in the connection process
- » Inconsistency across networks in terms of level of technical requirements, documentation requirements and structure of documents
- » Lack of clarity with respect to technical and documentation requirements.





ENTR Implementation







What are National Network Connection Guidelines?

- » Set of guidelines which streamline the technical requirements for connection of generators to Australia's electricity networks
- » The National Network Connection guidelines aim to:
 - Respond to various studies which have identified a benefit in streamlining technical requirements across network service providers
 - Ensure that technical requirements provide for participation of a broader range of players in Australia's existing and emerging energy markets
 - Ensure that technical requirements provide for system strength and security





Background







Key Connection Types (under the National Electricity Rules)

- » Basic connection
- » Standard connection
- » Micro-embedded generator
- » Non-registered connection
- » Registered connection





Documents

Framework and Principles Guideline

Specifies the scope and structure of the subsequent technical guidelines **Technical Guidelines**

Specifies the technical requirements and/or technical outcomes to be achieved for each connection type





Framework and Principles Guidelines

- » What types of connections should the technical guidelines address?
 - Technology types
 - Regulated connection types (basic, standard, negotiated, registered etc)
 - Connection level (high voltage, low voltage)
 - System size
- » What requirements should the technical guidelines cover?
- » How should the technical requirements be specified (e.g plant and equipment or performance based)?
- » To what level should the technical requirements be detailed?





Technical guidelines

- » How should the technical requirements be specified (e.g plant and equipment or performance based)?
- » To what level should the technical requirements be detailed? (Trade-off between achieving consensus and achieving a high level of technical specificity)?





Timeframe and milestones

Stage 1 - Principles/Framework Guidelines

Task/Milestone	Decmember	January	Feb	March
Review				
Develop and conduct survey				
Webinar (all stakeholders)			1	
Review survey findings and prepare summary				
Engage				
Steering committee meeting				
Develop Draft Guideline				
Test				
Steering committee meeting				
Webinar (all stakeholders)				
Finalise Guideline				
TOTAL				

Stage 2 - First Technical Guideline

Task/Milestone	April	May	June	July	August	September
Review						
Develop and conduct survey						
Review survey findings and prepare summary						
Engage						
Steering Committee						
NSP workshops (x6) - Qld+NT, NSW+ACT, SA, Tas, Vic, WA						
Prepare Issues Paper					e.	
NSP workshop (face to face)				1		
Develop Draft Techncial Guideline		i				
Test		1	2			
Steering committee teleconference						
One on one follow ups with key stakeholders			0			
Face to face workshop (all stakeholders)			0			
Finalise Technical Guideline		i				
TOTAL		1	-			







How to get involved

- » During the initial phase of the project, CutlerMerz will be engaging with all Australian Network Service Providers, as well as key industry stakeholders, such as the Clean Energy Council and its members.
- » Survey of members to be sent out in December 2017 Open for 1 month
- » A series of webinars will also be held over the duration of the project which are open for all interested parties to attend.
- » To register your interest, please email Stuart Johnston at energy Networks Australia (sjohnston@energynetworks.com.au).





Engagement approach – Framework and Principles Guideline

Engagement	Format	Objective	Invitees	Date
Framework and Principles Survey	Online survey	To collate input as to the objectives and structure of the Frameworks and Principles Guideline	NSPs, government and industry bodies	Commencing 8 th Dec 2017
Overview webinar (today)	Webinar	To increase awareness of the project and invite potential stakeholders to participate in the process	Open invite	14 th Dec 2017
Steering committee meeting #1	Teleconference	To test the findings of the online survey and shapethe Framework and Principles Guideline	Representatives from NSPs, CEC and AEMC	~30 th Jan 2018
Steering committee meeting #2	Teleconference	To gather feedback on the Draft Framework and Principles Guideline	Representatives from NSPs, CEC and AEMC	Late Feb 2018
Framework and Principles Guideline webinar	Webinar	To present the Draft Framework and Principles Guideline for stakeholder feedback	Open invite	Early March 2018





Engagement approach – Technical guidelines

Engagement	Format	Objective	Invitees	Date
Technical Survey	Online survey	To collate input as to the specific technical requirements for relevant connection type	NSPs, and industry bodies	Commencing 8 th Dec 2017
Steering committee meeting #3	Teleconference	To present the findings of the surveys and key issues	Representatives from NSPs, CEC and AEMC	Early May 2018
NSP workshops (state based)	Face to face	To work through key issues	NSPs	Late May 2018
NSP combined workshop	Webinar	To present the proposed way forward on key issues	NSPs	Late June 2018
Steering committee meeting #4	Teleconference	To gather feedback on the Draft Technical Guideline	Representatives from NSPs, CEC and AEMC	Early August 2018
Key stakeholder meetings	Teleconference / Face to face	To gather feedback on the Draft Technical Guideline	Government, industry bodies	Mid August 2018
Final workshop	Workshop	To gather feedback on the Draft Technical Guideline	Open invite	Late August 2018





Thank You !

Want to know more?

For more information on the National DER Connection Guidelines Project, please contact

Dr Stuart Johnston at Energy Networks Australia at **sjohnston@energynetworks.com.au** Or Melanie Koerner at CutlerMerz at **melanie.koerner@cutlermerz.com**



