

NOTES

ENA Electricity Networks and Futures Group DER TECHNICAL FORUM

24 JUNE 2020, 1330 START

Attendees by teleconference:

Name	Initial	Company
Chris McCann	CMC	ENA
Andy Hood	AH	WPD
Hui Heng	HH	SSEN
Anuj Chhettri	AC	Northern Powergrid
Mike Kay	MK	ENA
Luis Mayor	LM	PSE2 Consulting
Mark Lyon	ML	SPEN
Tim Moore	TMr	UKPN
Chris Marsland	CM	EuroSite Power
David Hill	DH	NIEN
Alistair Shearer	AS	GTC
Sarah Carter	SC	Ricardo
Tony Mason	TMn	Siemens
Dick Allen	DA	BHA
Richard Harrison	RH	Clarke Energy
Steve Knight	SK	Centrica
Ian Wassman	IW	ComAp UK/AMPS
Gillian Williamson	GW	ENW
Scott Briance	SB	Man Rollo
Ian Nicoll	IN	Qmulus Ltd
Steven Somerville	SS	SPE Electrical Ltd
Graham Bone	GB	Infinis
Jason Kirrage	JK	Solar Edge

Apologies:

Name	Initial	Company

ACTIONS LIST

No.	Detail	Leader	Date	Complete
1	Publish previous minutes etc	CMC	01/07	
2.1	All to consider the digest of ANM approaches and provide any comments	ALL	29/08	
2.2	Establish what is being covered by the ENA Open Networks Project respect of visibility of ANM concepts and settings.	MK	25/08	
3.1	MK to check issue 99 has been resolved satisfactorily and close.	MK	21/07	
3.3	Continue to investigate and provide update on load rejection simulation NG discussions.	SS/MK	Next meeting	
3.4	Report back on DNOs' thoughts on G100 revision.	CC	21/07	
3.5	Continue to investigate and provide update on fault ride through NG discussions.	MK	Next meeting	
4.2	Final review and close issue 96.	MK	21/07	
5.1	Review the ANM guide and G99 for misalignment wrt communication requirements.	ALL	21/07	
5.2	Ask MD about ENAs approach to cyber security in respect of generator communications and clarify how much of this topic should be included in G99 versus other ENA documents.	MK	Next meeting	
7	Circulate any additional information that is in the public domain about proposed EU storage modifications.	MK	01/07	✓
8	Articulate question wrt G5, synchronous generators and resonant plant for discussion with DNOs. Report back to Forum	GW MK	21/07 29/08	
9	Arrange next meeting.	CMC	21/07	
Previous outstanding actions				
1	Engage with EN50549 part 10 drafting re testing of families.	ENA	01/11	
2	Arrange for exemplar examples of completed forms following the database entry review.	MD	April 20	
3	Review G99 compliance forms in light of experience later (H2) next year.	All	2020	

4	Investigate the industry appetite for Equipment Certification.	CM/AG	26/02	
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NOTES

Item	Focus	Leader	Date
1.	Previous minutes and TOR The previous minutes were approved. Approved minutes and slides for the meeting to be published on the ENA Website.	CMC	01/07/20
2.	ANM approaches MK introduced the circulated digest and explained that it was a reflection of requirements at a point in time and would likely change. But in the meantime comments on it or the information referred to would be welcome IN and SK observed that getting visibility and information about ANM approaches at the time of project conception can be difficult and sometime the contracts are not clear wrt to the specific requirements. MK to establish what is being covered by the ENA Open Networks Project to provide clarification in this respect.	ALL MK	29/08/20 17/07/20
3.	Review of recent Tech Forum Queries Reference should be made to the DER Technical Forum Record of Issues log and the slide pack used during the meeting – “200624 ENA DER Tech Forum 200622.pptx”.		
3.1	New issue 1 (issue 99) Short term paralleling. This was raised by RWE and it is thought that they are satisfied with the response. MK to check and close.	MK	21/07/20
3.2	New issue 2 (issue 100). Voltage during faults – clarification on the list of future mods for G99.		Next G99
3.3	New issue 3. (issue 101). Load rejection simulation. This is currently under discussion between SS and NG ESO.	SS/MK	Update at next meeting
3.4	MK noted that DNOs had started to consider if G100 needs to be revised, based largely in feedback from the DER Technical Forum. CMC to report back on DNOs’ thoughts to the next Forum meeting. CM said that he expects DER Tech Forum members and other stakeholders will be included in the development of any revised version.	CMC	Next meeting
3.5	New issue 5 (issues 103 and 104) Fault ride through Being considered with NG and wind turbine manufacturer, update will be provided at next meeting.	MK	Next meeting
4	Review of previous Tech Forum Queries		
4.1	Annex C.6 Measurement of FRT and dynamic system recording - Siemens slides.	ALL	22/07/20

	The informal consultation was issued to the normal DCRP circulation list on 23/06. Responses due by 22/07.		
4.2	Issue 96 output power with falling frequency Pending a review of recently received material from IN.	MK	21/07/20
5	<p>Operational communication protocols</p> <p>SK raised the concern that the lack of standardisation and full requirements for the required communication protocols was problematic from the generator perspective. This affects projects and planning for future generators – cost of comms, interface points, testing requirements, cyber security requirements etc. It was noted that whilst G99 has a technical requirement that the generator must be able to be turned down / turned off, the use of this requirement would be specified in the connection agreement.</p> <p>MK noted that DNOs has also recently begun to think more about this and were considering what more could be standardised etc. The DNOs would report back at or before the next Forum meeting.</p> <p>RH observed that both G99/NI and the ANM Guide had more detailed requirements in them. G99/NI is specific to one DNO whilst G99 covers 6 DNOs and the inevitable different legacy approaches by DNOs was acknowledged.</p> <p>All to let MK know if there are points of detail between the ANM guide and G99 that do not align.</p> <p>MK to ask MD about ENAs approach to cyber security in this respect and to clarify how much of this topic should be included in G99 versus other documents.</p>	<p>MK</p> <p>29/08/20</p> <p>ALL</p> <p>21/07/20</p> <p>MK</p> <p>29/08/20</p>	
6	<p>ENA Database / Compliance and Equipment Certificates</p> <p>The WSP review of submissions to the G98/99 TTR continues and work undertaken in May comprised of further reviews and communications with both the DNOs and manufacturers. A draft tool for Type B applications has been developed. Manufacturer engagement remained positive throughout May with the common aim of getting devices compliant. 676 devices have been reviewed with a total of 43 manufacturers being contacted.</p> <p>For larger devices (> 50kW) WSP shall review as normal, for those that had not supplied a G5 (harmonics)/P28 (voltage fluctuations and flicker) the status would be marked down as Amber (assuming the device had passed compliance on the remaining tests). Amber could indicate that it has demonstrated compliance to the tests highlighted but it is not fully compliant nor is it ready to connect without prior assessment.</p> <p>Approximately 2000 devices have been submitted, far in excess of the 500 originally scoped based on submissions to the G59 database. The current contract with WSP is due to end in July 2020 and ENA are looking to extend this for a further 12 months to enable review of all devices on the Register.</p>	MK	25/06/20

<p>7</p>	<p>Storage (slides 18 and 19)</p> <p>MK to circulate any additional information in respect of the EU modification work on storage, or on the 110kV threshold, that is in the public domain.</p> <p>[post meeting note – these reports are in the public domain if you know where to look – so attached to these minutes]</p>	<p>MK</p>	<p>01/07/20</p>
<p>8</p>	<p>G5/5 Harmonics</p> <p>GW raised a question about approach to connection of synchronous machines at 33 kV and the new requirements of G5, particularly with respect to resonant plant. GW to articulate question for circulation for DNOs to respond to. Any salient points to be raised at next Forum meeting</p>	<p>GW</p> <p>MK</p>	<p>21/07/20</p> <p>28/09/20</p>
<p>9</p>	<p>Next meeting:</p> <p>To be arranged – September.</p>	<p>CMC</p>	<p>21/07/20</p>