

NOTES

ENA Electricity Networks and Futures Group DER TECHNICAL FORUM

12 MARCH 2019, 1030 START

Attendees in Person:

Name	Initial	Company
Peter Twomey	PT	Electricity North West
Ian Wassman	IW	IPU
Andy Hood	AH	WPD
Tim Moore	TM	UKPN
Rostand Siewe	RS	Nordex
Sarah Carter	SC	Ricardo
Mike Kay	MK	ENA
Luis Mayor	LM	PSE2 Consulting
Sue Pilcher	SP	SPEN
John Ruddock	JR	Deepsea
Vincent Hay	VH	ENA
David Hill	DH	NIE
Sean Whittaker	SW	Moixa
Tony Mason	TM	Siemens
Peter Rees	PR	Siemens
Hui Heng	HH	SSEN
Alan Guiver	AG	Independent



Attendees by teleconference:

Name	Initial	Company
Nigel Smith	NS	Sustainable Control Systems
Dick Allen	DA	BHA
Chris Thomas	CT	Energy Contour
Freddy Alcazar	FA	Jenbacher

Apologies:

Name	Initial	Company
Adam Tinkham	AT	Bosch
Jason Kirrage	JK	Solar Edge
Anuj Chhettri	AC	Northern Powergrid
Simon Hamlyn	SH	BHA

ACTIONS LIST

No.	Detail	Leader	Date	Complete
1	Publish previous minutes etc	VH	18/3/19	
3.2	Update the response to Q38. noting that isolation transformers could be required for DC injection.	AH	16/4/19	
3.4	German references for FRT study approach to be shared. Further consideration of FRT to be undertaken.	FA/MK	16/4/19	
3.5	Answer to Q41 to be clarified wrt compliance with BSEN 60255	MK	18/3/19	
3.6	Proposed new paragraph wrt Q42 reactive power to be revised in line with discussion and further comments.	ALL	25/3/19	
3.7	CT to discuss specific SAF issues with appropriate DNO representative.	CT		
3.8	Including the DNO modelling software in the DG guides to be discussed with the DNOs	SC	16/4/19	
3.10	Drafting clarifications about communication and data requirements to be considered. DNO solution to be considered.	ALL/ MK	11/4/19	
3.13	Relocation of generation clauses to be proposed next G99 modification.	SC	May 19	
3.14	Voltage fluctuations to be agenda item at next meeting	AH/NS	16/4/19	
3.15	Consideration to be given to including alternative LFSM-O tests for hydro generation in the next G99 amendment.	SC	May 19	

NOTES

Item	Focus	Leader	Date
1.	Previous minutes and TOR The previous minutes were approved. It was noted that the approved minutes and accompanying issue log at that date and slides for the meeting would be published on the ENA Website.	VH	18/03/19

2.	SAF SC provided an update about the SAF mods which will be published shortly on the ENA website.		
3.	Review of previous Tech Forum Queries Reference should be made to the DER Technical Forum Record of Issues log and the slide pack used during the meeting – 20190312 ENA DER tech forum 190311.		
3.1	Q35 & Q36 CE marking. The meeting agreed that the next amendment of G99 should propose text replacing the specific reference to CE marking with more general regulation compliance requirements.		
3.2	Q38. OK for harmonics, the meeting noted that isolation transformers could be required for DC injection and the answer will be updated to reflect this.	AH	16/4/19
3.3	Q39. LoM test requirements, the meeting agreed with the proposed answer.		
3.4	Q40. FRT studies and their requirements was discussed. It was noted that Annex B.4 requires a short circuit at the connection point and the use of the distribution network minimum fault level. This makes generic compliance (equipment certification) difficult. It was noted that in Germany an estimate of the short circuit level is made for the studies. FA to provide reference for German documentation. This is to be further considered.	FA, MK	16/4/19
3.5	Q41. The meeting agreed with the proposed answer, with a clarification that all relays should comply with BSEN 60255.	MK	18/3/19
3.6	Q42. The situation where a reactor is placed between a generator and the network to reduce the fault contribution from the generator was discussed. The proposed new paragraph will be reviewed to specifically mention the case when the generator is electrically distant from the connection point. Further comments on this welcome in advance of the next meeting (say by 25 March).	ALLA E	25/3/19
3.7	Q43. The meeting noted that whilst information was required about fault contribution from a power generating facility at the time of application, the detailed transformer data requirements were in section 4 of the SAF, and all DNOs agreed that it was not required until after the connection offer has been made. CT to discuss his specific issue with the appropriate DNO representative at this forum.	CT	
3.8	Q44. The challenge of the DNOs using different power system analysis software packages was discussed. Including the DNO modelling software in the DG connection guides to be discussed with the DNOs. The meeting agreed to determine how Europe were addressing this issue and ensure the drafting in G99 correctly represents the RfG.	SC	16/4/19

3.9	Q45. In discussion this was agreed as being another instance of Issue 43 and CT would pick up with the relevant DNO	CT	
3.10	Q46 and Q51. Communication and data recording requirements were discussed. It was noted that the need for provision of fault recording adds an additional expense to the solution, but that this is a requirement of the RfG and hence mandatory. The meeting agreed there could be more clarity in respect of the words at the start of Annex C6 and the requirements in paragraph 13.9.3 where some of the functionality is not mandated, but to be agreed with the DNO. It was noted that UKPN are currently investigating the provision of a single box located with the metering breaker which would provide the required functionality. This will be discussed with the DNOs to consider if they can have common requirements. The drafting will be reviewed. Any further comments about this would be welcomed before the next meeting (say by 11 April).	MK/ ALL	11/4/19
3.11	Q19. Post meeting note – paragraphs 17.2 (18.2, 19.2) and 17.4 (18.4, 19.4) have been modified in G99 amendment 4 to clarify the witnessing and commissioning process for Type B, C and D PGMs. Noted that further operating experience might suggest further improvements in due course, and can be raised as new issues.		
3.12	Q27. The meeting agreed with the proposed answer in respect of hydro generation tripping.		
3.13	Q29. The proposed additional G99 clauses in respect of relocation of generation were agreed in the meeting and will be proposed in the next G99 modification.	SC	May 19
3.14	Q32. Voltage fluctuations are being discussed (AH and NS) and will be reported at the next meeting.	AH/NS	16/4/19
3.15	Q34. The meeting agreed with the alternative LFSM-O test approach for hydro generation. Consideration will be given to including this in the next G99 amendment.	SC	May 19
4	AOB None.		
5	Next meetings: 16 April 21 May 3 July Vincent to send invitations. Venue: 4 More London Riverside, London, SE1 2AU	VH	19/3/19