

## NOTES

### ENA Electricity Networks and Futures Group G100 Review Working Group DCRP

Wednesday, 06 January 2021

#### Attendees:

Name	Initial	Company
Andrew Hood - Chair	AH	WPD
Richard Harrison	RH	Clarke Energy
Ian Wassman	IW	AMPS (Comap-Controls)
Chris McCann	CMC	ENA
Mike Kay	MK	ENA
Peter Twomey	PT	ENWL
Chris Marsland	CM	Euro Site Power
David Hill	DH	NI Networks
Alan Creighton	AC	NPg
Jason Kirrage	JK	Solar Edge
Jonathan Mitchell	JM	SPEN
Calum Jardine	CJ	SSEN
Marcos Lamas Diez	LM	UKPN

#### Apologies:

Name	Initial	Company
Steve Mockford	SM	GTC-UK
Peter Twomey	PT	Electricity North West

#### ACTIONS LIST

No.	Detail	Leader	Date	Complete
1	Include comms and cybersecurity in first draft	MK	31/01	✓
2	Draft Mode 2 ops and failsafe as discussed, leaving scope for criteria modification	MK	31/01	✓
3	Include VT burden and 11kV cable termination opportunities in drafting	MK	31/01	
4	Reinstate original 100A supplies standard sizes in drafting	MK	31/01	✓

5	Retain broad structure of current G100 in drafting	MK	31/01	✓
6	Consider quoting from or linking to PAS 1879 or relevant IECs in drafting	MK	31/01	✓
7	Circulate high level methodology of calculating voltage rise	DNOs	22/01	✓
8	Circulate any examples relevant to back up protection	JK	15/01	✓
9	MK to ask TN for multiple G100 examples	MK	08/01	✓
10	Consider if time differentiation could enable happy co-existence of multiple G100 devices	MK	31/01	✓
11	Circulate DNOs digest of ANM references	MK	08/01	✓
12	Consider how to progress ANM standardization	CMC/ MK	31/01	✓
13	Arrange subsequent meetings	CMC	08/01	✓

**NOTES**

Item	Focus	Leader	Date
1	<p><b>Welcome, Introductions and Acceptance of Agenda.</b></p> <p>AH welcomed WG members, introductions waved and the agenda were agreed.</p> <p>The minutes of the previous meeting were accepted as correct record.</p>		
2	<p><b>DCRP feedback</b></p> <p>CM reported that the DCRP were happy with the proposal to make G100 a formal D Code document and for DCRP governance to apply to it and to the administration etc of the WG.</p>		
3	<p><b>G100 device internal comms requirements</b></p> <p>There was a brief résumé of the discussion about communications between G100 components, and also on the implications for cybersecurity. It was agreed that it would be easier to comment on a first draft of the requirements.</p>	MK	31/01
4	<p><b>Operation outside of limits and failsafe</b></p>		

	<p>In reviewing the comments receive in this area it was noted that normal operation in some cases could see excursions over a normal limit or boundary several times a day and certainly for a couple of minutes (whilst slow acting plant responds). All agreed on the principles overall – but there were concerns that the application of criteria and limits might end up being inappropriately restrictive. MK noted that it might be appropriate to consider a normal operating limit which was within the maximum export (or import) limit. However if the full MEC is to be used, the excursions beyond must be limited – although it remains appropriate to continue to discuss the exact criteria.</p> <p>It was agreed that this might need to be revisited. But in the meant time a draft would be created that framed the requirements, leaving room for the numerical criteria to be flexed.</p>	MK	31/01
5	<p><b>Access to instrument transformers</b></p> <p>The position recorded at the last meeting was accepted. It was noted that access to VTs might also be facilitated based on acceptable burdens, and also that at 11kV modern cable terminations can in some instances provide voltage and current signals which might be appropriate for G100 equipment. The drafting should include this.</p>	MK	31/12
6	<p><b>100 A supplies</b></p> <p>Although some comments had been received suggesting a reduced number of standard arrangements, in discussion it was agreed to reinstate those that had been removed.</p>	MK	31/12
7	<p><b>Drafting Approach</b></p> <p>No further comments – current structure to be retained, although content would be rewritten.</p>	MK	31/12
8	<p><b>Availability of PAS 1879</b></p> <p>This had been circulated before the meeting. It was agreed it might be appropriate to quote from it, and possibly other IECs, in the drafting.</p>	MK	31/12
9	<p><b>Revised ToRs</b></p> <p>Amendments agreed but with the addition of “adverse” in front of “commercial impact”.</p>	MK	07/01
10	<p><b>Voltage Rise Limits</b></p> <p>Recognizing how material these might be, DNOs agreed to share their approaches to assessing voltage rise, with a view to standardizing the approach as far as possible, noting that network conditions, design history and availability of data could all be drivers of differences in outcomes between DNOs.</p>	DNOs	22/01
11	<p><b>Back up Protection Principles</b></p>		

	These were agreed both for implementation in a future G100 and also restated as applicable in the current G100. JK will research instances in the recent past where he believes these principles have not been applied	JK	15/01
<b>12</b>	<p><b>Multiple G100 devices</b></p> <p>Those present in the meeting thought that multiple G100 devices were probably not appropriate in most if not all cases. However it was agreed that some practical examples might help. MK to ask Thomas Newby if he could provide any.</p> <p>AH noted that differentiating G100 devices by operating time might be a way of accommodating multiple devices. MK agreed to consider.</p>	MK MK	08/01 31/01
<b>13</b>	<p><b>ANM</b></p> <p>Following a brief discussion of the common aspects of ANM and G100, and also of the lack of ANM commonality of approach to ANM between DNOS,. MK would recirculate the information that DNOs publish on this, and MK/CMC would discuss with the ENA how/if this might be taken forward.</p>	MK MK/CMC	08/01 31/01
<b>14</b>	<p><b>Timeline</b></p> <p>It was noted as ambitious, but it was agreed that it looked appropriate. To be followed for now, and updated as required.</p>		
<b>15</b>	<p><b>Next Steps</b></p> <p>CMC to seek meeting dates around the start of February</p>	CMC	08/01