

NOTES

Storage Working Group

DCRP

05/08/20 @ 14:00 (2 Hour)

Attendees:

Name	Initial	Company
Matthew White - Chair	MW	UK Power Networks
Chris McCann	CM	ENA
Mike Kay	MK	ENA
Eduard Sanz	ES	C-E Int
Ian Wassman	IW	Comap-Controls
Charles Wood	CW	Energy-UK
Alastair Shearer	AS	GTC/BUUK
William Cass	WC	Last Mile
David Hill	DH	NIE Networks
Alan Creighton	AC	NPG
Chris Artist	CA	NPG
Sarah Carter	SC	Ricardo
Paul Graham	PG	Sembcorp
Jason Kirrage	JK	Solar Edge
Hui Heng	HH	SSE
Faithful Chanda	FC	Western Power Grid
Mark Horrocks	MH	WSP

Apologies:

Name	Initial	Company
Mark Dunk	MD	ENA
Richard Harrison	RH	Clarke Energy
Gillian Williamson	GW	ENWL
Steve Somerville	SS	SP-Energy
Tony Robinson	TR	TVRI

ACTIONS LIST

No.	Detail	Leader	Date	Complete
Action 1	AMC to provide comments on ToR	AMC	ASAP	✓
Action 2	Clarify likely future treatment of storage as load and also flexible load for frequency control purposes	MK	Next meeting	
Action 3	Research if other nascent technologies and manufacturers need to be considered	MH	Next meeting	
Action 4	Draft sketches relating to inverter positioning for V2G equipment	SC	Next meeting	✓
Action 5	Continue to Reach out to manufactures re:V2G. BMW and JLR	CM	Next meeting	
Action 6	Draft Marked up copies of G98, G99 and DCode.	SC/MK/ MW	Next meeting	✓
Action 7	Take draft modification consultation and legal text to October DCRP	CM	Oct DCRP	✓
Action 8	Suggest consultation questions	ALL	14/08/20	
Action 9	Draft consultation paper	CM/MK/ /SC	Next meeting	✓
Action 10	Write to National Grid	MW		
Action 11	Circulate Draft Minutes	CM	12/08/20	✓
Action 12	Circulate Doodle poll and schedule next meeting from results. Date Range – 31 st Aug > 8 th Sept.	CM	12/08/20	✓

NOTES

Item	Focus	Leader	Date
1.	Welcome, Introductions and Acceptance of Agenda and previous meeting notes After running through the agenda and previous notes both documents were accepted by the panel.		
2	Agree revised Terms of Reference		

	The chair ran through the ToR (v3) there was broad agreement from the panel with some minor administrative modification proposals from members. These modifications will be included and a v4 version presented for agreement at the next meeting	AC/CM	Next meeting
3.	Potential changes to G98/G99/DCode		
3.1	<p><u>Review grid storage modifications – GC0096</u></p> <p>A summary of the modifications to the GCode through GC0096 was presented to the group as part of a slide pack proposed definition modifications within the DCode and these were discussed among the group.</p> <p>The proposal of a consultation question regarding storage was raised and the situation regarding Brexit came up. It was suggested that the UK attempt to be proactive regarding the issue of storage specifically relating to its contribution to frequency control. MK to clarify the position on controllable demand, ie storage as demand and controllable demand more generally at the next meeting in September.</p>	MK	Next meeting
3.2	<p><u>Considerations for distribution documents</u></p> <p>The working group noted the introduction of the concept of non-controllable storage in the Grid Code, but noted that the existing approach within clause 7.1.2 (regenerative braking etc) within G99 currently should be used as a basis dealing with other non-controllable storage.</p>		
3.3	<p><u>Review potential changes to G98, G99, DCode</u></p> <p>SC led the working group through the prospective changes to the documents. This was accepted as seeming to be the appropriate approach. Many of the proposed modifications consist of removing the exclusion of storage, and associated consequential changes.</p> <p>It was noted that, unlike the Grid Code where storage was always implicitly included (G0096 making this explicit), G98 and G99 exclude some requirements for storage that manufacturers may need lead time to introduce. Specific consideration will need to be given to the implementation date to allow for this.</p> <p>MH raised the risk that other nascent storage technologies, particularly those being developed for grid support, might have characteristics that we might not be allowing for. MH volunteered to do a little research on technology types and possible manufacturers to consider.</p>	MH	Next meeting
3.4	<p><u>Discuss implications for EVs and V2G</u></p> <p>As discussed at the previous meeting it was agreed that EVs in V2G mode would just be treated like any other electricity storage (EVs not using V2G mode must only be</p>		

	<p>treated as any other load), with compliance based on requirements delivered at the connexion point.</p> <p>It was noted that there is much scope for confusion given the variety of possibilities of inverters being incorporated into the EVs or in static charging equipment. SC will use Ricardo’s vehicle engineering expertise to help suggest what the options are, and these would be discussed with the working group as a series of examples that would accompany the consultation document, and possibly included in G98 and/or other guidance.</p> <p>CM would continue to try to contact EV manufacturers re V2G (including BMW and JLR).</p>	<p>SC</p> <p>CM</p>	<p>Next meeting</p> <p>Next meeting</p>
4.	Code Modification		
4.1	<p><u>Agree Approach to Proposed Modifications</u></p> <p>Marked up copies of G98. G99 and DCode will be drafted with inclusion of any text modification ready for the working group to discuss.</p>	<p>SC/MK/MW</p>	<p>Next meeting</p>
4.2	<p><u>Consultation Paper for DCRP Approval</u></p> <p>The working group should look to take the consultation package to the October DCRP for agreement to publish the consultation.</p> <p>The working group agreed to consider what questions should the consultation paper ask stakeholders. Please submit to MK</p> <p>A draft of the consultation paper and marked up legal text would be circulated in advance of the next working group meeting.</p>	<p>CM</p> <p>ALL</p> <p>CM/MK/SC</p>	<p>08/10/20</p> <p>14/08/20</p> <p>Next meeting</p>
5.	<p>Scope of ToR – have we met the requirements?</p> <p>It was noted that it would be useful to have formal interaction with NGENSO so that they were fully aware of the developments and harmonization with Grid Code requirements. MW to write to Rob Wilson at NGENSO</p> <p>Apart from this issue the working group agreed that the scope of the work discussed at the meeting aligned with the requirements in the ToR.</p>	<p>MW</p>	<p>10/08/20</p>
6.	<p>AOB</p> <ul style="list-style-type: none"> The next meeting will be held over MS Teams 	<p>CM</p>	<p>Next meeting</p>
5.	<p>Next Meeting</p> <p><u>Date of Next Meeting to be Agreed</u></p> <p>CM to send out doodle poll for next forum between 31st of August and 9th September 2020.</p>	<p>CM</p>	<p>12/08/20</p>