

## Customer Islanding Workgroup

### MINUTES

Meeting – Wednesday 08 November 2023

MS Teams Meeting

### ATTENDEES

Name	Initials	Company
Andy Hood	AH	NGED
Mike Kay	MK	ENA
Peter Twomey	PT	Electricity North West
Alan Creighton	AMC	Northern Powergrid
Alastair Oldfield	AO	SPEN
Jason Kirrage	JK	Solaredge
Martin Cotterall	MC	Tesla
David Hill	DH	NIE

### APOLOGIES

Name	Initials	Company
Steve Mockford	SJM	GTC
John Smart	JS	SSEN
Joseph Nolan	JN	GTC
Chris Marsland	CM	Bingham Hart

**MEETING NOTES AND ACTIONS**

**LEAD**

<b>Agenda item</b>		<b>Welcome and acceptance of agenda</b>	<b>MK</b>
Members were welcomed to the meeting, and the agenda was agreed.			
<b>Actions</b>	None		
<b>Agenda item</b>		<b>Review of previous actions</b>	<b>MK</b>
All previous actions complete.			
<b>Actions</b>	None		
<b>Agenda item</b>		<b>Discussion of proposed structure</b>	<b>MK</b>
MK explained that he had developed the drafting along the lines discussed at the last meeting and as summarised on slides 3 and 4 of the pack for this meeting. The meeting agreed that this was appropriate and should be adopted.			
<b>Actions</b>	None		
<b>Agenda item</b>		<b>Fault Ride Through</b>	<b>MK</b>
<p>This issue had been raised by a DNO in terms of the effect on the system of customers choosing to disconnect from the network during a disturbance and supply themselves from their own generation/storage. This could be undesirable, by adding further disturbance to the system with the sudden cessation of their active power exchange.</p> <p>MK outlined the issue, and suggested text to deal with this from a legal point of view, but also how the requirement could be relaxed if their net effect on the system was negligible.</p> <p>In discussion it was noted that an exception might not be strictly legal – this would need to be considered further.</p>			
<b>Actions</b>	All to consider the issue, and the possible drafting (see slides 6 & 7). Comments and thoughts in advance of the next meeting would be useful. <b>24/11/23</b>		<b>ALL</b>
<b>Agenda item</b>		<b>Earthing diagrams</b>	<b>AH/MK</b>
The proposal for revised diagrams was discussed and agreed. It was noted that: <ul style="list-style-type: none"> <li>• We need to check for alignment with the revised CoP diagrams emerging from The IET.</li> <li>• Three phase inverters would be assumed to generally be connected in star with the neutral connected and unearthed.</li> <li>• The loop in the earth connexion to the N-E bond relay in the domestic diagrams does not need to be a loop and could be tidied up.</li> </ul>			

<ul style="list-style-type: none"> <li>The terminology for N-E bond might need to be updated to align with The IET.</li> </ul> <p>MK expected a draft of the revised diagrams to be available in about ten days.</p>		
<b>Actions</b>	MK to circulate revised diagrams <b>24/11/23</b>	MK
	All to review/check etc by next meeting <b>11/12/23</b>	All
<b>Agenda item</b>	<b>Drafting points</b>	<b>MK</b>
<p>All to comment on the circulated draft (will be recirculated with the minutes). Also, it was agreed that all, but particularly manufacturers, would comment on the appropriate values to include here:</p> <p>14.5.4 Where the <b>Power Generating Module</b> is resynchronising from islanded mode, ie where the <b>Power Generating Module</b> is supplying some or all of the demand in the <b>Customer's Installation</b> resynchronisation will only be allowed such that any effect on the <b>DNO's Distribution Network</b> is minimised, and must demonstrate compliance with the requirements of EREC P28. In general auto resynchronisation should modify the <b>Power Generating Module</b> output to closely match the voltage, frequency and where applicable, the phase angle of the <b>DNO's Distribution Network</b>. The default absolute limits for these characteristics are network specific and agreed between the <b>DNO</b> and the <b>Generator</b> and, or the <b>Customer</b>;</p> <ol style="list-style-type: none"> <li>No more than +10% declared voltage,</li> <li>No more than -6% declared voltage,</li> <li>A difference in frequency no more than 50 mHz from 50Hz stable frequency, and</li> <li>a phase angle displacement of no more than 3 degrees.</li> </ol> <p>MK noted that the draft replacement RfG in Europe was proposing values of <math>\pm 10\%</math> for voltage, <math>\pm 200\text{mHz}</math> and 10 degrees. MK also asked whether the words "stable frequency" in (c) were meaningful or appropriate.</p>		
<b>Actions</b>	Comment on circulated draft <b>24/11/23</b>	ALL
	Comment on default synchronising values. <b>24/11/23</b>	ALL
<b>Agenda item</b>	<b>AOB</b>	<b>MK</b>
None		
<b>Actions</b>	None	
<b>Agenda item</b>	<b>Next meeting</b>	<b>MK</b>

Agreed to be Monday 11 December 0900-1100.		
<b>Actions</b>	Send invitation <b>08/11/23</b>	MK