

Customer Islanding Workgroup

MINUTES

Meeting – Monday 22 January 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 |
| Jason Kirrage | JK | Solaredge |
| Chris Marsland | CM | Bingham Hart |
| Alastair Oldfield | AO | SPEN |

APOLOGIES

| Name | Initials | Company |
|----------------|----------|---------|
| Steve Mockford | SJM | GTC |
| Richard Wilson | RW | UKPN |

MEETING NOTES AND ACTIONS

LEAD

| Agenda item | Welcome and acceptance of agenda | MK |
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| Members were welcomed to the meeting, and the agenda was agreed. | | |
| Actions | None | |

| Agenda item | Review of previous actions | MK |
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| Minutes approved and all previous actions complete or on the agenda. | | |
| Actions | None | |

| Agenda item | Section 8 (Earthing) Diagrams | MK |
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| <p>In working through the revised diagrams the following were noted:</p> <ul style="list-style-type: none"> 8.7 – the customer’s essential and non-essential loads ideally should be 3 phase, not single phase. The L3 contactor in the changeover switch is not drawn identically to the L1 and L2 contacts. 8.8 – to be drawn as 3 phase. When drawn 3 phase, remove the neutral connexion to the PMG star point. The note against the customer’s earth electrode should be (3), not (4). Change N-E switch to contactor. 8.9 – the depiction of conductors crossing but not touching should be more consistent – ie all the vertical lines show the deviation, rather than a mixture. Change N-E switch to contactor. Here and throughout the rest of the diagrams, can we make all the CBs that in 8.7 & 8.8 are called “CB or switch fuse” into “CB or switch” – including 8.7 and 8.8. 8.10 – can the inverter be drawn taller (probably as a rectangle rather than a square) so the phase conductors do not need to be bunched up? There should be no neutral connexion to the frame of the PGM. Change N-E switch to contactor. 8.11 – A taller PGM might allow the neutral to come in from the LHS, and can the AC half have an AC symbol included in it? The dotted line should go to the CB to the left of the Generator CB, not the Generator CB. The neutral to the customers non-essential load is draw as missing, rather than being connected to, the neutral. 8.12 – please use the PGM symbol as for 8.11; there should be no customer earth electrode, and the earth should not be shown as connected to the CB case (for consistency with other diagrams). 8.13 - We need a dotted line between the contacts of the cb in the customer island controller, and including the N-E bond relay. The relay should be in the opposite state to the CB, and can we change the name of the relay to a contactor? The CB case should not be shown earthed. Need to make the line crossings consistent too – and use the pgm symbol from 8.11. 8.14 – as 8.13 8.15 – need to make this 3 phase. Extend the dotted line from the timer to the dotted line withing the CB. Remove the optional N/E switch completely. <p>These requirements will be communicated back to the drafters, and an expected date for the update sought. MK will suggest a new deadline for comments on the updated diagrams.</p> | | |
| Actions | Communicate changes to designer 21/01/2024 | MK |

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| | Set deadline for comments 28/01/2024 | MK |
| | Provided comments By deadline set above. | ALL |

| Agenda item | Synchronizing | MK |
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| <p>The need for, and benefits of, setting synchronizing limits in G99 was discussed. The case for including them is that it gives something concrete for manufactures to test against, whereas the case against is that achieving arbitrary criteria is inappropriate given it is the observed effect on power quality, ie compliance with P28, that is the underlying requirement.</p> <p>Given the uncertainty about the implications of islands (as opposed to unloaded PGMs) being resynchronized it was agreed that G99 would have specific, but very relaxed, criteria included, and with a note that manufacturers and/or generators need to ensure that P28 is always complied with, including for the most onerous conditions they can envisage. The inclusion of the criteria would give a back stop, and the utility of this could usefully be a consultation question.</p> <p>CM agreed to suggest what the relaxed criteria could be.</p> | | |
| Actions | Determine synchronizing criteria 29/01/2024 | CM |
| | Include in G99 draft, along with P28 requirement 30/01/2024 | MK |

| Agenda item | Drafting points | MK |
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| There was not sufficient time to discuss in detail, but further comments would be welcome on the new text since the 11/12/23 meeting (ie that highlighted in the G99 version: "240121 Delta for Jan 22 Mtg.docx") | | |
| Actions | Comment on draft Deadline to be harmonized that for the diagram comments above | ALL |

| Agenda item | Next Meeting | MK |
|---|--------------|----|
| Thursday 22/02/2024. Invitations have already been sent. The meeting will focus on fault ride through, and also aim to sign off the rest of the text and diagrams. | | |
| Actions | None. | MK |

| Agenda item | AOB | MK |
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| None | | |
| Actions | None | |