

## Distribution Code Consultation Response Proforma

### DCRP/19/01/PC: G98/G99 and G59/G83 Minor Technical Modifications and Editorial Corrections (2<sup>nd</sup> Consultation)

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by **17:00 01 March 2019** to [dcode@energynetworks.org](mailto:dcode@energynetworks.org) and please title your email 'Consultation Response DCRP/19/01/PC'. Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to [dcode@energynetworks.org](mailto:dcode@energynetworks.org)

<b>Respondent</b>	Dr. Isaac Gutierrez
<b>Company Name</b>	Scottish Power Renewables
<b>No. of DCode Stakeholders Represented</b>	1
<b>Stakeholders represented</b>	Scottish Power Renewables
<b>Role of Respondent</b>	Generator
<b>We intend to publish the consultation responses on the DCode website. Do you agree to this response being published on the DCode website? [Y/N]</b>	Y

# Distribution Code Consultation Response Proforma

	Questions	Answer	DNO Response
Q1	Do you agree that all these modifications should be made?	Partially as there still some housekeeping modifications that should be reviewed in conjunction with NGESO	We agree and we will pick these up jointly with NGESO when NGESO initiate the modification to address them
Q2	If not, please explain which you think should not be made and the reasons for your view.	<p>In some of the modifications there still incorrect use of the terms Minimum Regulating Level (MRL) and Minimum Stable Operating Level particularly for frequency response requirements and testing. The current use of the terms does not align with what has been done in the past for frequency response requirements. I have attached in Appendix 2 a page from the UK grid Code (version 20 pre-RfG) where it shows the old terminology and additional comments from SPR. Please note that:</p> <ul style="list-style-type: none"> <li>• Minimum Regulating Level (MRL)= Design Minimum Operating Level (DMOL)</li> <li>• Minimum Stable Operating Level = Minimum Generation (MG)</li> </ul>	As above, we agree this point, but we want to address it jointly with the Grid Code Modifications that deal with the same point.
Q3	Would you suggest any alternative wording etc to any of the proposed amendments? And if so, please include the text you suggest.	Yes, please refer to the attached Appendix 1	We have noted these, the majority of which relate to the terminology issue above. Other points have been discussed by email with Dr Gutierrez who is satisfied with their resolution.
Q4	Are there any other housekeeping or minor corrections you believe should also be made at this time?	No, apart from the ones highlighted in the attached Appendix 1	As Q3 above

## Distribution Code Consultation Response Proforma

### DCRP/19/01/PC: G98/G99 and G59/G83 Minor Technical Modifications and Editorial Corrections (2<sup>nd</sup> Consultation)

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by **17:00 01 March 2019** to [dcode@energynetworks.org](mailto:dcode@energynetworks.org) and please title your email 'Consultation Response DCRP/19/01/PC'. Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to [dcode@energynetworks.org](mailto:dcode@energynetworks.org)

<b>Respondent</b>	Greg Middleton
<b>Company Name</b>	Deep Sea Electronics
<b>No. of DCode Stakeholders Represented</b>	N/A
<b>Stakeholders represented</b>	1 Manufacturer
<b>Role of Respondent</b>	Manufacturer
<b>We intend to publish the consultation responses on the DCode website. Do you agree to this response being published on the DCode website? [Y/N]</b>	Yes

# Distribution Code Consultation Response Proforma

	Questions	Answer	DNO Response
Q1	Do you agree that all these modifications should be made?	Yes	Noted - thanks
Q2	If not, please explain which you think should not be made and the reasons for your view.	N/A	
Q3	Would you suggest any alternative wording etc to any of the proposed amendments? And if so, please include the text you suggest.	No	Noted - thanks
Q4	Are there any other housekeeping or minor corrections you believe should also be made at this time?	Yes – there are some discrepancies identified as per below.	The issues identified are all valid and will be corrected in the version presented to the Authority, with appropriate attention drawn to them.

## Distribution Code Consultation Response Proforma

G99 -

There's a discrepancy between 15.4.1 (b) which says the frequency should be stepped from 50Hz and A2-4 which says it should be stepped from 0.3Hz before the threshold. That'll make quite a difference to tripping times so needs clarifying.

"Timing tests shall be carried out by stepping the frequency from 50 Hz to a value 0.3 Hz above the setting frequency (for over frequency protection) and 0.3 Hz below the setting (for under frequency protection) and recording the operating time of the protection."

Over Frequency		Lower Limit	Measured Value	Upper Limit	Result	Freq step	Lower Limit	Measured Value	Upper Limit	Result
52 Hz	0.5 s	51.90		52.10	Pass/ Fail	51.7- 52.3 Hz	0.50 s		0.60 s	Pass/ Fail

In 15.4.1 (c) the new requirement for a 3.0Hz/s tripping time test isn't mentioned, only the existing 1.1Hz/s test, it would avoid argument if it was mentioned.

## Distribution Code Consultation Response Proforma

### DCRP/19/01/PC: G98/G99 and G59/G83 Minor Technical Modifications and Editorial Corrections (2<sup>nd</sup> Consultation)

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by **17:00 01 March 2019** to [dcode@energynetworks.org](mailto:dcode@energynetworks.org) and please title your email 'Consultation Response DCRP/19/01/PC'. Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to [dcode@energynetworks.org](mailto:dcode@energynetworks.org)

<b>Respondent</b>	Alan Creighton
<b>Company Name</b>	Northern Powergrid
<b>No. of DCode Stakeholders Represented</b>	
<b>Stakeholders represented</b>	
<b>Role of Respondent</b>	Senior Smart Grid Development Engineer
<b>We intend to publish the consultation responses on the DCode website. Do you agree to this response being published on the DCode website? [Y/N]</b>	Yes

# Distribution Code Consultation Response Proforma

	Questions		
Q1	Do you agree that all these modifications should be made?	Yes, subject to a review of the points made below	Noted, thank you.
Q2	If not, please explain which you think should not be made and the reasons for your view.	N/A	
Q3	Would you suggest any alternative wording etc to any of the proposed amendments? And if so, please include the text you suggest.	Yes, some minor changes suggested below and in the attached marked up version of G99	These have been processed and the majority accepted. Any point not accepted has been discussed with Mr Creighton
Q4	Are there any other housekeeping or minor corrections you believe should also be made at this time?	Yes, some minor changes suggested below and in the attached marked up version of G99	These have been processed and the majority accepted. Any point not accepted has been discussed with Mr Creighton
	Appendix 1 Connection Process for Type B and C Power Generating Modules	Should there be an arrowhead on the line between box 10 and box 6?	The diagram is an attempt to summarise a complex process. It does not form a formal part of G99, although it may be re-used as part of the formal DG Guides when they are republished. This issue will be revisited as part of the consultation on the Guides.
	Appendix 3 G59 Parag 2.10	Reference to G59/3-4 as being 'this version' is now incorrect.	Yes – this is interactive with DC0079 and will need to be updated dependent on the order in which DC0079 and this housekeeping mod are approved.

## Distribution Code Consultation Response Proforma

	Appendix 5 G98 Front cover	Should the date refer to the first issue or the date of the amendment?	We are aware of this inconsistency with ENA documents and the ENA have agreed to review and standardize in future.
	Appendix 5 G98 7.6.1	<p>For consistency with the remainder of the document, change:</p> <p>... <b>DNO's LV Distribution Network</b> under this Engineering Recommendation shall be made ...</p> <p>to:</p> <p>... <b>DNO's LV Distribution Network</b> under this <b>EREC G98</b> shall be made ...</p>	Change made
	Appendix 5 G98 Form B	In the form there are rows under the 'Location of Lockable Isolation Switch' row which look like they should be deleted.	Yes- necessary tidying up to do as part of accepting change tracking.
	Appendix 5 G98 A.1.1	<p>Should the text:</p> <p>This Annex applies to <b>Micro-generators</b> either with or without load management or without energy storage systems connected on the energy source or prime mover side of the <b>Micro-generator</b>, read:</p> <p>This Annex applies to <b>Micro-generators</b> either with or without load management <b>and with or</b> without energy storage systems connected on the energy source or prime mover side of the <b>Micro-generator</b>.</p> <p>Or:</p>	<p>Change made to Annexes A1 and A2 respectively:</p> <p>This Annex applies to <b>Micro-generators</b>:</p> <ul style="list-style-type: none"> <li>• with or without or energy storage systems connected on the energy source or prime mover side of the <b>Micro-generator</b>; and</li> <li>• with or without load management devices.</li> </ul> <p>And</p> <p>This Annex applies to <b>Micro-generators</b>:</p> <ul style="list-style-type: none"> <li>• with or without <b>energy storage</b></li> </ul>



## Distribution Code Consultation Response Proforma

		<p>This Annex applies to:</p> <ul style="list-style-type: none"> <li>• <b>Micro-generators</b> with or without load management; and</li> <li>• <b>Micro-generators</b> with or without energy storage systems connected on the energy source or prime mover side of the <b>Micro-generator</b></li> </ul>	<p><b>systems</b> connected on the alternator side of the <b>Controller</b>; and</p> <ul style="list-style-type: none"> <li>• with or without load management devices.</li> </ul>
	Appendix 5 G98 Figure A3. Test circuit	Some of the lines in the circuit diagram are misaligned	Noted – thanks. We will address this in the final version for publication Done
	Appendix 5 G99	Various comments included on the attached marked up version of G99, which forms part of this consultation response	Noted with thanks.

## Distribution Code Consultation Response Proforma

### DCRP/19/01/PC: G98/G99 and G59/G83 Minor Technical Modifications and Editorial Corrections (2<sup>nd</sup> Consultation)

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by **17:00 01 March 2019** to [dcode@energynetworks.org](mailto:dcode@energynetworks.org) and please title your email 'Consultation Response DCRP/19/01/PC'. Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to [dcode@energynetworks.org](mailto:dcode@energynetworks.org)

<b>Respondent</b>	Chanura Wijeratne
<b>Company Name</b>	Renewable Energy Systems Limited
<b>No. of DCode Stakeholders Represented</b>	1
<b>Stakeholders represented</b>	Renewable Energy Systems Limited
<b>Role of Respondent</b>	Generator
<b>We intend to publish the consultation responses on the DCode website. Do you agree to this response being published on the DCode website? [Y/N]</b>	Yes

## Distribution Code Consultation Response Proforma

	Questions	
Q1	Do you agree that all these modifications should be made?	We welcome the modifications proposed for the G99 connection process (clauses 17.2.6 – 17.2.10 and 18.2.6- 18.2.10) and the new text in respect of the FON in 17.4 and 18.4. We also accept the addition of clause 18.15 in respect the initial 20% export limit on type C PPMs until voltage control tests have been completed.
Q2	If not, please explain which you think should not be made and the reasons for your view.	
Q3	Would you suggest any alternative wording etc to any of the proposed amendments? And if so, please include the text you suggest.	Not at this stage
Q4	Are there any other housekeeping or minor corrections you believe should also be made at this time?	The cover letter refers to Appendix -1 illustrating the connection process for Type B/C and D but could not find in the document.