

Summary of Meeting and Actions

Meeting Name	E3C Small Embedded Generation Frequency Obligations Working Group
Meeting No.	3
Date of Meeting	Friday 24 th April 2009
Time	1:00pm – 2:30pm
Venue	Conference Room 6, National Grid House, Warwick

This note outlines the key action points from the third meeting of the E3C Small Embedded Generation Frequency Obligations Working Group.

1) Apologies for Absence

Apologies were received from Andy Hood (WPD) and Ham Hamzah (RWE).

Paul Newton (E.ON) joined by conference call.

2) Previous Meetings

The minutes for meeting 2, held on the 20th March, were reviewed and several comments raised by the Working Group:

Paragraph 4 of section 3 of the minutes of the previous meeting discussed the paper presented by DR on Frequency Operating Range Requirements of Small Embedded Power Stations. It stated that “the current practices of ENW and CN (this should have been CE) adopt the frequency settings recommended in the G59/1 document for small plants connected in their area as mandatory requirements”. PN and CM commented that this did not accurately reflect the report that states:

“in all cases ENW insists on the over and under frequency relay settings as per G59/1”

And, in the case of CE:

“Protection settings will be agreed and discussed with the generator although it is standard practice that the settings on the voltage and frequency relays will be in accordance with Table 1 in ER G59/1”.

During discussions AC and DR confirmed that the report accurately reflects CE and ENW’s policies, which require the settings of G59/1 to be implemented whenever possible. However it was agreed that the requirements could not be described as mandatory, particularly in the case of CE where they are discussed with the generator.

It was agreed to remove this sentence from the minutes of the previous meeting. It was also agreed that a summary of all of the DNO policies in this area will be produced when all DNOs have provided DR with the information necessary to complete the report.

The minutes of meeting 2 noted in the third last paragraph of section 3 that plant rated down to 5MW in the Scottish Hydro area met the Grid Code frequency range requirements and that this indicated there could be no major frequency operating issues with small plant.

It was agreed that the Grid Code requirement had applied down to 5 MW in the Scottish Hydro area prior to BETTA and that the threshold is now 10 MW. The group noted that any plant which did not meet Grid Code requirements could be derogated. It was agreed that NGET will report the extent to which plant was derogated from the frequency range requirements at the time BETTA was introduced. This will give an indication of the extent

Summary of Meeting and Actions

to which generation down to 5 MW had difficulty meeting the requirement. It was agreed that the last sentence of the paragraph in the previous meeting's minutes could be misleading and should be removed, and that the position should be reviewed when more information is available.

National Grid agreed to redraft the document and will redistribute a revised version for Working Group comment. All minutes are available on the National Grid Working Group website.

3) Progress Against Actions and Working Group Discussions

DR had previously presented his paper on Frequency Operating Range Requirements of Small Embedded Power Stations at meeting 2. It was agreed that other DNOs will contribute to the paper by providing DR with the relevant information on each specific DNO's current practices on and requirements for frequency operating range of their connected small embedded plant.

DR provided an update on responses received, which included all the DNOs except for WPD and SSE regions. DR to follow up and ask the final responses to me provided no later than one week before the next meeting (28th May).

Action: DR and SSE and WPD DNO representatives

During the previous meeting the Working Group initially suggested a questionnaire could be sent to a range of developers and manufacturers to seek their views on the frequency operating range of future and existing small embedded generators. At that meeting further discussion agreed that a more effective way would be to invite major plant/machine designers and other interest parties to a meeting with the objectives of helping them to better understand the system needs and asking them to provide expert advice on plant capability in supporting the system during short term and extremely rare large frequency excursion events. AEP agreed to circulate a note to their members with the aim of them suggesting company names with contact details of major plant manufacturers, consultants and other interest parties who are likely to give constructive contributions to the meeting. The outcome of the meeting could provide useful feedback to the WG to move the issue forward.

During meeting 3 WH/BV confirmed that the AEP had distributed an email to its members requesting contact details for manufacturers and around 6-10 responses/ names had been received, including a representative of the AMPS (Association of Manufacturers of Power Generating Systems). It was reported that the initial responses on improving frequency operating range of small plant were positive.

Action: BV/WH

National Grid agreed to send an invite to the manufacturer representatives for an industry exchange session. It was proposed that this could be during the period of the 26th May to 6th June and potentially to be held on the same day as the next Working Group meeting if availability allowed. Representation from the Working Group was also suggested.

Action: TI

WH reported that he had been requested to attend and present to the AMPS.

RN commented that it would be of interest to learn about the current practices of the DNOs relating to the exchange of operational data with small embedded generators. DNO representatives commented that in general there is very little exchange.

During meeting 2, AEP were asked to help to obtain further information from their members regarding more detailed feedback on plant performance during the 27 May incident. National Grid agreed to provide the questionnaire for AEP to include in their call to their members.

Summary of Meeting and Actions

In meeting 3, WH confirmed that this action was being progressed. The questionnaire had been produced and distributed to AEP's members. The general message from the limited number of resulting responses was there were no major problems identified from their plant during the incident.

Action: WH/BV

CM confirmed that the Operational Information flows between Generator and DNO under the Distribution Code had been examined and that a list of relevant codes had been sent around the Working Group for review.

6) Next Meeting

It was agreed that the next meeting of the Working Group would be provisionally scheduled for 28 May 2009 commencing after the proposed industry information exchange with small generator manufacturers and both meetings will be at National Grid House, Warwick.

BV and CM sent their apologies for meeting 4 on 28th May.

The provisional dates for the Working Group meetings are:

- 9th July 2009
- 3rd September 2009
- 19th October 2009

Summary of Meeting and Actions

Appendix 1 – Working Group Attendance

Members Present:

Mark Perry	MP	Working Group Chairperson
Tom Ireland	TI	National Grid
William Hung	WH	National Grid
Raj Nagarajan	RN	National Grid
Alan Creighton	AC	CE Electric UK
Hamish Dallachy	HD	Scottish Power
Keith Hodson	KH	Central Networks
Claire Maxim	CM	E.ON UK
Dan Randles	DR	Electricity North West
Barbara Vest	BV	AEP
Paul Newton (by phone)	PN	E.ON
Bridget Morgan	BM	Ofgem

Apologies:

Andy Hood	AH	Western Power Networks
Ham Hamzah	HH	RWE