Meeting minutes

Grid Code Review Panel

Date:	19/12/2018	Location:	National Grid House, Warwick
Start:	10:00	End:	14:00

Participants

Attendee	Attend/Regrets	Attendee	Attend/Regrets
Trisha McAuley, Chair (TM)	Attend	Jeremy Caplin, BSC Panel Representative (JC)	Attend
Matthew Bent, Code Administrator Representative (MB)	Attend	Damian Jackman, Panel Member, Generator Representative (DJ)	Attend
Emma Hart, Technical Secretary (EH)	Attend	Alan Creighton, Panel Member, DNO Representative (AC)	Regrets
Robert Wilson, Alternate Panel Member, NGET (RW)	Attend	Gurpal Singh, Authority Representative (GS)	Attend
Guy Nicholson, Panel Member, Generator Representative (GN)	Attend	Nadir Hafeez, Authority Representative – Observer (NH)	Attend
Alastair Frew, Panel Member, Generator Representative (AF)	Attend	Greg Heavens, NGESO – Observer (GH)	Attend
Graeme Vincent, Panel Member, Onshore Transmission Operator Representative (GV)	Attend	Robert Longdon, Panel Member, Supplier Representative (RL)	Attend
Raveena Virk – presenter for action 196	Attended for update on action 196 only	Chrissie Brown – presenter for actions relating to the Customer Journey and the deferred actions	Attended for an update on the actions only

Discussion and details

1. Introductions and apologies for absence

6587 TM opened the Grid Code Review Panel ('the Panel') meeting with introductions and acknowledged the advance apologies received from Kyla Berry (KB) and Alan Creighton (AC).

2. Approval of Panel minutes

6588 Subject to amendments raised by AC, which were circulated by email and ensuring that the cross references are clear and correct, the Panel agreed that the minutes from the Panel held on 22 November 2018 are approved as a correct record of the meeting.

Action 198: The Code Administrator to review the website to ensure all the final agreed minutes are published on the page for the relevant meeting e.g. October final minutes published on the October GCRP meeting date rather than the November meeting date where they are agreed.

3. Review of Actions within the Action Log

Action 174

- 6589 MB confirmed that the GC0106 Draft Final Modification Report and the report included the legal text. This demonstrated that the Code Administrator has ensured that the legal text has been included in relation to the vote.
- 6590 The Panel agreed to close action 174.

Action 178

6591 The Panel noted that this action could not be progressed until February 2019 when the SQSS Panel next convenes.

Action 185

- 6592 MB stated that the Panel could agree to have Panel meetings at an alternative location is a Panel member wants to host this.
- 6593 GV stated that he thought the new Panel (from January 2019) should decide whether they would like to hold the Panel at an alternative location. The Panel agreed to leave this action open.
- 6594 TM queried whether the Panel wanted to have regular updates on the Customer Journey work as this is brought to the CUSC Panel every other month? The Panel agreed that they would like regular updates on the Customer Journey work.

ACTION 199: CB to provide an update to the Panel on the Customer Journey work every other month starting at the February 2019 Panel.

Action 191

- 6595 MB informed the Panel that the housekeeping modifications would be looked to be raised post April 2019 (legal separation of the National Grid Electricity System Operator (NGESO) from the National Grid Transmission Operator). He confirmed that a timeline would be brought to the Panel in January 2019.
- 6596 RW agreed that this approach is sensible as by then there will be a settled baseline to work on.

Action 192

6597	MB stated that the issue around the changes to GC0118 had now been resolved and this modification is currently at the Code Administrator Consultation stage. The Panel agreed to close action 192.			
	Action 193			
6598	MB informed the Panel that the review of the RES documents process is something that will be looked at as part of the wider improvements.			
6599	The Panel agreed to leave this action open.			
	Action 194 and 195			
6600	The Panel was informed that the Code Administrator was looking at the issue of quoracy for Workgroups. It was agreed that an update will be provided at the January 2019 Panel.			
	Action 196			
6601	RV updated the Panel and advised that on 18 December 2018 four documents were submitted to Ofgem in relation to Emergency Restoration and Planning. These documents have been published on the website.			
6602	RV confirmed that NGESO had written to the respondents of the consultation with exception of those responses that are anonymous.			
	ACTION 200: RV to circulate the weblink to the Emergency and Planning documents.			
6603	AF queried why NGESO did not send to Ofgem first then write to respondents once this has been reviewed by Ofgem. RV confirmed that there is no formal approval process of the documents.			
	ACTION 201: Ofgem to clarify their role in terms of the Emergency Restoration and Planning process.			
6604	RV will be running a webinar in the new year with code mapping spreadsheet.			
6605	AF queried whether the modifications required to implement the changes to Emergency and Planning needed to be completed prior to 18 December 2018. RV confirmed that as there is a 1 year implementation date, the modifications did not need to be completed in advance.			
	Action 197			
6606	On the agenda under the elections.			
	Query on Action 161 (closed)			
6607	The G5 consultation has been delayed as discussed at the November 2018 Panel meeting. RW confirmed that once the position is settled in relation to the Distribution Code, a Grid Code modification can be raised.			
6608	GN stated that he was concerned that there is not a plan in place to deal with this. RW confirmed that NGESO does have a plan but this cannot be put it into action until the Distribution Code changes are resolved.			
	Deferred actions:			
6609	CB presented the slides for the deferred actions. The remaining deferred actions have been categorised into two types, namely Customer Journey related actions (actions 19, 55, 56, 63 and 105) and lessons learnt/business as usual actions (actions 42, 70, 87 and 134).			
6610	The Panel agreed to close actions 42 and 87 as these have been fulfilled.			

6611 TM asked the Panel whether the Panel wanted the deferred actions to be regularly reported on? CB stated that these would be picked up as they are closed off through the Customer Journey work and the wider business as usual improvements.

4. Chair's update

6612 TM informed the Panel that she provided an update to the Flexible Generation Group last week in relation to the ongoing Customer Journey work.

5. New Modifications

- 6613 There were no new modifications raised in December 2018.
- 6614 CB informed the Panel that in January 2019, she will be raising a modification to set a deadline for new modifications to be received by the Code Administrator. This modification will state that new modification proposal forms must be received at least 10 working days prior to Panel to allow the Code Administrator time to act as an effective 'critical friend' to the proposer.

6. Current modification updates and current Panel priority order

GC0111: Fast Fault Current Injection Specification Text

- 6615 MB informed the Panel that GC0111 is currently on track to meet the Panel's timetable. The next meeting is scheduled to take place on 7 February 2019.
- 6616 AF stated that the calendar on the website is currently incorrect.

ACTION 202: Code Administrator to check the calendar on the website to ensure it is up to date.

<u>GC0109</u>: The open, transparent, nondiscriminatory and timely publication of the various GB electricity Warnings or Notices or Alerts or Declarations or Instructions or Directions etc., issued by or to the Network Operator(s).

6617 MB informed the Panel that GC0109 is currently at risk of not meeting the Panel's timetable. The next meeting is scheduled to take place on 6 February 2019. During the next Workgroup meeting, a revised timetable will be created with an update will be provided at the February 2019 Panel.

GC0096: Energy Storage

6618 MB informed the Panel that GC00096 is currently on track to meet the Panel's timetable. It is currently out to Workgroup consultation until 11 January 2019. The next steps are to review any Workgroup consultation responses.

GC0103: Introduction of Harmonised Applicable Electrical Standards

6619 MB confirmed that an extension to the GC0103 timetable was agreed by the Panel via email. Therefore, this modification is on track to meet the Panel's timetable.

<u>GC0107 and GC0113: The open, transparent, non-discriminatory and timely publication of the generic</u> and/ or PGM specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the RfG.

- 6620 MB confirmed that the last Workgroup meeting was held on 5 December 2018. MB further stated that the current timetable would not be met as there were issues with arranging a first quorate Workgroup.
- 6621 EH stated that at the Workgroup it was agreed that the Workgroup would need to attempt to complete the proposed spreadsheet to agree the content. Until this had been done, the Workgroup was not able to confirm a sufficiently robust timetable for the Panel to review and agree. It was therefore proposed that a

timetable be presented to the Panel following the next Workgroup scheduled for 6 February 2019. The Panel agreed that this was an appropriate approach.

<u>GC0117: Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of PGM requirements.</u>

- 6622 The Panel discussed the CUSC Panel decision to progress CMP291 separately to GC0117. TM confirmed that the reason for this was due to the delay in waiting for an impact assessment for GC0117 and the fact that CMP291 is higher on the CUSC Panel prioritisation stack than GC0117.
- 6623 GV stated that he was unsure how CMP291 could progress without GC0117 given that they are intrinsically linked.
- 6624 RL stated that it is inefficient to progress CMP291 in isolation of GC0117 as this may result in additional work being generated to ensure that both modifications align.
- 6625 TM confirmed that the decision was made by the CUSC Panel in October 2018. Therefore, it seems that there is an internal issue around sharing information.
- AF queried the process in relation to the decisions made for modifications that are linked across different codes such as CMP291 (CUSC) and GC0117 (Grid Code). He said that it appears the CUSC Panel has made a unilateral decision to separate out the modifications and has not consulted the Panel. RL agreed that this was substantive point that needed to be looked at.
- 6627 The Panel requested that the Code Administrator review the rules about cross code joint working groups including the process and the procedure for decisions and how this is communicated. An update to the Panel is to be provided at the January 2019 Panel.

Action 203: Code Administrator review the rules about cross code joint working groups including the process and the procedure for decisions and how this is communicated.

GC0105: System Incidents Reporting

6628 MB informed the Panel that this modification is currently being consulted on. The Workgroup consultation closes on 21 December 2018. At present the Code Administrator is looking at dates to hold the new Workgroup meeting to discuss any consultation responses.

Prioritisation Stack

- 6629 The Panel agreed to not amend the prioritisation stack.
- 6630 AF stated that those modifications that are currently out to Code Administrator consultation do not appear on the prioritisation stack. The Panel agreed that due to the Workgroup being discharged for modifications that are at Code Administrator Consultation, these do not need to be part of the prioritisation stack.

7. Workgroup reports

<u>GC0114</u>

6631 The Panel discussed the GC0114 Workgroup report and agreed that the GC0114 Workgroup has met it terms of reference and the modification should proceed to a Code Administrator Consultation. The Panel noted the proposed timetable.

6. Draft final modification reports/draft self-governance reports

<u>GC0106</u>

- 6632 RW stated that he noted the proposed changes and his view is that these amendments are not-material. However, the Panel has an opportunity to correct the minor amendments and therefore it is sensible to do so.
- 6633 The Panel agreed that the Code Administrator should make the following minor typographical amendments under GR.22.4 should be made to the legal text as follows:
 - 1. Ensure the legal text in Annex 4 is on the current baseline
 - 2. Correct the legal text in PCA3.1.4 to say 'with a Registered Capacity of less than 1MW'
 - 3. Remove the blank page between DRC Schedule 11 pages four and five.
 - 4. Remove date box in Table 11D
- ⁶⁶³⁴ The Panel was invited to vote on whether to send GC0106 to the Authority as a Final Modification report. GN expressed that based on the information presented to him, he did not feel able to vote either way as the Workgroup was divided and therefore he did not feel able to make an informed decision as to what would be best for generators in relation to this modification.
- 6635 MB advised GN that he has the option to abstain from voting and can provide his reasoning as part of his voting statement.
- ⁶⁶³⁶ The Panel voted on GC0106 and agreed by a majority that GC0106 should be sent to the Authority for decision as a Final Modification Report. A record of the Panel's vote is included in Appendix 1 below.

9. Reports to the Authority

6637 GS informed the Panel that Ofgem had made a decision on GC0112 and this has been provided to National Grid.

10. Implementation Updates

6638 MB confirmed that there were no implementation updates.

11. Electrical Standards

6639 MB confirmed that there were no items in relation to electrical standards.

12. Governance

6640 MB confirmed that there were no governance items to be discussed.

13. Grid Code Development Forum and Workgroup Day

6641 MB informed the Panel that at the last Grid Code Development Forum the only agenda item was the Code Administrator Update. Additionally, at present the Code Administrator has not received any agenda items for the January Grid Code Development Forum.

14. Standing items

Joint European Stakeholder Group

- 6642 MB updated the Panel in relation to the Joint European Stakeholder Group (JSEG). He informed the Panel that representatives from the Department of Business, Energy and Industrial Strategy (BEIS) attended the meeting. BEIS stated that in the event of a no deal Brexit scenario they intended to revoke the connection codes.
- 6643 RW confirmed that the connection codes have already been incorporated into UK legislation and therefore any revocation would have a neutral impact as they are already in effect. RW stated that an email will be circulated to the industry and when this occurs some narrative and rationale should be included. RW stated that he is concerned about stating what BEIS stated without any context
- 6644 The Panel agreed that BEIS should provide the industry with clarification about the impact.
- 6645 GV stated that the letter provided is short on detail in relation to the interpretation. He queried whether the Panel should have a response for any queries raised in response to the circulation of the letter.
- ⁶⁶⁴⁶ The Panel agreed that GS was best placed to discuss this with BEIS and to express the Panel's concern in relation to providing an explanation and clarity in relation to the implications of revoking the connection codes.

ACTION 204: GS to speak to BEIS and express the Panel's concern about the potential revocation of the connection codes without further explanation and rationale in relation to the impact of this decision.

6647 MB stated that if the Panel wish to attend the next JSEG meeting to let him know. In addition, he stated that JSEG are running a consultation in relation to the impact of a no Brexit deal and invited the Panel to respond or contact him if they wish to respond but do not receive the JSEG newsletter.

15. Elections

- 6648 MB confirmed that the Panel's elections had concluded and that there will be an introductory session for the new Panel run as part of the first Panel on 24 January 2019. RL stated that Bali Virk ran a CUSC panel introduction which was really good.
- 6649 MB updated the Panel about the Governance Rules in relation to alternates.

13. AOB

Code Review Workshops

6650 GS informed the Panel that there are Code Review Workshops being held on 4 February 2019 and 18 February 2019. The details can be found on the BEIS website.

Changes to the Code Governance Team

6651 TM informed the Panel that Rob Marshal will now lead the Code Governance Team and he will be reporting to Gareth Davies.

Thank you to the Panel

6652 TM thanked the Panel for their contribution and she wished everyone a nice break over the Christmas and new year period.

14. Next meeting

6653 The next Panel meeting will take place at National Grid House (and WebEx) on **24 January 2019** commencing at **10am**

Appendix 1 – Panel's vote in relation to GC0106

At the Grid Code Review Panel meeting on 19 December 2018, the Panel voted on GC0106 against the Applicable Grid Code Objectives.

Before the vote took place the Grid Code Review Panel instructed the Code Administrator under GR22.4 to make the following typographical changes;

- 5. Ensure the legal text in Annex 4 is on the current baseline
- 6. Correct the legal text in PCA3.1.4 to say 'with a Registered Capacity of less than 1MW'
- Remove the blank page between DRC Schedule 11 pages four and five.
 Remove date box in Table 11D

For reference the Grid Code Objectives are;

i.	to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;
ii.	to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);
iii.	subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;
iv.	to efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and
V.	to promote efficiency in the implementation and administration of the Grid Code arrangements.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (iv)?	Better facilitates AGCO (v)?	Overall (Y/N)
Guy Nicholson						
Original	Abstain	Abstain	Abstain	Abstain	Abstain	Abstain
WAGCM1	Abstain	Abstain	Abstain	Abstain	Abstain	Abstain
WAGCM2	Abstain	Abstain	Abstain	Abstain	Abstain	Abstain
WAGCM3	Abstain	Abstain	Abstain	Abstain	Abstain	Abstain

Voting Statement:

Abstained from voting.

I represent generators. I was not a member of the working group. Therefore I rely on a consensus of opinion (at least amongst the various groupings - e.g. generators) for mods where the issue is not one where I am involved.

From the voting results there are diametrically diverse views on the various solutions. It is not clear to me why various very experienced and knowledgeable WG and Panel members have such varied and different views on the solutions (Original and WACMs), and therefore it is impossible to determine what is best for generators whom I represent.

From previous experience in the Grid Code Panel when I see such divergence of opinion my instinct is that the defect has not been clearly specified. On reviewing the document "State 05 draft final modification report" (provided for the Panel meeting) there is no statement of a defect, although "defect" is referenced five times in the document without ever being specified.

The role of the Panel should be to overview and scrutinise the work group's extensive and detailed work. There is clearly something amiss with this mod yet the current Grid Code Review Panel has failed in not dealing with this matter – it has just been passed to Ofgem. The whole purpose of the Panel must be brought into question if it has not even attempted to bring out and address the issues that sit somewhere behind this Modification.

As a post script I would refer the reader to the voting statement of Damian Jackman who has tried to unpick the various solutions and issues in a well referenced and logical manner. It would have been helpful to review and discuss his statement (and other statements) as a Panel before voting on the mod.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (vi)?	Better facilitates AGCO (v)?	Overall (Y/N)
Robert Longde	en			- -		•
Original	Y	-	-	Y	Y	Y
WAGCM1	N	N	N	N	N	Ν
WAGCM2	N	-	N	N	N	N
WAGCM3	N	N	N	N	N	N
Voting Statem		widence that the				

BEIS and Ofgem have issued guidance that the relevant EU regulations should be applied. The Original proposal seeks to achieve compliance with minimum cost and disruption. Depending on the legal interpretation, which has not been fully clarified, WAGM2 may have merit. However, given the available information and timetable, the Original is best.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (vi)?	Better facilitates AGCO (v)?	Overall (Y/N)
Alastair Frew						

Original	-	-	-	Y	-	Y
WAGCM1	-	-	-	Y	-	Y
WAGCM2	-	-	-	Y	-	Y
WAGCM3	-	-	-	Y	-	Y

Voting Statement:

All the options better facilitate the Grid Code objectives as they introduce EU regulations, however best two options for implementation are the Original and WAGCM2, unfortunately which these 2 solution is legally correct is dependent on which legal interpretation of the phrase "Unless otherwise provided by the TSO" is correct. The interpretation in the Original assumes the phrase means that the data is not required unless specifically requested by the TSO based on Article 40 paragraph 5 which allows the TSO, DSO and SGU to agree on scope and application of all the Articles which start with the phrase. So it could be considered that is what is meant by the phrase, however in Article 50 paragraph 2 there is a specific exclusion clause which would not be required if the Original interpretation is correct.

The interpretation used in WAGCM2 deals more directly with the actual words in the phrase and asserts that someone must provide the information if the TSO does not, which is basically what the phrase says if taken on its own.

The fundamental issue is that both these interpretations could be correct and it will only be settled if precedent law is set by a court. If the Original is implemented and parties act in accordance with this there will not be an issue if the Original interpretation is correct, however if the WAGCM2 is correct parties such as DSOs and SGUs are going to be in breach and could be subject to legal action. In terms of costs the Original is basically what happens now except DNOs have to submit some week 24 data twice a year instead of once so most parties will have no cost effect. If WAGCM2 is implemented and all parties follow its requirements no parties can be in breach as they will be forced to provide additional data, but this will incur potentially significant additional costs to embedded users and DNOs.

Given that currently it is not clear which legal interpretation is correct or would be upheld in a court, I have voted for the Original on the grounds it has the minimum cost and disruption to existing parties.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (vi)?	Better facilitates AGCO (v)?	Overall (Y/N)
Graeme Vincer	nt					
Original	-	-	-	Y	-	Y
WAGCM1	N	-	-	N	Ν	Ν
WAGCM2	N	-	-	Y	Ν	Ν
WAGCM3	Ν	-	-	N	Ν	Ν

Voting Statement:

The Original Proposal implements the SOGL data exchange requirements through the minimal changes necessary to the GB Codes. The WACMs although having benefits are not the most efficient way of implementing the requirements and would impose additional obligations and costs on transmission connected generators greater than 10MW in the South of Scotland currently classified as small. An enduring solution for Large. Medium, Small issues would be preferable to the partial solution offered in WACM2.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (vi)?	Better facilitates AGCO (v)?	Overall (Y/N)
Rob Wilson	·					
Original	Y	-	-	Y	Y	Y
WAGCM1	N	N	N	N	N	N
WAGCM2	N	-	N	N	N	N
WAGCM3	N	N	N	N	N	N

Voting Statement:

The original proposal aligns with guidance from BEIS and Ofgem to apply the new EU requirements within the existing GB regulatory frameworks making only those changes necessary. Each of the WACMs is less efficient and imposes unnecessary change. The principle of harmonisation across TO areas in WACM2 is better addressed properly in GC0117. The legal principle on which WACMs 1&3 are based is incorrect and is not shared by any other European member state in their implementation activities.

It is worth noting in particular that as the System Operation Guideline (SOGL) applies to all rather than only to new generators, each of the WACMs will apply retrospectively and compel certain existing as well as new smaller generators to provide additional data items, including realtime data by means of metering and communications equipment, by March 2019. The original proposal minimises any change as the need for additional data against the costs that would be incurred in doing this have not been proven by the System Operator. Were a need to be identified in the future this would be progressed through a further code modification.

Panel Member	Better facilitates AGCO (i)	Better facilitates AGCO (ii)?	Better facilitates AGCO (iii)?	Better facilitates AGCO (vi)?	Better facilitates AGCO (v)?	Overall (Y/N)
Damian Jackr	man					
Original	-	-	-	N	-	N
WAGCM1	-	Y	Y	Y	-	Y
WAGCM2	-	Y	Y	N	-	N
WAGCM3	-	Y	Y	Y	-	Y

Voting Statement:

I do not support the original GC0106 Proposal or WAGCM2 which either maintain the 'status quo' for apparent reasons of expediency (original) or retain the existing anomalies of data provision within the generator classes (WAGCM2). I justify this position on benefits that would be provided to the consumer through **lower costs and increased security** by the TSO having access to real-time data and also the legal interpretation of the requirement for the TSO to require the data.

It is worth returning to the original aims of the 3rd European Energy Package as published in 2011, namely:

1. create a single EU gas and electricity market...

- 2. ...to keep prices as low as possible and...
- 3. ... increase security of supply

http://europa.eu/rapid/press-release MEMO-11-125 en.htm?locale=en

Evident in the workgroup report is disagreement between workgroup members over the legal interpretation of the key phrase in the SOGL "...Unless otherwise provided by the TSO...", particularly in regards to real-time data exchange (Art 50) and the implications of its interpretation on the need for an SGU or DSO to supply real-time data to the TSO. By permitting the need for data exchange to be decided by the TSO goes against the aims of the 3rd Energy package:

1. It creates an non-level playing field between generators of the same Type - which is incompatible with the need for harmonisation - by requiring some to provide data (depending on their location or even at the whim of the TSO) thus imposing additional costs on those generators which is going against the desire for a single EU electricity market with a level playing field in each country.

2. The inability of the system operator to accurately monitor power output from embedded generators (Type B and C) is becoming critical to ensuring the system is secure. For example we have seen incidents of widespread tripping of embedded generators' vector shift protection in response to transmission faults (discussed in the GC0079 workgroup) yet due to the lack of visibility the GB TSO has of distribution connected generator MW output it has taken the GB TSO days if not weeks after the event to even come close to understanding the amount of generation lost and the severity of the issue.

With the increasing dependence on intermittent, converter-connected generation, the frequency of these type of events where we are seeing new phenomena emerging is only likely to increase. Access to the full data that is set out in SOGL is critical to ensuring system security.

3. Furthermore, the inability of the TSO to accurately forecast demand as so much electricity is now being generated on the distribution networks without visibility to them means that balancing costs are increasing unnecessarily, particularly when the demand forecast is excessively long, leading to the need to constrain large amounts of generation or procure unnecessary levels of reserve, with the cost being passed on to the consumer. For example we are regularly seeing occasions where the imbalance is as much as 3 GW with significant cost for scheduling of generators to manage voltage issues.

I acknowledge that obtaining real time data from embedded generation comes at a cost and so a costbenefit analysis should be completed to fairly compare the cost of the GC0106 proposal with the benefits of lower system management costs and increased security from having greater visibility of embedded generation output.

In this context it is worth noting that the GB SO has historically greatly underestimated the growth in embedded generation; ie in the 2012 Ten Year Statement 'Gone Green' forecast ~11 GW of embedded generation was expected by 2017 when the actual installed capacity was over 26 GW and current projections are that this will rise to 40 GW by 2032.

Again, access to the full data that is set out in SOGL is critical to ensuring system security

Also I question the Proposer's legal interpretation of "Unless otherwise provided by the TSO" for the following reasons:

1. ENTSOE have not - as far as I'm aware - provided any formal public statement that the decision regarding the provision of data is 'voluntary' and in light of the recent Tempus Energy case and its implications for the Capacity Mechanism it is vital that the correct legal interpretation is obtained despite the urgency with implementation of this modification is needed.

When ENTSOE submitted this Network Code to ACER for approval on 24th September 2013 it provided a detailed (252 page) document that justified how the code complied with the Framework Guideline provided by ACER (to ENTSOE) and guidance for the rational for why the network codes have been developed as they are:

(https://www.entsoe.eu/fileadmin/user_upload/_library/resources/OS_NC/130924-AS-NC_OS_Supporting_Document_2nd_Edition_final.pdf)

In particular they foresaw (ref Section 6.1) the need for the System Operator to:

"assess the expected power flow in the Transmission System as accurately as possible and to estimate the System State in order to avoid dangerous situations in real-time and to plan Remedial Actions. The required access by TSOs to data from DSOs and Significant Grid Users is mandatory to facilitate this process".

This would appear to be incompatible with the original GC0106 proposal and WAGCM2.

2. ENTSOE go on to state:

"The focus is therefore on fast and effective data provision by DSOs and Grid Users necessary for detecting, **forecasting** and thus for carrying out Operational Security Analysis of a Transmission System ahead of and in real-time, supporting the coordination in System Operation between TSOs, DSOs and Significant Grid Users."

And

"Since mere trust in the accuracy of information without an appropriate level of assurance and control is not acceptable for technical and for reasons of liability, the OS NC establishes the right of the TSOs to receive the required data with the aim of enabling the adequate performance of Operational Security Analysis and, at the same time, establishes the obligation on all **involved parties** to provide the therefore required data with an adequate level of quality and precision"

This too, in my view, reinforces that it was the intention of ENTSOE when drafting SOGL, to have a common minimum requirement for data so as to "ensure the availability and exchange of necessary data and information between TSOs and between TSOs and all other stakeholders" (as set out in Recital (3) of SOGL) across the Union in order to maintain the operational security of the power system and that this was not (as had been the case up to that point) to be left to national determination where that fell below the common minimum requirements for data across the Union - a point which was reinforced in Recitals (4) and (5) of SOGL.

ENTSOE also foresaw the present problem the TSOs have in forecasting demand on a system with widespread embedded generation; without accurate data from generators it is impossible to forecast demand or constraint power flows accurately and the consumer ultimately pays the price through higher

balancing volumes and / or procurement of unnecessary levels of reserve or unnecessary scheduling of thermal stations.

3. Furthermore, ENTSO-E go on to state:

"The central purpose of the Data Exchange Articles of the OS NC is to define the data and information required by the TSO to perform its tasks described in the OS NC. The OS NC is the umbrella code of the SO NCs. Therefore, it has to consider all the possible data and information required to maintain the Operational Security in the Transmission System. This includes: real-time data, schedules, structural data and other data needed for analysis." (page 37)

Which begs the question; if it is actually for the TSO to decide when data is required (as per the original GC0106 proposal and WAGCM2) then why go to the trouble of explicitly defining the data exchange articles in the first place in SOGL?

4. On further reading of Section 6.5 two further key statements, from ENTSOE, appear:

a. "To maintain the Operational Security, it is necessary to know the situation of the Transmission System in a precise way so the follow-up analyses are reliable. To achieve this, the TSO needs information from its Responsibility Area or from another TSO's Responsibility Area. Data from its Responsibility Area may come from the Distribution Networks and Significant Grid Users, so the TSOs rely on the information from the Significant Grid Users to perform its tasks." [emphasis added] Page 38

b. "The information from the own Responsibility Area is provided by DSOs or the Significant Grid Users, both Power Generating Facilities and Demand Facilities. The information about Distribution Networks shall be provided by the DSO. The information from Significant Grid Users may be provided by the owner of the Facility or by the operator of the network where the Significant Grid User is connected. It shall be decided at national level how to respect current detailed practices in different countries."

When read in in conjunction, these statements make it clear that whilst the obligation for the SOGL data to be provided is mandatory, it is not mandatory that it must come only from the SGU.

5. In summary, ENTSOE makes clear, in their publicly stated position, (submitted to ACER) that the SOGL data may be provided by the TSO, as the operator of the network where the SGU is connected, or be provided by the SGU. This statement from ENTSOE, in my view, is fully compatible with the SOGL wording:

"Unless otherwise provided by the TSO, each significant grid user shall provide the TSO.."

...but does not permit the data provision to be optional as is the GC0106 Original (and WAGCM2) proposer's position.

6. Finally, even if according to the proposer (see P. 25 of workgroup report) ENTSOE now state that "the flexibility interpretation was the way in which drafting of the code was intended", does ENTSOE's reversal of its apparent position in September 2013 have any legal weight when seeking to determine the meaning of the SOGL when it was drafted and then approved in accordance with European law?

7. As a result, I believe that the Original proposal and WAGCM2 are not in line with European law regarding the data requirements in the relevant data Articles of SOGL; for example where it refers to 'where the TSO provides'; as being non-mandatory it would be possible (according to this Original and WAGCM2 interpretation) for some, but not all, (or indeed any) of the data items listed in the relevant data Articles of SOGL needing to be provided by either the SGU or relevant network operator, such as the TSO.

In contrast, WAGCM1 and WAGCM3 interpretation make clear that it is a mandatory requirement that data be provided by someone, be that either the SGU (or DSO) or the relevant network operator (including the TSO).

As a result I support the WAGCM1 and 3 alternatives for their more correct legal interpretation in addition to the significant operational benefits to the TSO and lower costs to the consumer that increasing visibility of embedded generator output would bring. On balance I believe that WAGCM3 is the better alternative as it meets the requirement to obtain real-time data from all Type B and C generators and does so on a harmonised level playing field in the spirit of the regulation.

<u>Vote 2</u> – Which option is the best? (Baseline, Original, WAGCM1, WAGCM2, WAGCM3)

Panel Member	BEST Option?
Guy Nicholson	Abstained from voting
Robert Longden	Original
Rob Wilson	Original
Graeme Vincent	Original
Alastair Frew	Original
Damian Jackman	WAGCM3