

Grid Code Alternative and Workgroup Vote

GC0117: Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of Power Stations requirements.

Please note: To participate in any votes, Workgroup members need to have attended at least 50% of meetings.

Stage 1 - Alternative Vote

If Workgroup Alternative Requests have been made, vote on whether they should become Workgroup Alternative Grid Code Modifications (WAGCMs).

Stage 2 - Workgroup Vote

2a) Assess the Original and WAGCMs (if there are any) against the Grid Code objectives compared to the baseline (the current Grid Code).

2b) Vote on which of the options is best.

Terms used in this document

Term	Meaning
Baseline	The current Grid Code (if voting for the Baseline, you believe no modification should be made)
Original	The solution which was firstly proposed by the Proposer of the modification
WAGCM	Workgroup Alternative Grid Code Modification (an Alternative Solution which has been developed by the Workgroup)

The Applicable Grid Code Objectives:

- To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity
- Facilitating effective 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);
- 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;
- 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
- To promote efficiency in the implementation and administration of the Grid Code arrangements

Workgroup Vote

Stage 1 – Alternative Vote

Vote on Workgroup Alternative Requests to become Workgroup Alternative Grid Code Modifications.

The Alternative vote is carried out to identify the level of Workgroup support there is for any potential alternative options that have been brought forward by either any member of the Workgroup OR an Industry Participant as part of the Workgroup Consultation.

Should the majority of the Workgroup OR the Chair believe that the potential alternative solution would better facilitate the Grid Code objectives than the Original proposal then the potential alternative will be fully developed by the Workgroup with legal text to form a Workgroup Alternative Grid Code modification (WAGCM) and submitted to the Panel and Authority alongside the Original solution for the Panel Recommendation vote and the Authority decision.

“Y” = Yes

“N” = No

“-“ = Neutral (Stage 2 only)

“Abstain”

Workgroup Member	Alternative 1 (Northern PowerGrid, Retain the existing Small, Medium and Large Power Station categorisation in England and Wales and to extend this to Scotland)	Alternative 2 (UK Power Networks, Large Power Station: >100MW; Small Power Station: < 100MW)	Alternative 3 (ESO, LEEMPS Plus)	Alternative 4 (ESO, Regional Development Programme)	Alternative 5 (ESO, Hybrid Approach)
Alan Creighton	Y	Y	Y	Y	Y
Antony Johnson	Y	N	Y	Y	Y
Calum Watt	Y	-	-	-	-
Garth Graham	Y	N	N	N	N
Graeme Vincent	-	N	Y	N	N
Isaac Gutierrez	-	-	-	-	-
Mike Kay	Y	Y	Y	Y	Y
Paul Youngman	Y	N	N	N	N
Richard Woodward	-	Y	Y	N	N
Richard Wilson	Y	Y	Y	Y	Y
Tim Ellingham	N	N	N	N	N
WAGCM:	1	2 (Withdrawn)			

Stage 2a – Assessment against objectives

To assess the Original and WAGCMs against the Grid Code objectives compared to the baseline (the current Grid Code).

You will also be asked to provide a statement to be added to the Workgroup Report alongside your vote to assist the reader in understanding the rationale for your vote.

AGCO = Applicable Grid Code Objective

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
Alan Creighton – Northern Powergrid						
Original	No	Yes	No	Neutral	Neutral	No
WAGCM1	No	Yes	No	Neutral	Neutral	No

Voting Statement:

1. The materiality of the defect, which as I understand it, relates to the additional costs faced by generators when connecting new generators in GB due to the different connection processes and technical requirements depending on the geographic location, has not been demonstrated.
2. During the extended time during which this modification has been developed there has been a change in the industry and generation landscape and, because of this, the workgroup became focussed on concerns associated with visibility and control of embedded power stations. I recognise that these are valid concerns that need to be discussed and addressed by industry but am not convinced that the GC0117 workgroup is the right place for the discussions on the holistic industry wide changes required to meet net zero targets. The Original Proposal cuts across many of the industry discussions such as those in the Open Networks Project and the ESO DER Visibility Programme. The stated objective of the ESO DER Visibility programme being: to deliver visibility and control of Distributed Energy Resources (DER) & Consumer Energy Resources (CER) across all timescales (real-time to long-term) – receiving, procuring, storing, analysing, and making decisions on this data –to improve operation of the whole-energy system.
3. With respect to the Original Proposal:
 - a. The benefits associated with increased visibility alone seem to be limited.
 - b. The benefits case associated with increased control have been illustrated only by two case studies or two half hour periods in 2022. It is unclear whether these two case studies are representative of a whole year or whether the scenarios in the case studies align with the FES. Hence the case for additional NGESO control for power stations >10MW is unclear.
 - c. It is clear that increased NGESO control of >10MW power stations will have implications for DNO particularly as they transition to DSOs. It is unclear whether increased control of power stations >10MW by NGESO is the optimum solution from a whole system perspective. Issues that have been raised in the working group but not satisfactorily addressed include:
 - i. The treatment of >10MW power stations associated with ANM schemes managing DNO constraints.

- ii. The treatment of >10MW power stations associated with Regional Development Plans
 - iii. The treatment of >10MW power stations associated with the emerging Delegated Technical Limits initiative
 - iv. The primacy between NGESO instructions and DNO instructions issues to a Generator at the same time
 - v. Uncertainty as to how DNO constraints would be managed in real time in accordance with BC1
 - d. It is unclear whether there will be implications for connection queue management at a time when queue management is an increasing concern for stakeholders.
4. With respect to WAGCM1
- a. This was introduced as an alternative harmonisation approach that would limit the implications for DNOs by extending the arrangements in E&W to Scotland. It is understood that there were good reasons for the regional differences when they were introduced and there doesn't seem to be evidence justifying the continuation of different arrangements in Scotland.
 - b. This approach would enable the ESO and DNOs to develop the optimum solutions for managing both TO and DNO constraints in a whole system way utilising ANM schemes, RDPs and Delegated Technical Limits integrating the ESO and DSO roles.
 - c. However, WAGCM1 would introduce differences between existing power stations in Scotland and new power stations in Scotland, that could further complicate an enduring holistic solution consistent across GB.
5. Therefore, retaining the existing Baseline option, to preserve the present arrangements pending the development and agreement on the holistic industry wide changes required to meet net zero targets is the most appropriate option for GC0117.

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
Paul Youngman – Drax						
Original	No	Yes	Neutral	Neutral	Neutral	No
WAGCM1	Yes	Yes	Neutral	Neutral	Neutral	Yes

Voting Statement:

This has been an involved and engaging workgroup that in essence is attempting to improve the application and consistency of rules between the same type and size of assets irrespective of their location on the transmission system. The current distortion between generation based in E&W or Scotland appears to be historical, and we agree that continuing with the current regime and rules appears un-duly discriminatory. Consistency in rules should enhance competition by facilitating a level playing field between market participants. Although both proposals better facilitate AGCO (b), WAGCM1 better achieves this then the original proposal, as it ensures consistency and a level playing field without incurring additional costs on market participants. It is on this point where the original proposal is negative against AGCO (a) in that it may not encourage economical development of the system for the transmission of electricity. Figures shared in the workgroup noted that an average increase in cost of compliance for a small site would be £250k /year under the original solution. This would be an additional barrier for entry for smaller generation, which is only justifiable if the presumed benefit in balancing

costs materialises. This benefit was predicated on an increasing number of new sites being covered by the reduction in E&W of the large limit to that operating in Scotland, however there was no consideration of the numbers of generators that would be deterred by the addition £250K / year costs. We therefore feel that the benefit case of £330m / year saved in balancing costs may be overstated. In conclusion we believe that the baseline is not justifiable, and the rules need to be standardised. it is our view that WAGCM1 would better facilitate a level playing field to the benefit of consumers then the baseline or the original proposal.

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Garth Graham – SSE					
Original	Yes	Yes	Yes	Yes	Yes	Yes
WAGCM1	Yes	Yes	Yes	Yes	Yes	Yes

Voting Statement:

As the Proposer of GC0117 Original, the reasoning why this proposal better facilities the Applicable Grid Code Objectives (a), (b), (c), (d) and (e) were detailed within the Proposal form itself – which, for the sake of brevity, I avoid repeating that reasoning here.

Suffice to say that that reasoning has, in my view, been validated, vindicated and enhanced by the Workgroup deliberations (and consultation) including, for example, the CBAs carried out by the ESO over the past five years or so.

In addition to this, it is also important to recognise the legitimate (legal) expectation that stakeholders can expect from the Authority when deciding upon this GC0117 proposal (be that the Original or WAGCM1).

In this regard it is important to note (as set out in the Proposal form, on pages 4, 6 and 7) the existing legal obligations upon, for example, the Authority in Recitals (3) and (27) as well as the Authority's publicly stated policy reasoning in terms of the Authority's decisions regarding GC0100, GC0101, GC0102 and the Distribution Code GC0102/DCRP change.

In terms of GC0117 WAGCM1, it too exhibits the broad facilitation of the Grid Code Applicable Objectives as the Original.

This is hardly surprising as, in principle, it is based upon the Original (as regards harmonising the level across GB) all be it with a different level and thus a different benefit (compared to the Original – see for example the CBA) and as such when compared with the Baseline, WAGCM1 is better.

However, for the avoidance of doubt, when compared to the Original then WAGCM1 is not 'best' (as the Original is, in my view, 'best' when considered against either the Baseline or WAGCM1).

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
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	Graeme Vincent – SP Energy Networks					
Original	No	Yes	No	Neutral	No	No
WAGCM1	No	Yes	No	Neutral	No	No
<p>Voting Statement:</p> <p>Whilst the intention to harmonise connection requirements across GB is welcome the materiality of the defect as originally presented has not effectively been demonstrated so that it can be compared to the costs and benefits to the wider industry of the proposed solution. As it is not planned to apply the modification retrospectively this means that going forward the application of Large will be consistent but will create an inconsistent application (in terms of enduring operational and planning requirements) with existing generators. It is likely that this will require network operators to manage a complex data exchange exercise between themselves and the ESO going forward as they will need to manage sites not only on size but on date connected as generators with the same capacity will be treated differently depending on their connection date (as this impacts whether they are Small or Large).</p> <p>As the workgroup has progressed the benefits of the modification have tended to be focussed more on the visibility and control of embedded generation of new generations connections from 2027 (and the significant benefits that this element accrues) rather than those arising from a consistent connection process and enduring operational requirements for existing and future generation connections. However, these visibility and control aspects are also being considered in other industry for a such as the ENA Open networks projects and the more recent ESO DER Visibility Programme and therefore considering this solution within the confines of this workgroup without a wider, more strategic industry view may have unintended implications for any future industry developments as industry moves to deliver the net zero targets.</p>						

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Isaac Gutierrez – Scottish Power Renewables					
Original	No	Yes	Neutral	No	Neutral	No
WAGCM1	Yes	Yes	No	Neutral	Neutral	Yes
<p>Voting Statement:</p> <p>SPR agrees with the principle that there is inconsistency In the GB Grid Code in relation to the definition of small, medium, and large generators across GB. The proposer solution, although address the issue, in SPR opinion will increase investment cost for independent developers with a very small portfolio (with generators of less than 20MW or so) of projects as they will need to meet requirements that before were non-existent. Also, IDNOs and DNO do not seem to be ready to incorporate all the required network changes in time for implementation of the proposer solution (2027). SPR considers that WAGCM1 could be an alternative that will not have a major impact on developer's project investment.</p>						

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Mike Kay – Electricity North West					
Original	No	Yes	No	Neutral	Neutral	No

WAGCM1	No	Yes	No	Neutral	Neutral	No
<p>Voting Statement:</p> <p>Whilst fully acknowledging the unsatisfactory current situation, the materiality of the original defect has never been stated. The original solution is going further than is needed to resolve the original defect. NGESO has effectively turned the original defect into a modification to resolve their perceived emerging balancing issues and costs. Again this is a valid concern, but it is not appropriate to use the original defect as a vehicle for this important strategic need. The reach of the Grid Code deep into distribution systems is an overarching strategic energy system issue which should be driven by clear policy development, not by a narrow focus working group operating within only the scope of Grid Code governance. The trigger for Generators to have to accede to the full rules of the market is an issue of government policy, set in the licensing regulations. This is a decision made by parliament; any change to this, exposing Generators to new costs etc, should also be made by parliament, unless the authority is specifically delegated.</p> <p>It is far from clear, that in spite of the efforts of the workgroup, some of the key stakeholders affected by this proposal have assimilated its possible effects on them. The impacts of this modification, particularly on future embedded generators and DNOs, have not been sufficiently developed to form a view as to whether the claimed balancing mechanism savings, and inefficiencies unstated in the original proposal, fully outweigh all the other costs of such a radical change of responsibilities for DNOs, the operation of their networks, and the effects on embedded generators.</p>						

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Richard Woodward – NGET					
Original	Neutral	Neutral	Neutral	Neutral	Neutral	No
WAGCM1	Neutral	Neutral	No	Neutral	Neutral	No
<p>Voting Statement:</p> <p>The Original may have merit by providing a more uniform approach across GB to applying technical capability requirements for future generation connections. However, we are wary it could do so at the detriment of safe operation of the whole electricity system. Additionally, we do not believe a compelling case for change has been made to justify such a fundamental shift from well-established arrangements. WAGCM1 can be assessed similarly, but whilst it addresses the proposer's defect, we believe it does so in a manner contrary to managing the prevailing challenges for system operability.</p> <p>As flagged towards the latter stages of the workgroup, there are other ongoing policy reform initiatives which we believe will provide a greater probability of success in the near term for addressing the issues highlighted by GC0117 (and beyond).</p>						

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Richard Wilson – UK Power Networks					

Original	No	Yes	No	Neutral	Neutral	No
WAGCM1	No	Yes	No	Neutral	Neutral	No

Voting Statement:

I agree that there is a disparity between regions in the UK however, the materiality of the original defect has never been stated. The original solution is going further than is needed to resolve the original defect. NGESO has turned the original defect into a modification to resolve their perceived emerging balancing issues and costs. This is a valid issue but it is not appropriate to use the original defect as a vehicle for this important strategic need. The reach of the Grid Code deep into distribution systems is an overarching strategic energy system issue which should be driven by clear policy development, not by a narrow focus working group operating within only the scope of Grid Code governance. The trigger for Generators to have to accede to the full rules of the market is an issue of government policy, set in the licensing regulations. This is a decision made by parliament; any change to this, exposing Generators to new costs etc, should also be made by parliament, unless the authority is specifically delegated.

It is far from clear, that in spite of the efforts of the workgroup, some of the key stakeholders affected by this proposal have assimilated its possible effects on them. The impacts of this modification, particularly on future embedded generators and DNOs, have not been sufficiently developed to form a view as to whether the claimed balancing mechanism savings, and inefficiencies unstated in the original proposal, fully outweigh all the other costs of such a radical change of responsibilities for DNOs, the operation of their networks, and the effects on embedded generators.

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Tim Ellingham – RWE					
Original	Yes	No	Yes	Neutral	Neutral	No
WAGCM1	Yes	Yes	Yes	Neutral	Neutral	Yes

Voting Statement:

Alignment will improve the competition for new connectees across the geographic locations, but there is a disadvantage in comparison to legacy generators. Without knowing the distribution of MW in each geographic area it feels the intuitively WAGCM1 would be less distortive when comparing new Users with existing. WAGCM1 would also enable a degree of modification at some existing sites which under the Original would see them immediately caught by the new requirements, thus potentially killing off such projects. The benefits to the ESO are hard to ignore, but the additional cost to Generators of what are currently small sites that will now become (or could become) Large is not insignificant.

Workgroup Member	Better facilitates AGCO (a)	Better facilitates AGCO (b)	Better facilitates AGCO (c)	Better facilitates AGCO (d)	Better facilitates AGCO (e)	Overall (Y/N)
	Tony Johnson – National Grid ESO					
Original	Yes	Yes	Yes	Neutral	Neutral	Yes
WAGCM1	No	No	No	Neutral	Neutral	No

Voting Statement:

The ESO support the Original, especially in respect of Grid Code Objectives (a), (b) and (c) which as demonstrated by the Cost Benefit Analysis has shown the net benefit to the development, maintenance and operation of an efficient, coordinated and economical system against the background of increasing volumes of Embedded Generation which in turn will also promote greater competition. We also believe this modification will enhance the security and efficiency of the system through bringing a greater proportion of Generation under the framework of the Grid Code. Whilst we acknowledge there will be an increased cost to some individual parties, including sub 100MW Embedded Generators, Transmission Owners, DNO's and the ESO, the CBA has demonstrated a significant net overall benefit to the System as a whole.

We do not support WAGCM1 as we do not believe this better facilitates the Grid Code objectives, especially in respect of (a), (b) and (c), as it reduces competition, increases operating costs and reduces the levels of resilience. The additional costs arising from WAGM1 have been demonstrated in the Cost Benefit Analysis.

Of the 10 votes, how many voters said this option was better than the Baseline.

Option	Number of voters that voted this option as better than the Baseline
Original	2
WAGCM1	4

Stage 2b – Workgroup Vote

Which option is the best? (Baseline, Proposer solution (Original Proposal) or WAGCM1)

Workgroup Member	Company	BEST Option?	Which objective(s) does the change better facilitate?
Alan Creighton	Northern Powergrid	Baseline	N/A
Paul Youngman	Drax	WAGCM1	A, B
Garth Graham	SSE	Original	A, B, C, D, E
Graeme Vincent	SP Energy Networks	Baseline	N/A
Isaac Gutierrez	Scottish Power Renewables	WAGCM1	A, B
Mike Kay	Electricity North West	Baseline	N/A
Richard Woodward	NGET	Baseline	N/A
Richard Wilson	UK Power Networks	Baseline	N/A
Tim Ellingham	RWE	WAGCM1	A, B, C
Tony Johnson	National Grid ESO	Original	A, B, C