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CUSC Alternative and Workgroup Vote

CMP423: Generation Weighted Reference Node

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 CUSC Modifications (WACMs).

Stage 2 – Workgroup Vote

2a) Assess the original and WACMs (if there are any) against the CUSC objectives compared to the baseline (the current CUSC).

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

Terms used in this document

Term	Meaning
Baseline	The current CUSC (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
WACM	Workgroup Alternative CUSC Modification (an Alternative Solution which has been developed by the Workgroup)

For reference the Applicable CUSC (charging) Objectives are:

- d) That compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;*

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- e) *That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard licence condition C11 requirements of a connect and manage connection);*
- f) *That, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses and the ISOP business*;*
- g) *Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and*
- h) *Promoting efficiency in the implementation and administration of the system charging methodology.*

** See Electricity System Operator Licence*

***The Electricity Regulation referred to in objective (G) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.*

Workgroup Vote

Stage 1 – Alternative Vote

Vote on Workgroup Alternative Requests to become Workgroup Alternative CUSC 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 may better facilitate the CUSC objectives than the Original proposal then the potential alternative will be fully developed by the Workgroup with legal text to form a Workgroup Alternative CUSC modification (WACM) and submitted to the Panel and

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Authority alongside the Original solution for the Panel Recommendation vote and the Authority decision.

"Y" = Yes

"N" = No

"-" = Neutral (Stage 2 only)

"Abstain"

No Workgroup Alternative Requests were raised.

Stage 2a – Assessment against objectives

To assess the original and WACMs against the CUSC objectives compared to the baseline (the current CUSC).

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.

ACO = Applicable CUSC Objective

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Dennis Gowland – Research Relay Ltd (nominated by EMEC)					
Original	Y	Y	-	-	Y	Y
Voting Statement: The original reflects developments in the generation mix and the needs of the transmission system to satisfy the requirements towards 2030. It is positive in supporting competition in generation of electricity and helps to mitigate against high CfD outturns, particularly in Northern Zones (Objective d). The modification is more cost reflective than the Baseline, given the changes in the mix of Generation (Objective e). The impact on Demand is low and the benefit likely to arise from lower CfD prices should more than cancel out any uplift. The original also trends away from reliance on the Adjustment Factor to comply with the EU Cap which is more cost reflective.						

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Overall, the modification promotes efficiency in the implementation and administration of the system charging methodology (Objective h).

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Graham Pannell – BayWa r.e.					
Original	Y	–	–	–	–	Y
Voting Statement: Mitigates against likely distortions to the intended signal via implementation of the Limiting Regulation, to better maintain the intended relative signal between generation users, therefore better facilitates competition. Causing the ‘Adjustment Factor’ to fall to zero could be argued to marginally improve efficiency in administration, but only marginally, in the round. No change to cost recovery on behalf of TOs, neutral in that aspect.						

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Gregory Edwards – Centrica					
Original	N	N	–	–	–	N
Voting Statement: It has not been demonstrated that the proposal is more cost reflective than the baseline. In fact, the proposal creates the risk of conflicting locational (and operational) price signals given other industry initiatives (such as the Strategic Spatial Energy Plan) that either directly or indirectly will provide locational investment signals. It has not been demonstrated that an underlying assumption of the proposal – that Generation will always scale to meet Demand – is valid. This assumption conflicts with the principle of some industry initiatives that imply Demand will scale to meet						

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Generation. An example of such an industry initiative is the proposal for hydrogen electrolyzers to ramp up production in line with when renewables are generating sufficient electricity.

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	John Tindal – SSE					
Original	Y	Y	Y	Y	–	Y

Voting Statement:

Overall the Original proposal is better than Baseline because it is substantially better with regards to applicable objectives D, E and G, also to a lesser extent better regarding F and neutral with regards to H.

D Effective Competition – Better for reasons including:

- Firstly, better for international competition as it reduces the competitive disadvantage of GB Generators who pay expensive GB TNUoS charges (transmission connected and large distribution connected), compared with Generators in other countries and markets who do not pay such network charges.
- Secondly, better allocation of risk between generators at different locations that arises from changes in tariff gradient by reducing the disproportionate exposure to risk for northern generators where a multiplier factor change has a disproportionately large absolute impact on charges, compared with southern generators, whose charges are close to £zero, who face relatively little absolute risk from multiplication factors changing their tariffs.
- Thirdly, better demand competition by largely reinstating the locational price signal for demand by increasing demand locational charges so the “floor at £zero” defect practically applies for fewer zones.
- Fourthly, better embedded generation competition by largely reinstating the locational gradient for small distribution connected generators (<100MW) since increasing the demand locational tariff will also increase the value of

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the Embedded Export Tariff (EET), so that the “floor at £zero” of the EET also practically applies in fewer zones.

E Cost Reflectivity – Better because it is more cost reflective of the drivers of network investment according to a cost benefit analysis (such as Network Options Assessment and new strategic planning approaches), SQSS and the way the energy system operates in practice, for reasons including:

- Firstly better reflects increase in generation: If a generator user incrementally increases its generation, it will tend to displace alternative generation either by substituting for an alternative new generator e.g. through competition in CfD, CM, or other contracted service, which will tend to be weighted towards areas of existing generation, or by a different generator closing, which can only happen at locations where generators are already located.
- Secondly better reflects reduction in generation: If a generator user incrementally reduces their generation (e.g. through closure), then alternative generation will respond by either an increase in alternative generation to fill the gap e.g. through merchant investment, additional CfD awards to meet decarbonisation targets, or CM capacity to meet capacity targets, or a different generator will not close that otherwise may have closed.
- Thirdly, better reflects increase in demand: If a demand user incrementally increases their demand, then this will be met by an increase in generation e.g. through either merchant investment, or contracts such as CfD, or Capacity Mechanism to deliver policy targets. By contrast, there is not a determined capacity of demand, so a decision for a demand user to increase their demand does not cause a corresponding reduction in other demand, as the Baseline incorrectly assumes.
- Fourthly, better reflects reduction in demand since if a demand user incrementally reduces their demand, then this will be met by a reduction in generation e.g. closure of existing generation, or reduced provision of new generation via routes including: merchant investment, or contracts such as CfD, or Capacity Mechanism to deliver policy targets. By contrast, there is not a determined capacity of demand, so a decision from a demand user to reduce their demand does not cause a corresponding increase in other demand, as the Baseline incorrectly assumes.

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F developments in transmission licensees' transmission businesses and ISOP

business – Better, but to less of a degree than objectives D, E and G. There appears to be a growing difference in average locations of generation versus Demand. This means any detrimental impacts caused by using an inappropriate reference node is already large and likely to worsen over time. This adds to the importance of addressing this defect in a timely way.

G Compliance with Electricity Regulation – Better meets the objective of UK retained law relating to European Regulation 838/2010 which relates to the Limiting Regulation of generator transmission charges to within €0 to €2.50. This modification will bring the average cost arising from the generator TNUoS Wider charges closer to being within the range of the limiting regulation on an underlying basis. This will reduce the need to make add-on corrections via the Generator Adjustment Credit to bring overall charges back within the range.

H Efficiency in implementation and administration – Neutral

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Niall Coyle – NESO					
Original	–	N	–	–	–	N

Voting Statement:

We do not believe that the proposed move to a generation-weighted reference node would increase cost-reflectivity of TNUoS charges.

Significant growth in electricity demand is expected as we transition to net zero, with decarbonisation efforts resulting in electrification of many forms of existing energy demand. New generation capacity will need to be installed to meet this increased level of demand. This suggests that the status quo of the current demand weighted reference node is more cost reflective of the expanding electricity system. I.e. new generation capacity meeting, and being driven by, increasing levels of system demand.

We therefore do not believe the assumption underpinning the proposed generation-weighted reference node, that new generation displaces generation

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elsewhere on the network with static demand, is appropriate for the future. Further, the generation weighted reference node implies that new generation plant will be commissioned at the same rate as existing plant are decommissioned, which is not consistent with the above expectation of increasing generation capacity.

Therefore, we feel the redistribution of over £300m of revenue per annum from generation to demand without the justification of increased cost-reflectivity would be detrimental to consumers.

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Nick Sillito – Peakgen					
Original	Y	Y	-	-	Y	Y

Voting Statement:

The proposal meets objectives (e), (f) and (h).

A property of the reference node in the transport model is that its charge is 0 (all other nodes are calculated relative to the reference node). Therefore, by selecting a generation weighted reference node, the net revenue collected from generation is zero. This means that the absolute value of the generation residual charge (to ensure that the amount connected from generation is between 0 - 2.50 €/kW) is minimised.

Reducing residual charge cashflow results in an efficient implementation of the charging methodology (h). Similarly reducing residual charges means that the methodology is properly reflecting costs (e) and therefore takes account of developments in the Transmission Owners' businesses (f).

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Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Robert Longden - Cornwall Insight (nominated by Eneco Energy Trade)					
Original	Y	-	-	-	-	Y
Voting Statement: The change to a generation weighted reference node is more reflective of the operation of the system, where new generation displaces older facilities. It will enhance competition and has other associated benefits: reduction in the extent of demand charges below zero; increasing the headroom to the Limiting Regulation.						

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Hector Perez - Scottish Power Renewables					
Original	Y	Y	-	-	-	Y
Voting Statement: Moving the reference node to a generation weighted one has the potential to improve competition by delivering more cost-reflective price signals for both generation and demand, reducing existing market distortions currently faced by GB generators and by improving the predictability of TNUoS charges.						

Workgroup Member	Better facilitates ACO (d)	Better facilitates ACO (e)	Better facilitates ACO (f)	Better facilitates ACO (g)	Better facilitates ACO (h)	Overall (Y/N)
	Tom Steward - RWE					
Original	Y	-	-	-	-	Y
Voting Statement:						

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The benefits to locational demand signals facilitate greater competition between generation and demand.

Of the 9 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	7

Stage 2b – Workgroup Vote

Which option is the best? (Baseline or Original)

Workgroup Member	Company	Industry Sector	BEST Option?	Which objective(s) does the change better facilitate? (if baseline not applicable)
Dennis Gowland	Research Relay Ltd (nominated by EMEC)	Generator	Original	d, e, h
Graham Pannell	BayWa r.e.	Generator	Original	d
Gregory Edwards	Centrica	Supplier	Baseline	N/A
John Tindal	SSE	Generator	Original	d, e, f, g
Niall Coyle	NESO	System Operator	Baseline	N/A
Nick Sillito	Peakgen	Generator	Original	d, e, h
Robert Longden	Cornwall Insight (nominated by	Interconnector User/Supplier	Original	d

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	Eneco Energy Trade)			
Hector Perez	Scottish Power Renewables	Generator	Original	d, e
Tom Steward	RWE	Generator	Original	d