Public

Draft Final Modification Report

CMP444:

Introducing a cap and floor to wider generation TNUoS charges

Overview: This modification seeks to introduce a temporary cap and floor mechanism to wider generation TNUoS (Transmission Network Use of System) charges, to reduce investment uncertainty for Generators and Developers.

Modification process & timetable

1. **Proposal Form**
   21 October 2025
2. **Workgroup Consultation**
   23 January 2025 to 29 January 2025
3. **Workgroup Report**
   03 March 2025
4. **Code Administrator Consultation**
   10 March 2025 to 14 March 2025
5. **Draft Modification Report**
   24 March 2025
6. **Final Modification Report**
   28 March 2025
7. **Implementation**
   01 April 2026

Have 30 minutes? Read our Executive summary
Have 120 minutes? Read the full Draft Final Modification Report
Have 360 minutes? Read the full Draft Final Modification Report and Annexes.

Status summary: The Draft Final Modification Report has been prepared for the recommendation vote at Panel.

This modification is expected to have a: High impact on Generators, Storage operators, NESO, Consumers

Governance route	Urgent modification to proceed under a timetable agreed by the Authority (with an Authority decision)	
Who can I talk to about the change?	**Proposer:** Niall Coyle, NESO Niall.coyle@nationalenergyso.com	**Code Administrator Chair**: Catia Gomes Catia.gomes@nationalenergyso.com

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Executive summary

This modification proposes to introduce a temporary single GB-wide cap and floor to wider TNUoS generation charges in response to the Ofgem's Open letter published in September 2024. As outlined in that letter, this change is intended to provide more certainty to Generators to make clearer investment decisions ahead of the upcoming Contracts for Difference (CfD) Allocation Round 7 (AR7) auction, and potential changes to energy pricing that could be implemented by HM Government's Review of Electricity Market Arrangements (REMA), to ensure GB can attract the investment in generation required in the context of Clean Power by 2030.

What is the issue?

On 30 September 2024, Ofgem published an open letter outlining their concerns around the uncertainty of long term TNUoS (Transmission Network Use of System) Generator charges, and the risks posed by TNUoS unpredictability caused by the NESO's 10-year generation TNUoS projection. This uncertainty was deemed to raise significant concerns to HM Government's ambition of achieving a clean power system by 2030. The letter asks NESO to raise a modification to mitigate these challenges and reduce investment uncertainty.

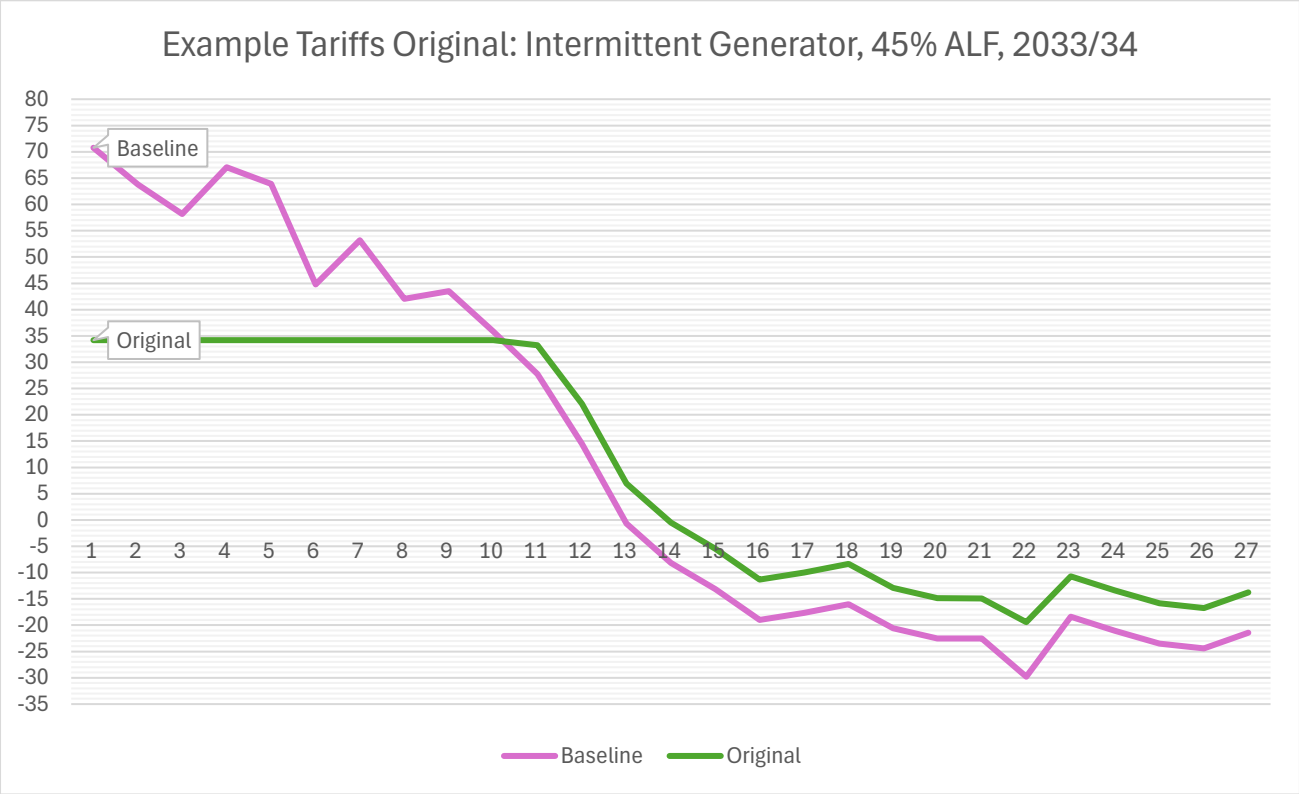
What is the solution and when will it come into effect?

All analysis presented below has been carried out against the network/generation background included in the 2024 5-year forecast (charging years 2025/26 to 2029/30) and the 2023 10-year projection thereafter (charging years 2030/31 to 2033/34). This Report provides some illustrative tariff impacts on a selection of generation types. The spreadsheet tool provided in Annex 6 allows other generation to calculate their illustrative tariff impact.

Proposer's solution:

Apply a single £/kW cap and floor for the whole of GB to each of the YRS (year-round shared), YRNS (year-round not shared) and PS (Peak Security) tariff elements of the wider generation TNUoS charge. The initial £/kW cap and floor values for each element shall be calculated as the 97.5th and 2.5th percentile respectively for each of the different tariff elements across all generation zones and years from the NESO 5-year view TNUoS tariff publication published in April 2024, in 2025/2026 prices.

Ofgem's open letter stated that the cap and floor intervention should be temporary. Although no specific end date has been defined in this modification, NESO believes the cap and floor should remain in place until the reforms through REMA are implemented. Transitional arrangements and/or additional ongoing protection may be required for Generators who make an investment decision while the temporary arrangements are effective.



Implementation date: 1 April 2026

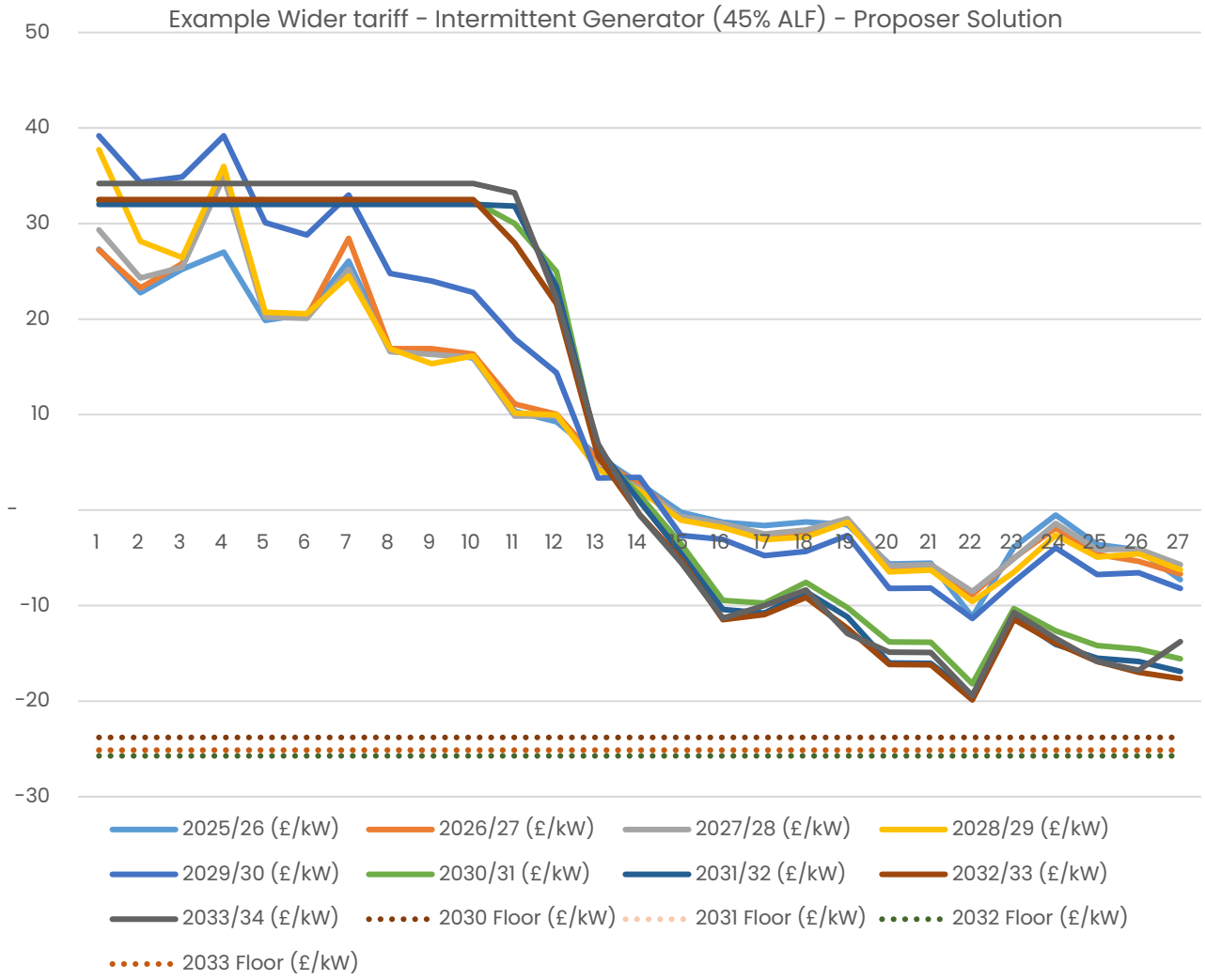
Summary of alternative solutions:

WACM1 – Deciles TNUoS Cap & Floor

WACM1 Solution notes that the Original solution:

- Means the 10-year projections materialise post 2030 for all Southern Generators because the floor is too low; and
- Consequently, fails to prevent consumers subsidising increasingly negative charges in the Southern zones

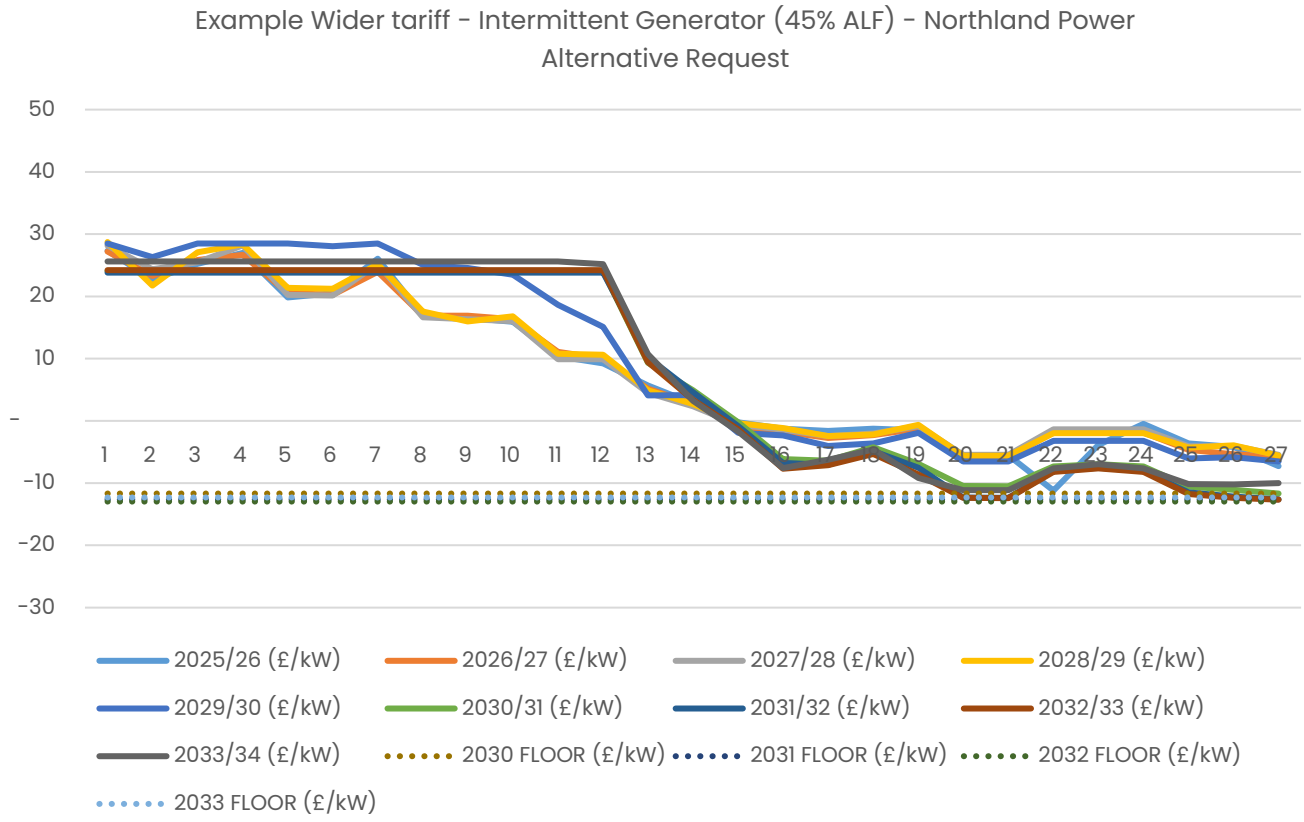
The chart below shows the output wider tariff under the Original solution. The dashed lines are the wider tariffs that result from the floor of the individual tariffs and the Adjustment Tariff.



The Original solution doesn't affect wider tariff charges paid by Southern Generators post 2030.

WACM1 seeks to address this fault in the Original solution by setting the initial cap and floor for the 2025/2026 year for each of the tariffs as the 90th and 10th percentile, respectively, of the NESO 5-year view TNUoS tariff publication published in April 2024. Other elements of the calculation are the same as the Original solution.

WACM1 leads to an effective floor in Southern zones as well as a cap in the Northern zones, as seen in the chart below:


Example Wider tariff - Intermittent Generator (45% ALF) - Northland Power Alternative Request
50
40
30
20
10
-
-10
-20
-30
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
2025/26 (£/kW)
2026/27 (£/kW)
2027/28 (£/kW)
2028/29 (£/kW)
2029/30 (£/kW)
2030/31 (£/kW)
2031/32 (£/kW)
2032/33 (£/kW)
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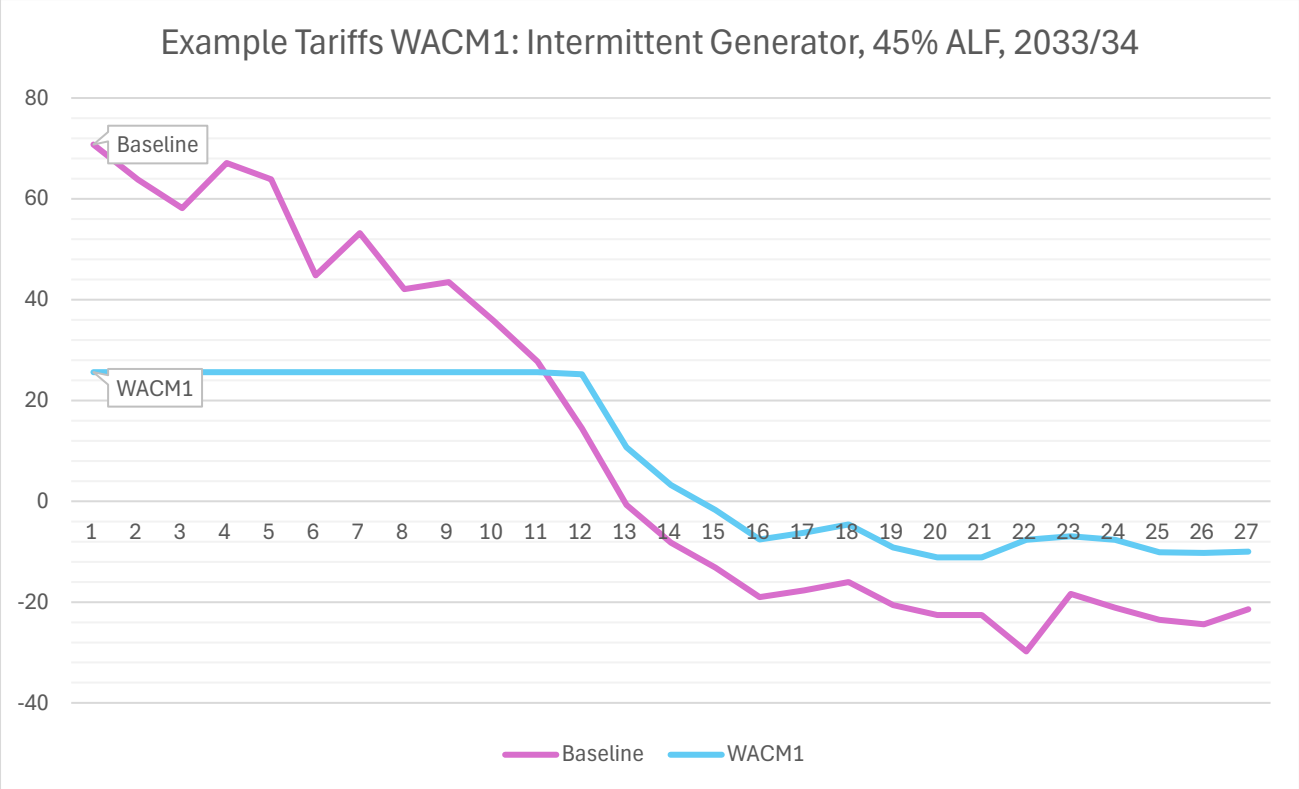
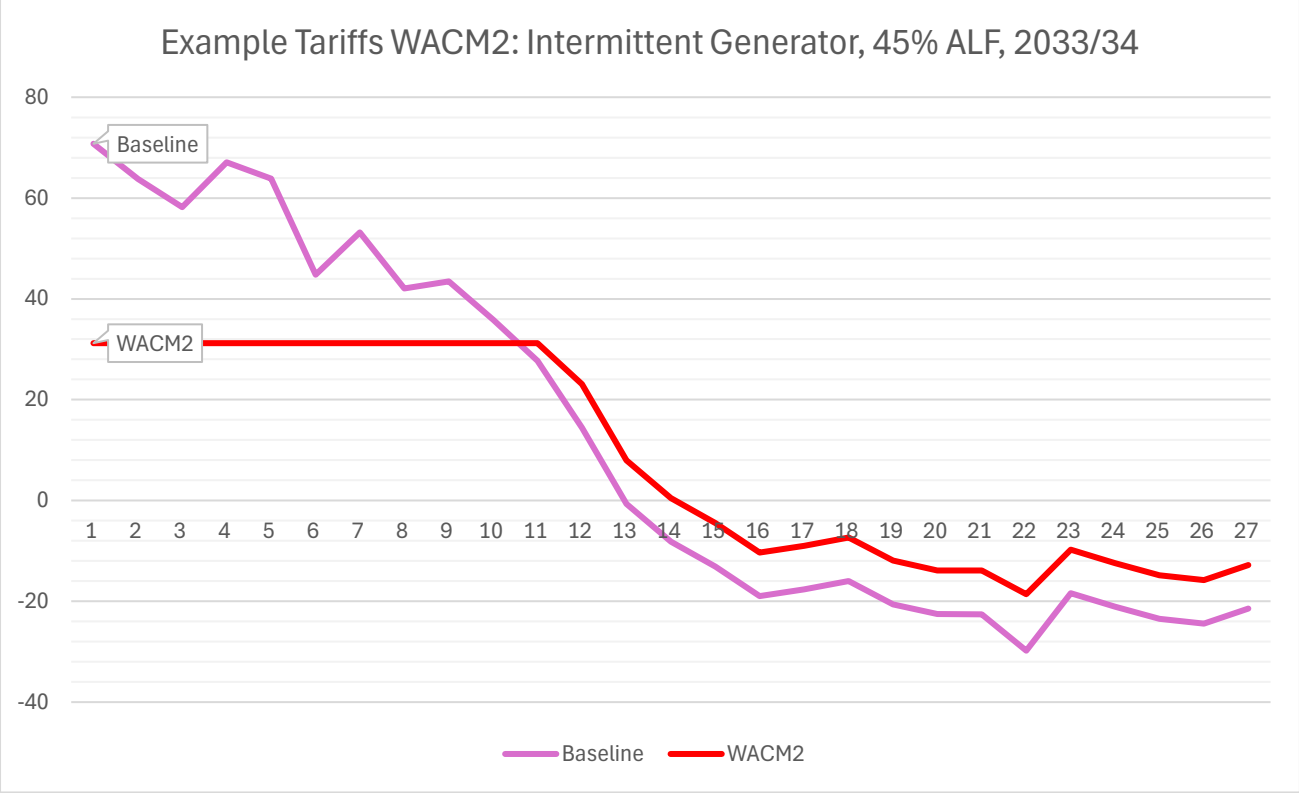
2032 FLOOR (£/kW)
2033 FLOOR (£/kW)


Example Tariffs WACM1: Intermittent Generator, 45% ALF, 2033/34
80
60
40
20
0
-20
-40
Baseline
WACM1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Baseline
WACM1

WACM2 – Removal of the data set for 2029/30

The calculation of the cap and floor as per the Original solution uses data representing financial years up to and including 2028/29. The difference from WACM2 to the Original solution is that forecast data for 2029/30 is not used.

WACM2 flags concerns noted in Ofgem's Open letter around the potential impact to charges from large-scale infrastructure investments - *"A third point of concern is that, under the current charging methodology, the unprecedented infrastructure build required to achieve Clean Power 2030 not only results in significantly higher TNUoS charges in Northern regions, but also much higher credits in Southern regions. NGESO's 10-year projections for TNUoS generation charges in the early 2030s suggest that paying much larger credits to generators to use the system could oppose consumers' interest as they may end up paying more depending on the broader picture."* that are required to decarbonise the electricity system, notably towards the end of this decade, and submits that these concerns will be better addressed if the solution omits the final forecast year of NESO's suggested input dataset for the purposes of calculating any cap or floor.



WACM3 – Cap and floor fixed values based on current charging year 2025/26

WACM3 seeks to implement a more appropriate solution compared to the Original solution to address the defect identified by Ofgem by fixing the cap and floor values using actual tariffs rather than forecast tariffs, specifically the prevailing tariff extremes for charging year 2025/26.

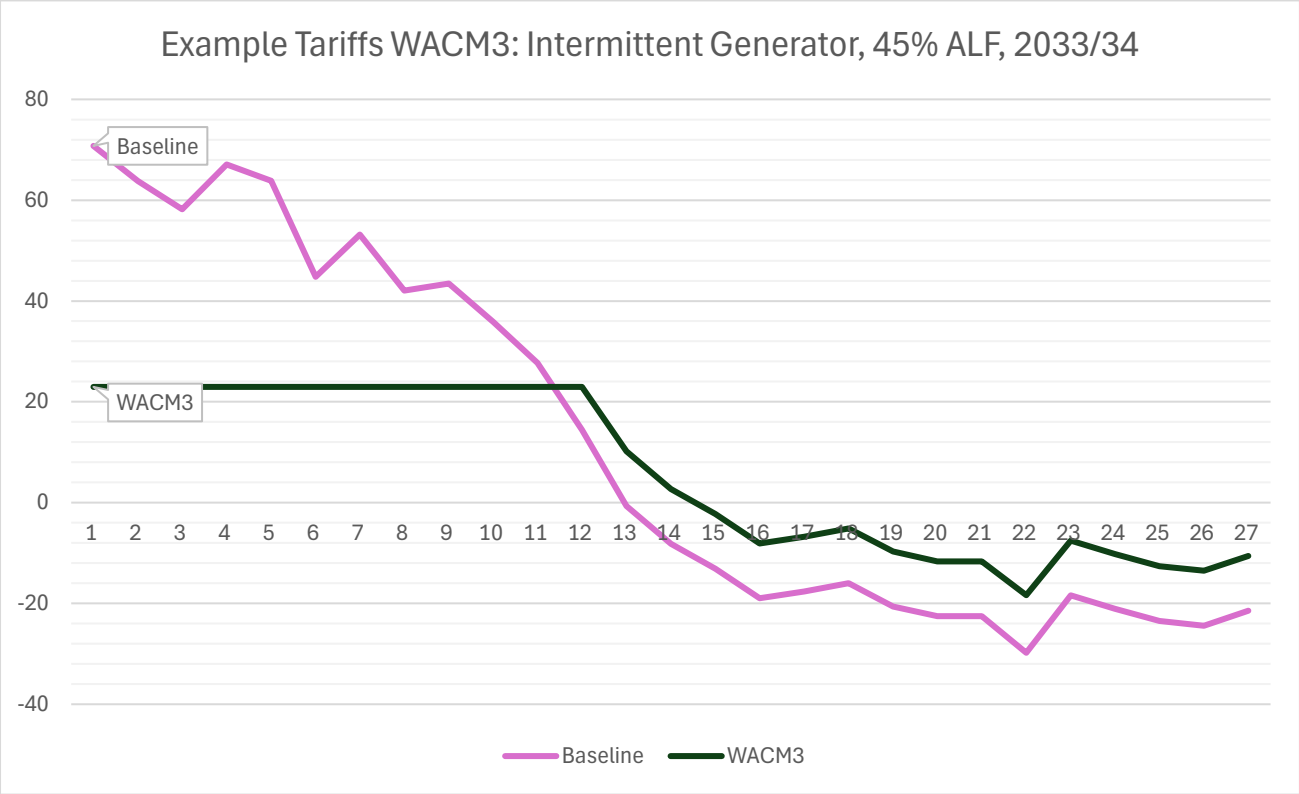
The cap value of each tariff components shall be set by taking the maximum value for the respective tariff components (except for the Adjustment Tariff) from the 2024/25 charging year. The floor value of each tariff component shall be set by taking the minimum value for the respective tariff components (except for the Adjustment Tariff) from the 2025/26 charging year.

The values will be set as follows:

	System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff
	(£/kW)	(£/kW)	(£/kW)
Cap	7.75	23.98	21.39
Floor	-6.61	-12.52	-10.18

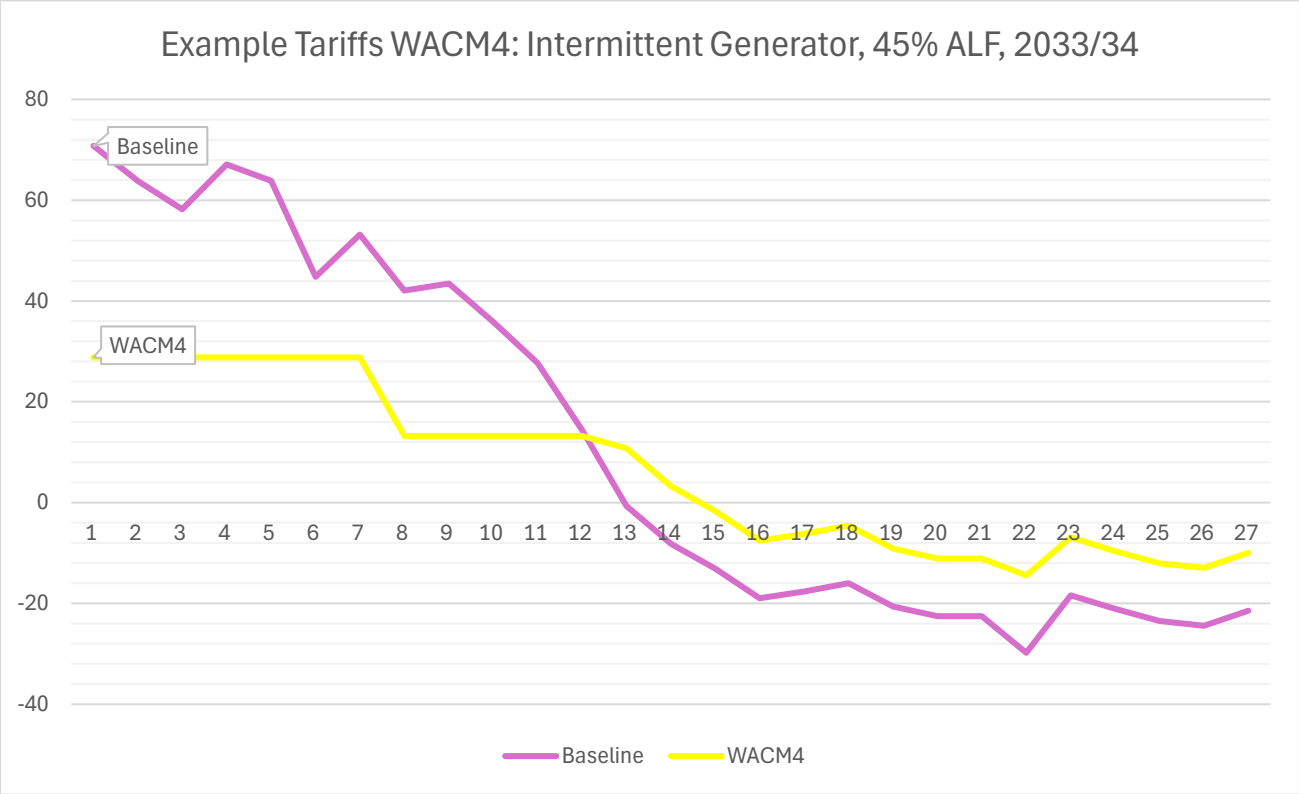
These values have been calculated by taking the minimum and maximum values from the Final 2025/26 tariff publication, as shown in the table below.

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)
1	North Scotland	2.288151	23.984031	17.659859
2	East Aberdeenshire	2.910959	15.929791	17.659859
3	Western Highlands	2.396306	22.514052	16.552739
4	Skye and Lochalsh	-6.611418	22.514052	16.181290
5	Eastern Grampian and Tayside	1.803437	18.746946	13.138581
6	Central Grampian	4.064652	18.544109	12.944675
7	Argyll	3.583309	16.940216	21.391974
8	The Trossachs	2.823609	16.940216	11.388546
9	Stirlingshire and Fife	1.542154	16.426609	11.072204
10	South West Scotlands	1.861108	15.567886	10.682177
11	Lothian and Borders	1.283110	15.567886	5.112375
12	Solway and Cheviot	0.765542	11.225338	7.099740
13	North East England	1.971469	7.783992	3.998834
14	North Lancashire and The Lakes	0.913770	7.783992	1.331831
15	South Lancashire, Yorkshire and Humber	2.536147	3.971199	0.720953
16	North Midlands and North Wales	1.824078	1.556608	0.005437
17	South Lincolnshire and North Norfolk	0.201803	2.722942	0.005437
18	Mid Wales and The Midlands	0.235364	2.721706	0.005437
19	Anglesey and Snowdon	5.688998	0.767063	0.005437
20	Pembrokeshire	7.753209	-9.929935	-
21	South Wales & Gloucester	3.082694	-10.828978	-
22	Cotswold	2.809476	1.794081	-10.184174
23	Central London	-2.912018	1.794081	-6.016002
24	Essex and Kent	-1.599071	1.794081	-
25	Oxfordshire, Surrey and Sussex	-0.018492	-4.392691	-
26	Somerset and Wessex	-0.549731	-6.379161	-
27	West Devon and Cornwall	0.191883	-12.517022	-
	Cap (=MAX of field)	7.753209	23.984031	21.391974
	Floor (=MIN of field)	-6.611418	-12.517022	-10.184174



WACM4 – Two-step cap. Zone 1 to 7 and Zones 8 to 27 based on existing zones and using 1 Standard Deviation

WACM4 introduces a different way of calculating the various caps when compared to the Original solution by introducing a 2 Tier Zonal Grouping as well as 1 Standard Deviation as opposed to a decile. This is designed to maintain locational differences whilst reducing the risk of TNUoS rising significantly higher than expected for all Users as opposed to just those on the extremities.



WACM5 – Scaling factor to all tariffs

WACM5 introduces an alternative methodology for applying the cap and floor to try and better preserve the locational signals in Northern GB. WACM5 is looking to set a maximum range between the highest and lowest TNUoS zone and an explicit maximum cap for each of the Peak Security, Year-Round Shared and Year-Round Not Shared tariff components. The maximum range and cap for each component will be the highest of the first four years of the latest NESO 5-year view of TNUoS publication, published in April 2024.

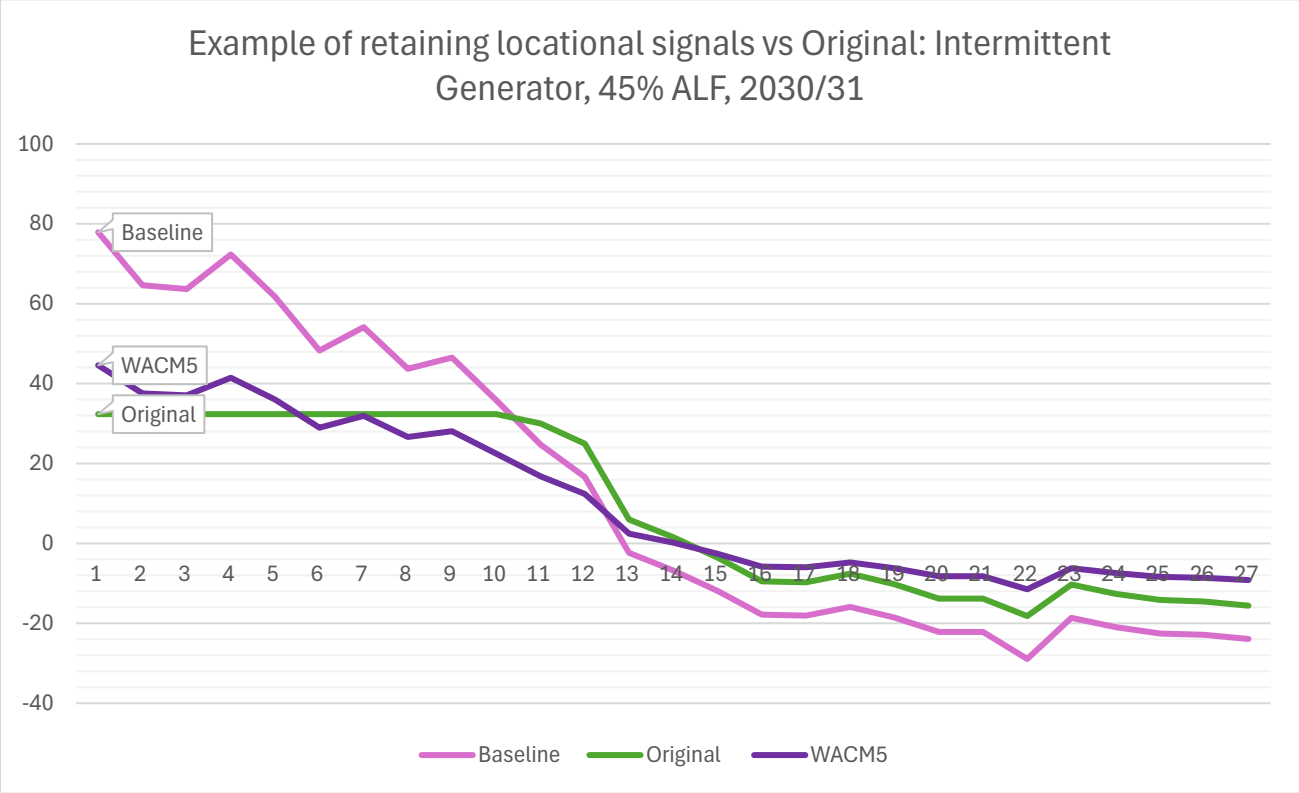
These would be applied in two steps: Firstly, if the range of tariffs is greater than the defined maximum when setting tariffs, the tariff in each zone is multiplied by a scaling factor to bring the range back within the maximum. This scales all tariffs by a factor between 0 and 1. Then if the highest zone is still higher than the absolute cap, then a £/kW adjustment would be applied equally to all zones to bring the highest back down to the level of the absolute cap while still maintaining the difference between zones. A simplified example for a 3-zone network is outlined below.

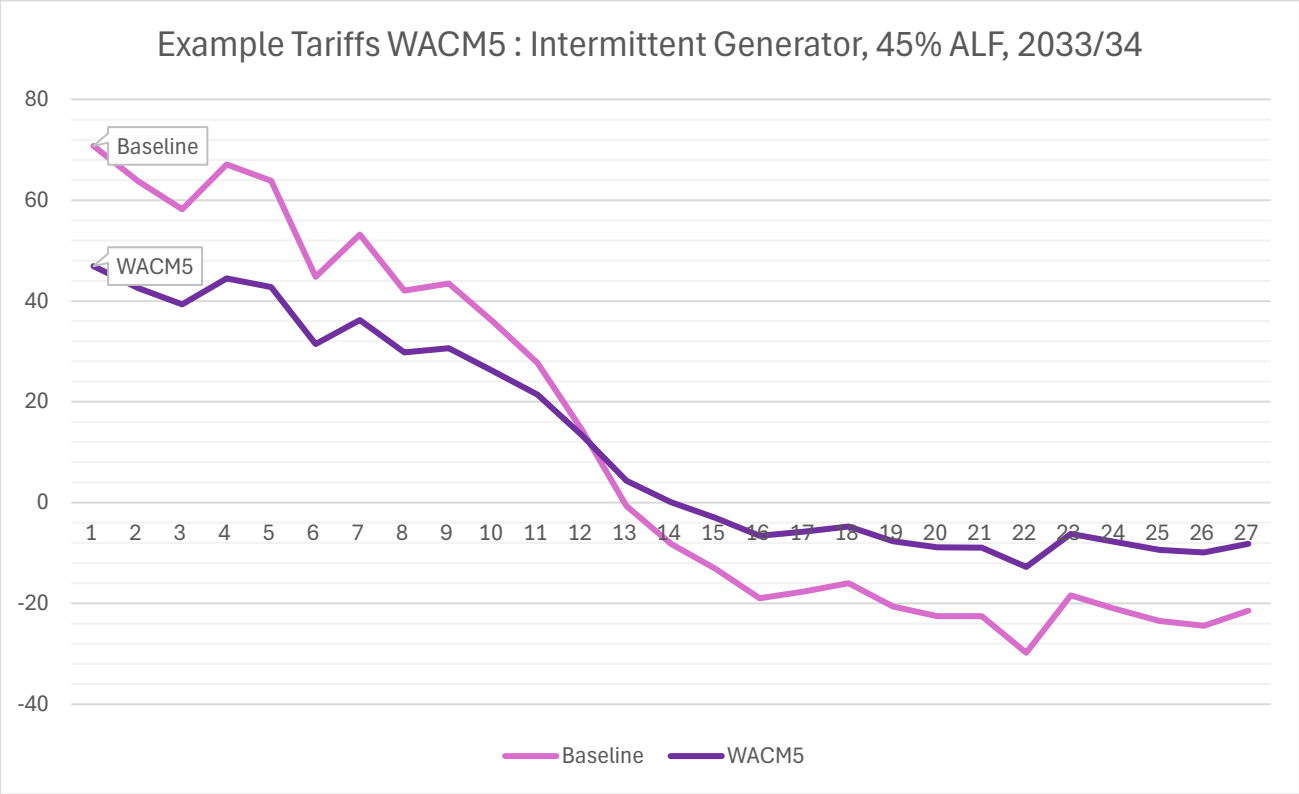
Consider the simplified example network below with 3 generation zones, applying a cap of £20/kW and a maximum tariff range of £30/kW. The range of initial tariffs is greater than

the defined maximum tariff range, therefore, a scaling factor is applied to all tariffs (Scaling Factor = Maximum Tariff Range / Actual Tariff Range = 30/40 = 0.75). The highest scaled tariff is greater than the defined cap value, therefore a cap adjustment is applied to all tariffs (Cap Adjustment = Cap – Highest Scaled Tariff = 20 – 22.5 = -2.5 £/kW).

Applying the methodology of the Original solution and many of the WACMs to this example would result in Zone 1 & 2 both having the same Final tariff of £20/kW thereby removing the locational differential. Under WACM5 this differential would be largely preserved, albeit scaled down.

Zone	Initial Tariff (£/kW)		Scaled Tariff (£/kW)		Final Tariff (£/kW)
1	30.0	x Scaling Factor (x 0.75) →	22.5	+ Cap Adjustment (-2.5) →	20.0
2	24.0		18.0		15.5
3	-10.0		-7.5		-10.0





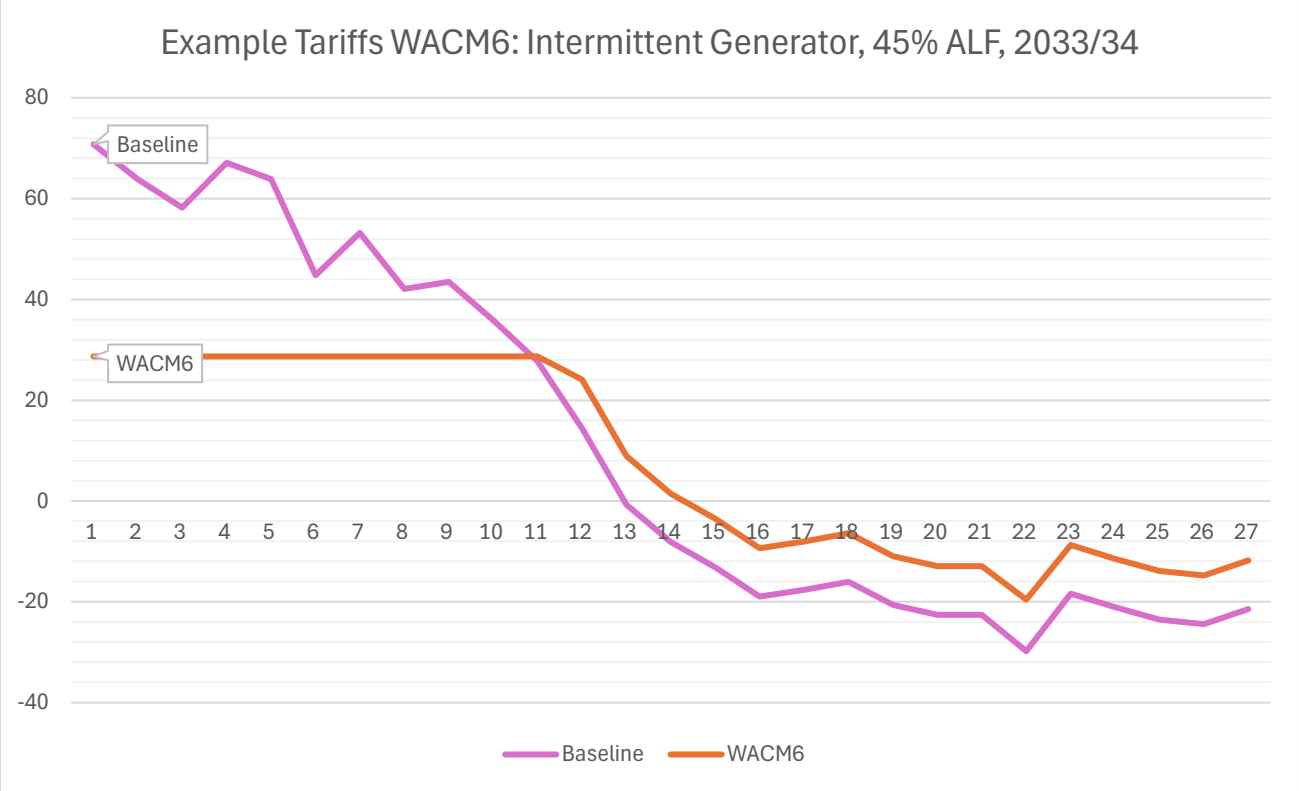
WACM6 – Use of data set 2023/24-2027/28.

WACM6 uses the Original solution cap and floor, however, proposes to use for the data set years 23/24 – 27/28 instead of the 5-year forecast.

The reasons for the change are as follows:

- Anything beyond 2027/28 can be considered speculative as it has not yet passed security Trigger date.
- In the context of only 34% of the grid queue having secured land rights and planning there appears a large amount of speculative TEC in the forecast.
- New Clean Power 2030 Action Plan , particularly in Scotland, is at risk of carrying a large amount of theoretical cost for: 1. speculative upgrades, 2. Upgrades that would be avoided if storage was properly modelled.

The end result would be more costly power for the end consumer as CfD's would end up at higher prices to cover this phantom TNUoS increase that is being modelled, but un-likely to materialise.



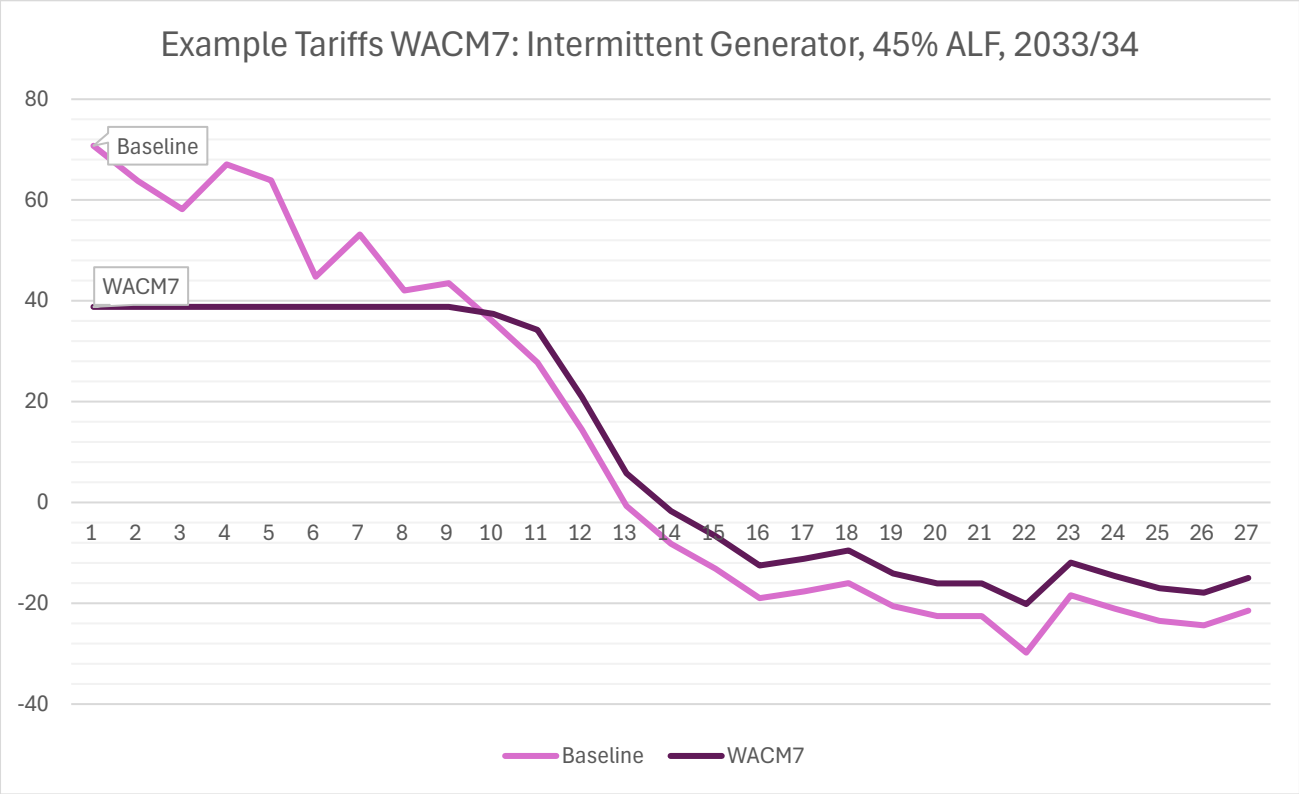
WACM 7 – Cap set at the maximum value from the 2029/30 tariffs and the floor set at the minimum value from the 2029/30 tariffs

In WACM7 the cap and floor are derived from the existing 5-year TNUoS forecast of tariffs published by NESO in April 2024.
For each of the following components, the cap is set at the maximum value from the 2029/30 tariffs.
For each of the following components, the floor is set at the minimum value from the 2029/30 tariffs.

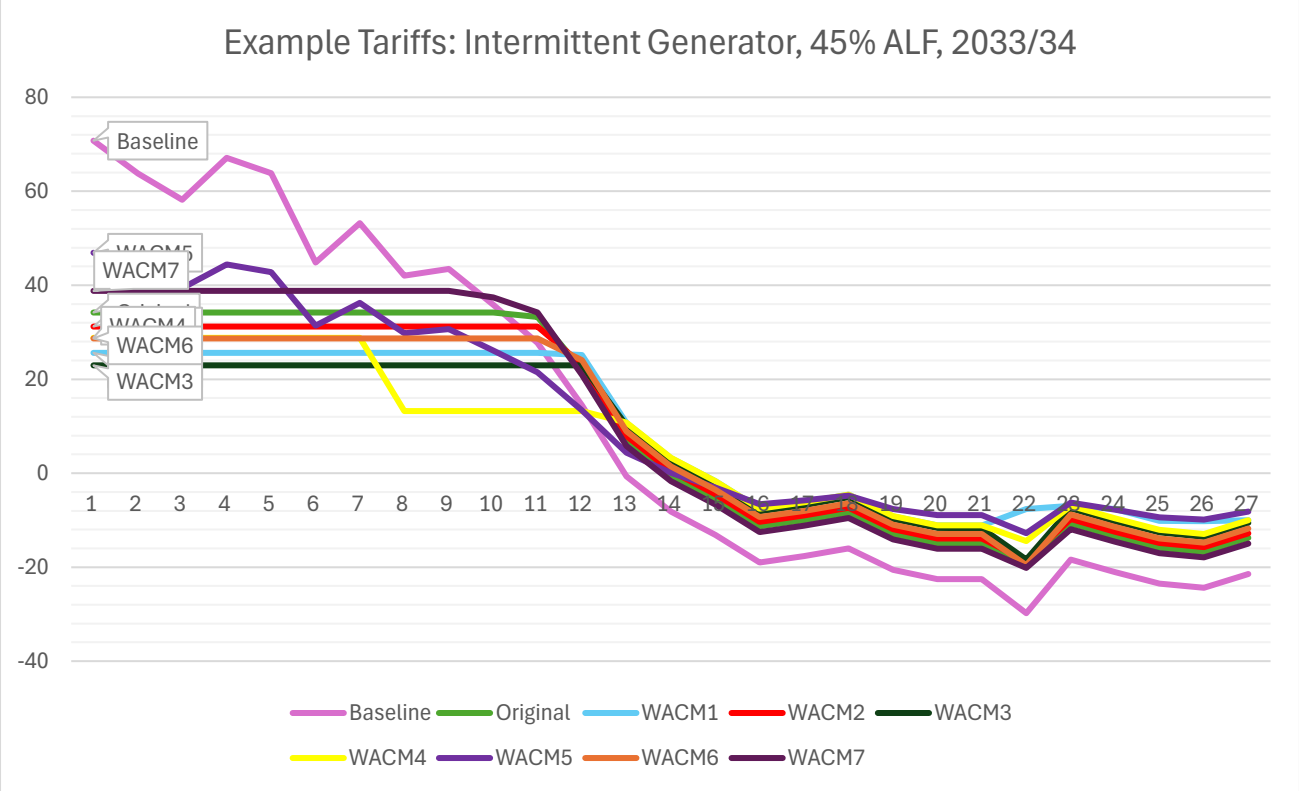
Tariff Components

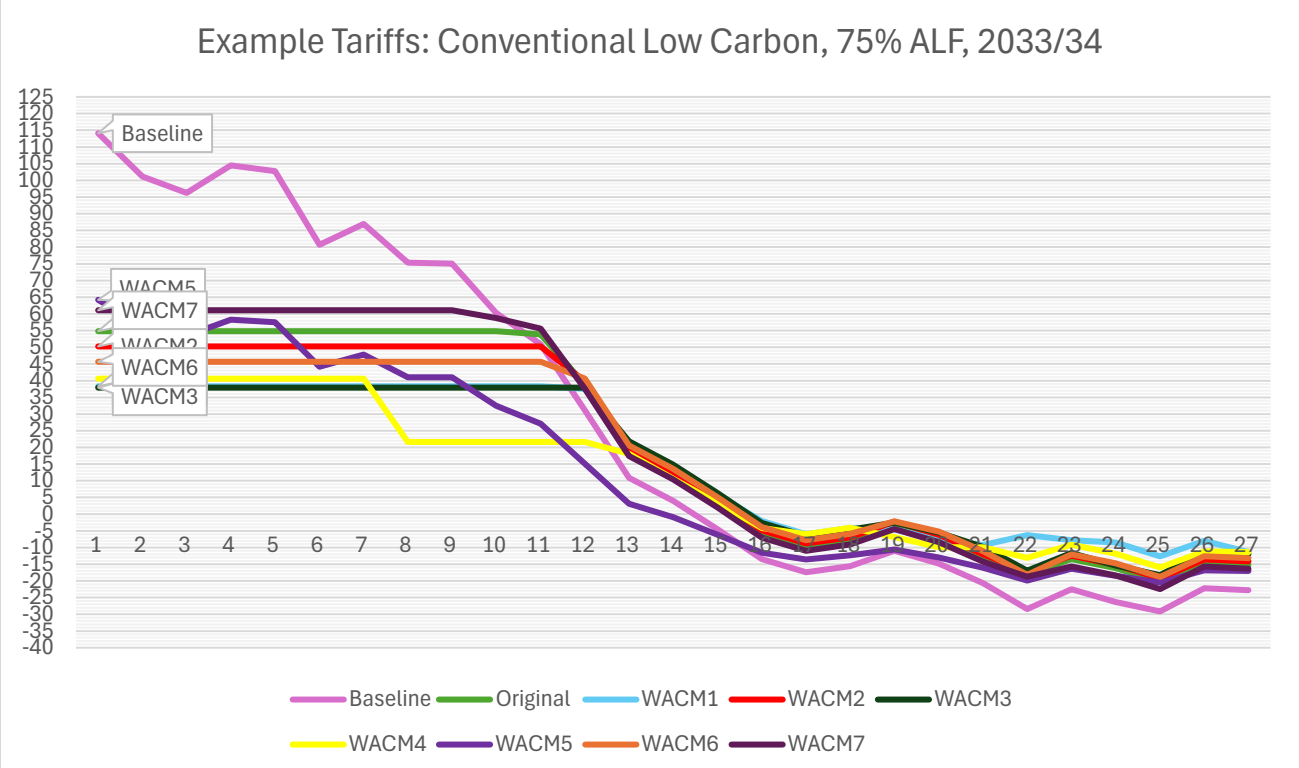
- Shared Year Round
- Not Shared Year Round
- System Peak

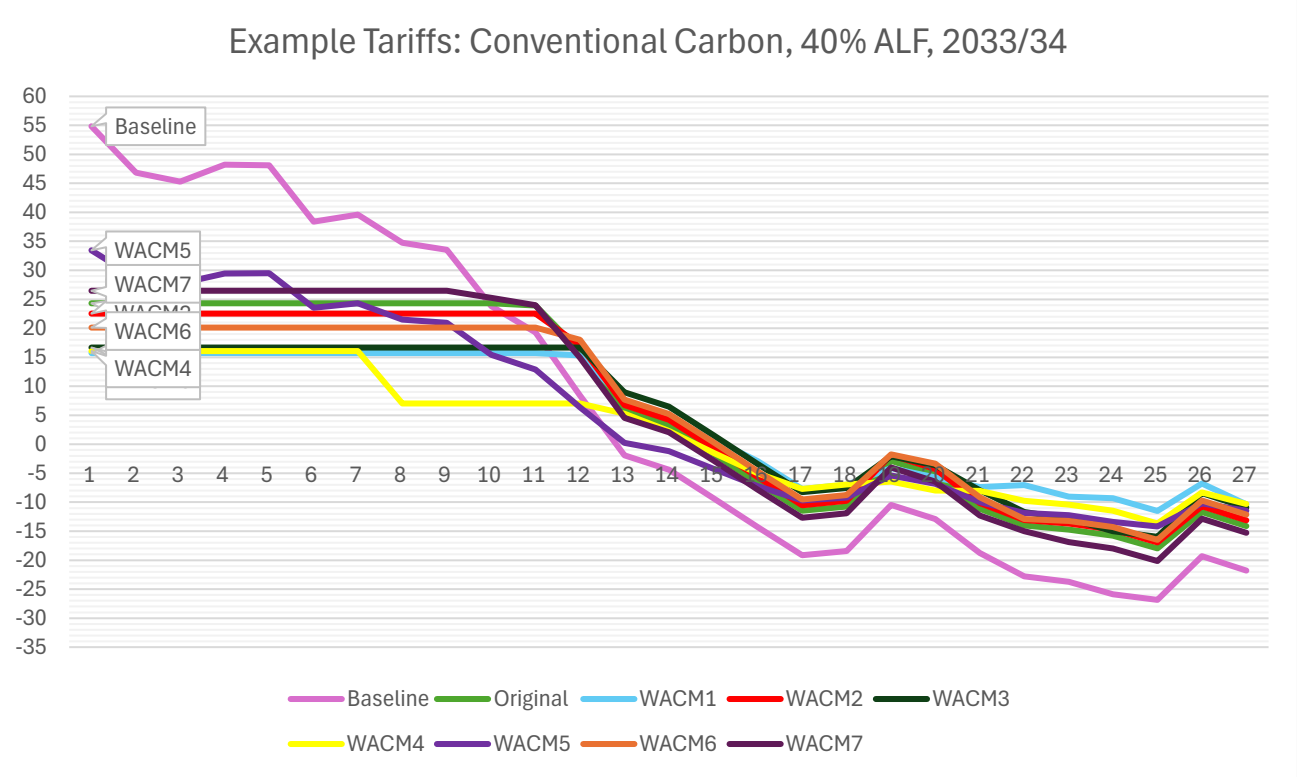
The Proposer for WACM7 also recognises that tariffs would tend to trend higher in Northern GB areas in the future as more network is reinforced however, this becomes more uncertain to forecast. Whilst the Proposer would want to use the most up to date 5-year tariff forecast published in 2025, there is not sufficient certainty on when this will be provided. By setting the guardrails at the existing 2029/30 forecast of tariffs strikes a level at which to set a temporary cap and floor.



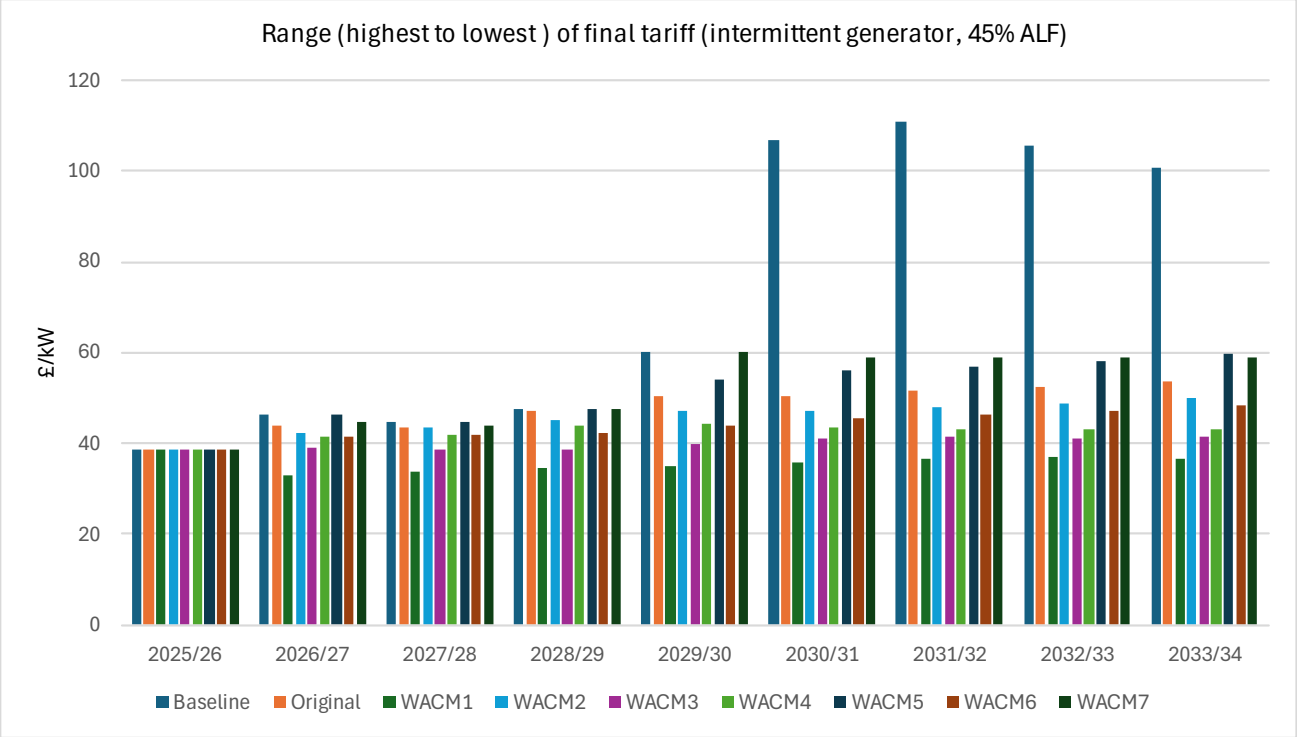
Comparison Charts Original and WACMs (Annex 6)

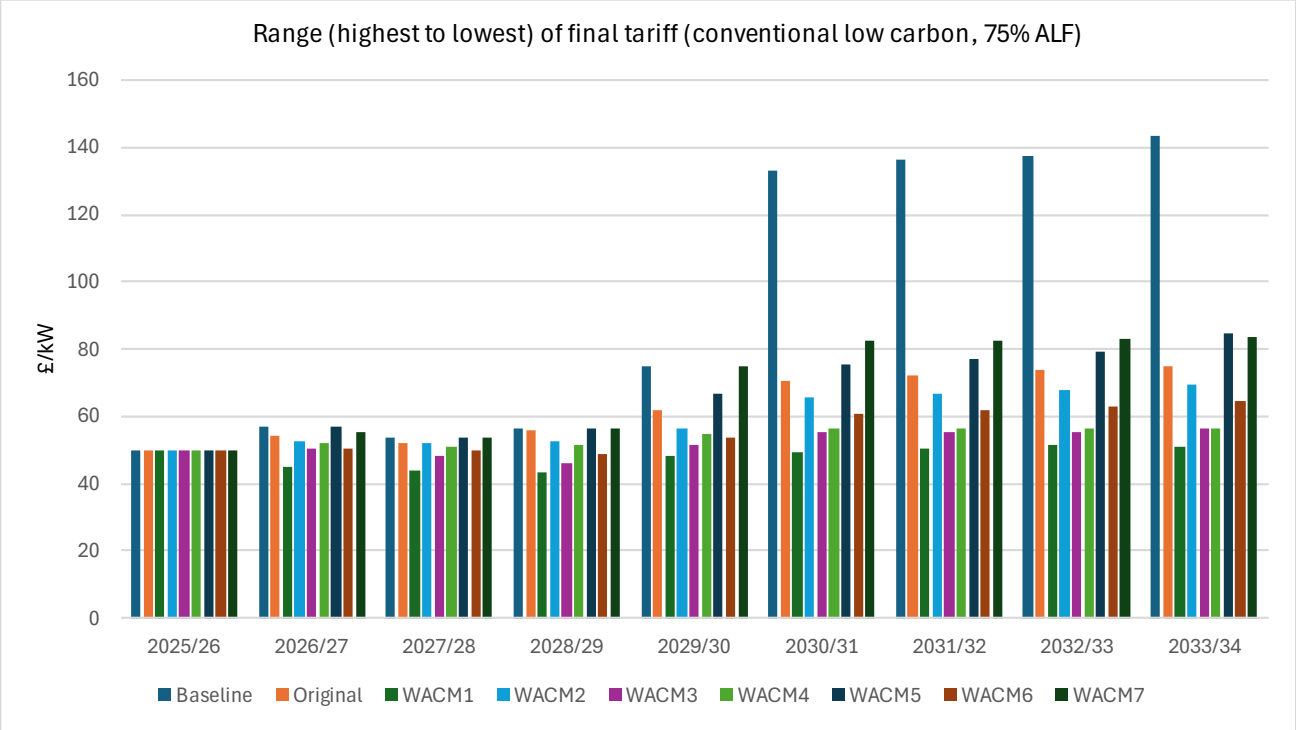


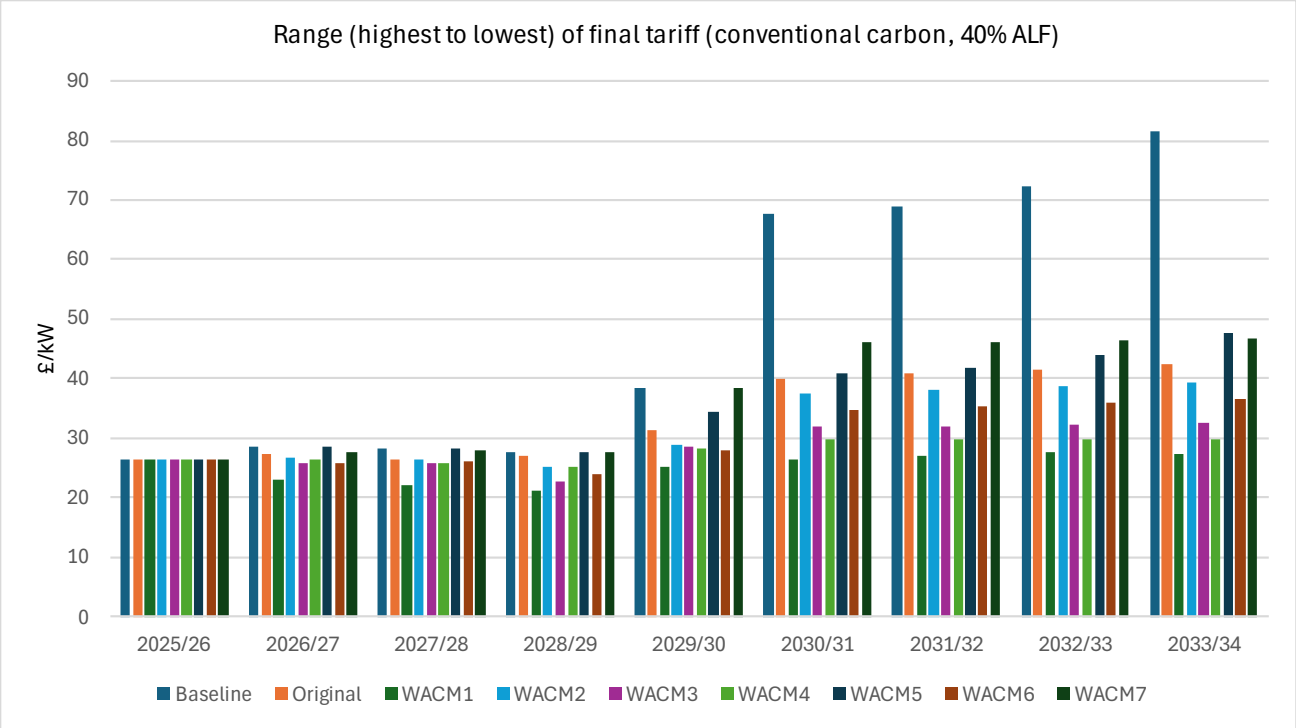




Range chart to be added







Implementation Date for all solutions: 01 April 2026

Workgroup conclusions: The Workgroup concluded by majority that the Original and WACM1, WACM2, WACM3 and WACM6 better facilitated the Applicable Objectives than the Baseline.

Code Administrator Consultation: The Code Administrator Consultation received 27 non-confidential responses and 2 confidential responses.

Panel recommendation: Panel will meet on 28 March 2025 to carry out their recommendation vote.

What is the impact if this change is made?

High impact on Generators, Storage operators, NESO and Consumers.

Generators and Storage Operators: Applying a cap and floor to Generator TNUoS charges will prevent Generators and Storage operators from being exposed to the extreme levels of TNUoS charges that were foreseen in the later years of NESO's 10-year projection. The proposed solutions will affect the values of locational tariffs for all Generators to varying degrees, due to differences in the design. All options have the potential to alter levels of the Generator Adjustment Tariff, that applies equally to all Generators and Storage operators regardless of location.

NESO: Changes will be required to the tariff setting process to reflect the cap and floor proposals. There are no structural changes required on the NESO in the solutions presented, as per Ofgem's guidance.

Suppliers: The intent of the Original solution and all the WACM's is that there is no impact on Transmission Demand Residual charges. There is no requirement for Suppliers to change any systems to reflect any of the solutions.

Consumers: There is no direct consumer impact arising from this modification. There may be some indirect impacts to consumers (e.g. as a consequence of different CfD auction bids or other commercial arrangements)

Interactions

There are interactions with other in-flight modifications that impact the level of TNUoS charges. These include CMP423 (Generation Weighted Reference Node), CMP315 (TNUoS: Review of the expansion constant and the elements of the transmission system charged for)/CMP375 (Enduring Expansion Constant and Expansion Factor Review) and CMP442 (Introducing the option to fix Generator TNUoS charges). Each of these could drive different impact assessment outcomes and could lead to the cap and floor being breached more or less frequently.

On 20 January 2025, Ofgem published the decision on the urgent treatment for CMP432 stating, that "with respect to potential interactions with the proposed cap and floor mechanism through CMP444, we agree with the Proposer that CMP432 should be progressed in parallel, or prior to CMP444 "Cap and Floor" modification. We consider that the prospects of modifying the Security Factor post the introduction of the cap and floor could generate uncertainty and interact with levels of the cap and the floor if introduced."

While there are interactions with the modifications stated above, there is no impediment to advancing implementation of CMP444. The introduction of a single GB wide cap and floor allows for changes to the underlying methodology to calculate the wider TNUoS charge.

What is the issue?

On 30 September 2024, Ofgem published an open letter[1] outlining their concerns around the uncertainty of long term TNUoS (Transmission Network Use of System) charges, and the risks posed by TNUoS unpredictability to HM Government's ambition of achieving a Clean Power system by 2030. That letter asks NESO to raise a modification to address those concerns.

The scale of the investment required over the next decade is unprecedented, both in networks and generation. The 10-year projection of TNUoS charges published by the NESO in 2023 projected significant increases to charges for Generators, particularly in the North of GB, over the next decade. These escalating costs for generation in the North of GB risks driving up consumer costs via increased CfD (Contracts for Difference) bids that incorporate a larger risk premium than would otherwise be necessary, or deterring investment in new generation, which could put the achievement of Clean Power 2030 Action Plan goals at risk.
Ofgem has via the open letter, asked NESO to develop a temporary proposal that takes account of the principles below:

- Establishes appropriate, individual, upper and lower limits on the £/kW charges paid by Generators through the Year-Round and/or Peak Tariffs.
- Retains regional/locational differentials in charges and between technology types through a single GB cap and floor.
- Maintains a procedure for ensuring compliance with the requirements on Generator annual average transmission charges as provided for in Regulation 838/2010.
- Is capable of implementation without requiring NESO to change its TNUoS forecasting approach or timetable.
- Is capable of implementation from April 2026, if approved.

There are currently a number of reforms to the TNUoS charging methodologies progressing via CUSC modification Workgroups; the Proposer of each change contends that it would improve the locational signals sent to the market through TNUoS. The temporary intervention necessary to reduce uncertainty for Generators through a cap

[1] https://www.ofgem.gov.uk/sites/default/files/2024-09/Open_letter_TNUoS_intervention_vF_Publications.pdf

and floor to elements of generation TNUoS charges (as per Ofgem's open letter) must also still allow for subsequent code modifications to make further improvements to the underlying TNUoS charging methodologies. As this change proposes a universal GB-wide cap per generation tariff element, and not a zonal cap, it is not contingent of the method used to define generation charging zones, which may be subject to revision (via CMP419 (Generation Zoning Methodology Review), if approved. This change is intended to provide more certainty to Generators ahead of the CfD AR7 auction, and ahead of potential changes to energy pricing that could be implemented by REMA, under which electricity market arrangements are being reviewed by DESNZ and Ofgem.

For the avoidance of doubt, the intended scope of this modification is limited to the parameters stated above in the Ofgem's open letter, by only considering options for a GB cap and floor to each tariff elements of the wider generation TNUoS charge, within NESO's existing forecasting approach/timetable. Broader, more fundamental, reforms to the TNUoS charging methodology, zonal cap options or fixing of parties TNUoS charges are out of scope.

Why change?

NESO has been asked by Ofgem to raise a modification to address the issues outlined above; to reduce uncertainty around the long-term trajectory of TNUoS charges, reduce costs for consumers through CfD and other markets, and not deter investment required to meet HM Governments ambition of a Clean Power system by 2030.

What is the solution?

Proposer's solution

Apply a single £/kW cap and floor for the whole of GB to each of the YRS, YRNS and PS tariff elements of the wider generation TNUoS charge. The initial £/kW cap and floor values for each element shall be calculated as the 97.5th and 2.5th percentile respectively for each of the different tariff elements based on the values calculated for each element across all generation zones and years from the NESO 5-year view of TNUoS tariffs for 2025/26 to 2029/30 Version 3, published in April 2024, in 25/26 prices.

Setting the cap and floor at the 97.5th and 2.5th percentile of the 5-year forecast ensures that 95% of the data of the 5-year forecast falls within the range of the cap and floor, thereby only the most extreme datapoints of the 5-year forecast fall outside the

range. This threshold applied to the significantly higher baseline charges in Northern GB in the 10-year projection means these charges are stopped from materialising.

NESO proposes an annual indexation of the cap and floor, by applying CPI-H inflation. This is the same measure of inflation already used in the CUSC (defined as Transmission Owner Price Inflation (TOPI) with reference to the ESO licence and/or Transmission Licence) for indexation of Generator local circuit tariffs and other tariff components. This means that the cap and floor values would remain of static potential effect in real terms by maintaining pace with inflation and would not (as this is not the intent) "bite deeper" over time due to inflation.

NESO is proposing to apply both the cap and floor via all three wider tariff components to ensure consistent treatment between technology types (as not all technology types are exposed to the same components, or in the same way) This will generally retain the existing differential in charges between technology types, which we consider to be a fair and un-discriminatory approach.

During the annual tariff setting process, where one of the applicable tariff components is calculated to fall outside of the range of the cap and floor, the tariff component will be replaced by the cap value when above the upper limit, or floor value when below the lower limit, whichever is relevant.

Any change in revenue recovery from generation due to the cap and floor mechanism will be recovered via a change in the Generation Adjustment Tariff. This Adjustment Tariff is a non-cost reflective tariff element, which is typically a negative credit applied to all generation to bring average generation transmission charges back within the range of the limiting regulation.

The intention for the proposal is for the cap and floor to remain in place until the reforms through REMA are implemented. However, as the timelines for REMA are unclear at this stage, no end date has been defined in the solution, with the intention to raise another modification in the future once the decision/implementation timescales for REMA become clear.

Workgroup considerations

The Workgroup convened 12 times to discuss the perceived issue, detail the scope of the proposed defect, devise potential solutions and assess the proposal in terms of the Applicable Code Objectives.

Consideration of the proposer's solution

The Proposer shared the Original solution with Workgroup members and discussions were had around the introduction of a cap and floor.

A Workgroup member noted it was important to highlight there would be numerous deadlines impacted by this modification, not just the Celtic Seabed or Contracts for Difference (CfD) auctions. A question was asked about the timeline and target for the Workgroup to meet the AR7 application window, which had not yet been confirmed. The Ofgem representative noted the Workgroup members point and advised appropriate dialogue and co-ordination between Ofgem and DESNZ was taking place.

The initial draft of the Original proposal factored in an indexation to the cap and floor, using an inflation methodology. Confirmation was sought on the application of inflation in the tariffs derived from the data set used. The Proposer confirmed that the 5-year forecast already factored in inflation. Therefore, there was a double counting of inflation in the cap and floor levels. The Proposer updated the Original solution to remove this effect to ensure inflation is applied only once.

Additional clarity was sought regarding which set of the 5-year forecast would be used when setting the cap and floor values, specifically why the Original forecast did not use the data from the 5-year forecast published in 2023. The Proposer explained that using a more up-to-date forecast, that was available in 2024, would be more appropriate.

The Workgroup discussed the importance of creating a cap and floor that gives investors' confidence, aiming to prevent extreme tariff outcomes. It was emphasized that the choice of which tariff forecast is used to set the cap and floor levels is arbitrary, and that importance should be given to ensuring that the cap provided protection from extreme tariff scenarios from occurring.

Some Workgroup members questioned the rationale of the Original solution. The Proposer stated their interpretation of the Ofgem open letter was that the significant escalation of charges in the 10-year projection published by NESO in 2023 was the primary driver of uncertainty, for which the cap and floor intervention should look to address. Setting the cap and floor at the 97.5th and 2.5th percentile of the 5-year forecast ensures that 95% (2.5% above the cap and 2.5% below the floor) of the data of

the 5-year forecast falls within the range of the cap and floor, thereby only the very highest and lowest tariffs of the 5-year forecast fall outside the range, which then means that the significantly higher charges in northern GB in the 10-year projection are stopped from materialising.

Some Workgroup members emphasised the importance of maintaining cost reflectivity and locational signals, which are core TNUoS principles. Failing to do this would risk the cap and floor not being set at appropriate levels. They cautioned against implementing a cap value that, while benefiting Northern GB Generators, may disadvantage Generators across GB, who made investment decisions based on the previous unrestricted charges. These Workgroup members noted that the Generation Adjustment Tariff paid by all Generators could materially change if the cap and floor was not set at appropriate levels. It was deemed important by these Workgroup members that due consideration is given to all Generators, not just those in Scotland.

A Workgroup member noted that long-term uncertainty around how charges will develop may increase costs for Generators and create barriers to investment, ultimately risking the delivery of a Clean Power system by 2030 through Contracts for Difference ("CfDs") or merchant investments and reinvestments. The 10-year projection, however, has been useful in signalling the very high costs that could result using the current TNUoS methodology, given the very likely generation and network investments that will be required to meet Clean Power 2030 Action Plan targets. These costs seriously put at risk new generation investments in Scotland. Other Workgroup members highlighted that the 10-year projection had used a process and methodology that derived a set of tariffs that was not as robust as the NESO's annual 5-year forecast .This could lead to unrealistic data and tariffs that could lead to setting the inappropriate can and floor levels.

Some Workgroup members questioned the accuracy and methodology of the Generation Adjustment Tariffs that would occur as the NESOs 5-year forecast (published April 2024), and 10-year projection (published in September 2023) omitted analysis of data from the Clean Power 2030 Action Plan publications. The NESO representative stated that the 5-year forecast is their best and most credible view of forecasts out to 2029/30 under the current charging methodology. The NESO representative went on to further explain that the wider tariffs, under the 10-year projection, were also a credible view based on assumptions from the TOs that all the network infrastructure deemed necessary is built and delivered on time. It was clarified that the Generation Adjustment Tariff may not be therefore possible to forecast robustly due to the assumptions made on the level of new generation capacity and their location.

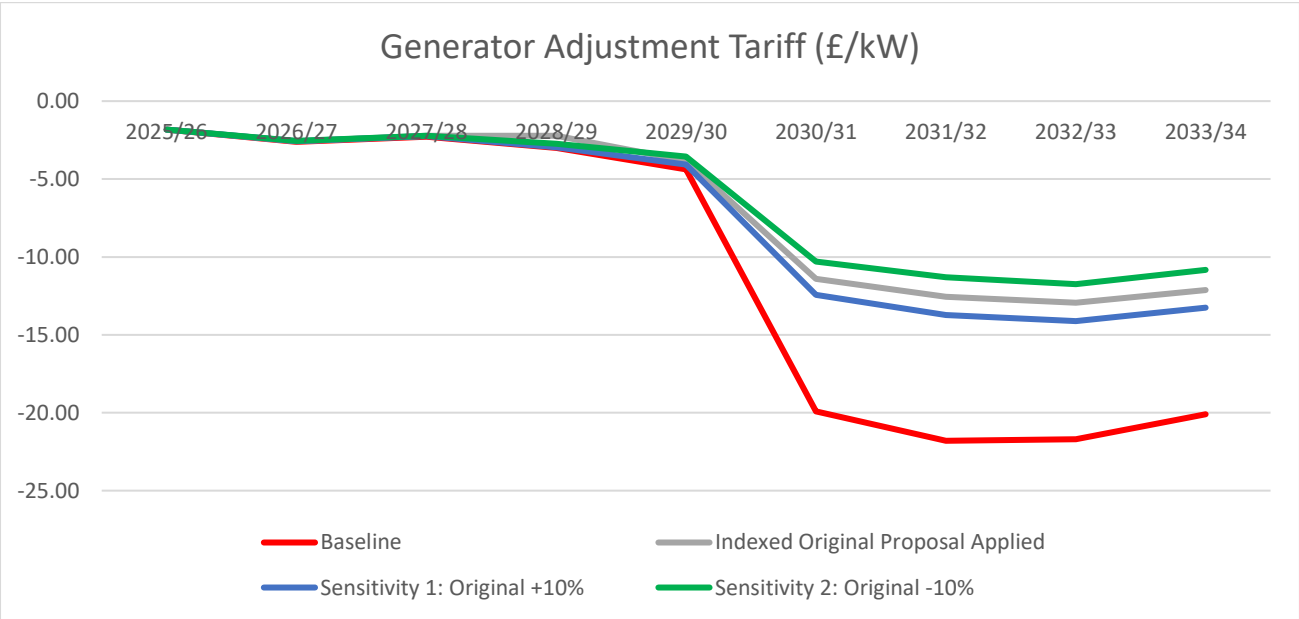
There was a discussion about where to set the appropriate single GB cap. A Workgroup member pointed out that the Original proposal did not adequately protect generation in many further Southern Scottish zones. This Workgroup member suggested an Alternative proposal with a two-tier cap to address this issue. This was later developed as a WACM (WACM4).

Generator Adjustment Tariff

When setting a cap and floor value, there will be an impact to the Generation Adjustment Tariff that every Generator is exposed to. Analysis on the Adjustment Tariff was presented to the Workgroup. The Proposer confirmed that all analysis had been carried out against the network/generation background included in the 2024 5-year forecast (charging years 2025/26 to 2029/30) and the 2023 10-year projection thereafter (charging years 2030/31 to 2033/34).

It was clarified that the impact was illustrative based on the above data set used and would be subject to change if the underlying generation background data was updated in future. The purpose of this analysis was to allow Workgroup members to determine the relative impact of the Original and WACMs against the baseline.

Workgroup members discussed the implications of significant reductions in baseline Adjustment Tariffs and the need to believe in the 10-year projections for these reductions to materialise. The baseline Adjustment Tariff credits only become so large because of the significant increases in the wider tariffs and large increases to the generation capacity in the 10-year projection. If the wider tariffs and generation capacity didn't reach those highs, then the large negative adjustment credits wouldn't materialise.



NESO representatives pointed out that, whilst the cap is applied to locational elements of the tariffs, the change in revenue is recovered through a non-locational Adjustment Tariff.

There were opposing views on whether addressing the Adjustment Tariffs maintains a distortion to the locational signal and that an incidental benefit from this Proposal will be to mitigate the Adjustment Tariffs.

Circuits in different backgrounds

A Workgroup member asked for clarification about whether the cap and floor levels set would be impacted if certain circuits in the transport model "flipped" between being designated as a peak circuit and a year-round circuit. This can impact the flows within a zone on a year-to-year basis, and therefore impact charges within that zone. The Proposer stated that it is not necessary to adjust for this phenomenon when calculating the cap and floor levels, as the proposed methodology would set the cap and floor looking at the full 5-year dataset, rather than picking a single year in the dataset (when a circuit would be in only one of the two potential backgrounds). If it is an issue of application of the cap (i.e. a Generator is outside the range of the cap and floor one year and inside the range another) then the Proposer believes this is a feature of the current charging methodology not specific to the cap and floor and therefore is out of the scope of this modification.

Cap and floor duration

The Proposer stated the intention for the cap and floor to remain in place until the reforms through REMA, and consequential reforms to the TNUoS charging methodology, are implemented. The Proposer presented two options to define the duration of the intervention in the legal text:

1. Define an exact date for the cap and floor to be removed, based on the latest available timelines of REMA. It is likely with this approach that another modification will be needed in the future to correct the date once a decision is published and the implementation timelines become clear.
2. Define a trigger for when the cap and floor will be removed, linked to a specific REMA project milestone. This would be a more flexible approach, allowing for the end date to move if the project timelines moved, but defining an appropriate project milestone may be challenging.

Some Workgroup members highlighted that a third option is available:

3. Do not define an exact end date, with the intervention then remaining in place until another modification is raised to amend the charging methodology.

Upon further consideration, the Proposer was unable to define an appropriate REMA project milestone to trigger the removal of the cap and floor (as the project is still in the policy development phase rather than implementation phase). Both of the two remaining options would require a future modification to correct/define the expiry date of the intervention, with the Proposer favouring option 3 – to not define an exact end date in this modification, but to raise another modification in the future to define the end date and any transitional arrangements/additional protection required once the decision and implementation approach for REMA become clear.

One Workgroup member suggested to introduce a scheduled review in the future (in for example 5-years) to assess whether the cap and floor is still necessary, and to decide at that point whether to extend or remove the intervention.

One Workgroup member highlighted that a key element of the TNUoS discussion relates to the question of: "are the charges serving a useful purpose?" This leads on to a broader question regarding: "Is it time to revise the nature of Transmission charges to recognise that technology differentiation should now be addressed as the drivers of investment are now very different to the drivers that were in place when the current regime was designed". Resolving this may be a stronger indicator of when any cap and floor should come to an end.

One Workgroup member emphasised that this modification has resulted from an intervention from Ofgem, and it would be rational to rely on Ofgem to instruct NESO to progress a further modification in future, when it deems that the defect has come to an end.

The Workgroup started to consider the protection needed for investments made during the cap and floor and the rules that will need to be considered and applied to offer certainty that they would be granted some grandfathering rights. The Workgroup broadly agreed that grandfathering arrangements sits outside of the CUSC Code change that is being proposed by this modification, but the Workgroup considered that is crucial that the topic is discussed and other measures to mitigate the issue are explored such as seeking comfort from the Government and affected Stakeholder. Some Workgroup members suggested that having a change without a certain level of security will make investments riskier.

Level of Cap and floor

The NESO representative stated that the 5-year forecast is their best and most credible view of forecasts out to 2029/30 under the current charging methodology. The wider tariffs under the 10-year projection are also a credible view if all the network infrastructure the TOs think is necessary is built and delivered on time. The Adjustment Tariff may not be as robustly forecast due to the assumptions made on the level of new generation capacity and their location.

The level of the Cap and floor was discussed by the Workgroup. NESO routinely produces a 5-year forecast (years 1-5) based on best estimate of generation growth and infrastructure build. NESO also provided a one-off longer-term projection (years 6-10) in 2023, based on forecasted generation and infrastructure. The projection shows a significant growth in generation and associated infrastructure, as such the projection forecast numbers significantly higher than the 5-year forecast, particularly the final few years. Example data from the forecast and projection are shown below[2].

Charging Bases	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Generation (GW)	75.78	78.00	80.51	99.21	103.29	106.92	117.74	125.70	134.20	138.76	157.86

Generation Tariffs (£/kW)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Average Generation Tariff*	12.454583	12.937121	13.121493	11.303263	12.127407	12.721659	17.856852	20.154059	22.016934	24.394945	26.824238

Workgroup members expressed different views on the levels of the cap and the floor achieved by the Original solution.

Some Workgroup members have advocated for solutions that result in a lower cap for Northern zones. They signalled that the reduction in the tariff under the Original solution is not large enough to deliver the investment required by Clean Power 2030 Action Plan. Other Workgroup members have argued that the threshold of the cap should be set at a level which allows the prevailing forecast to materialise, adjusting for any extremities.

Some members emphasised that Clean Power 2030 Action Plan envisages large investment in Southern zones, too. They cautioned against setting a cap that was too low which could significantly alter the trajectory of credits to Southern zones, and the investment decisions which rely on these.

Workgroup members have also noted that the choice of data and methodology to derive the cap and floor is arbitrary. It was the Workgroup view that the levels proposed were dependent on the interpretation of the policy intent based on the Ofgem Open Letter in conjunction with satisfying the modification Terms of Reference.

[2] The 5-year forecast and 10-year projection can be found on the NESO website: Transmission Network Use of System (TNUoS) Charges | National Energy System Operator

Locational Signal

The Ofgem Open Letter highlighted that "TNUoS charges should send efficient locational, long-run investment signals." Ofgem also outlined that one of the design constraints for the modification is that "it should retain the regional/locational differentials in charges and between technology types."

A Workgroup member suggested that locational signals were less relevant in the context of Clean Power 2030 Action Plan, and NESO's new mandate to undertake strategic spatial system planning.

Ofgem's representative highlighted during Workgroup meeting 5 that the role of locational signals in the context of strategic planning is uncertain and is being discussed with DESNZ colleagues.

Cost reflectivity

The Workgroup discussed what constituted 'appropriate' limits on the cap and floor that should be applied.

One Workgroup member argued that because Ofgem had intervened in the market, then it was reasonable to conclude that the code framework had not or was not capable of delivering an outcome that is aligned with their objectives in relation to delivery of Clean Power 2030 Action Plan. Ofgem did not provide detailed instruction to the Workgroup on what was deemed appropriate and because the Workgroup was being asked to progress an urgent modification, there was insufficient time to discuss what was intended as an 'appropriate' limit to the cap and floor . Therefore, a Workgroup member suggested that the Workgroup should present Ofgem with a broad range of cap and floor proposals to ensure that Ofgem was not limited when making its decision.

Main Themes of Discussion

a. A view was, that even the current levels in the 5 years forecast (Years 1-5) were too high and not cost reflective because of defects in the TNUoS model. This would have the knock-on effect of impacting the commercial arrangement (CfD auctions bids) and ultimately effect on customer bills. A suggestion was to cap at a level below the highest values contained in the 5-year forecast (years 1-5).

b. The second view was that the data assumptions under-pinning the NESO 10-year projection (years 5-10) contain a significant degree of uncertainty based on

forecast generation and infrastructure build. If the outturn build matched the assumption the level of TNUoS was likely to be correct. The projection was based on a set of "bold" assumptions and are indicative of the upper range of TNUoS. If parties assume these are the average (as opposed to a high outlier) this will have a destabilising effect on the generation investment market and a knock-on effect on the commercial arrangement (auction bids) and ultimately effect on customer bills. It's the perception of higher prices that is the issue, therefore it would be right to cap TNUoS such that the levels in the 5-year forecast are allowed to occur but the levels in the 10-year projections are moderated. Thereby capping TNUoS at the levels contained in the forecast.

c. The third view was that TNUoS is a cost reflective signal, and it is right to ensure that all generation is subject to a cost reflective location signal. Fundamentally the further away from the centre of demand generation is located the greater the infrastructure build that is required to connect the generations. Reflecting the incremental cost of investment in the transmission system (TNUoS cost) allows Generators to build this into the business model along with other factors (land cost, wind /solar resource, cost of capital etc) when developing a project. Projects with highest overall cost/benefit will likely have the lowest consumer benefit. The effect of introducing a cap and floor on TNUoS will ultimately increase consumer bills as the locational effect of the siting decision of generation an ultimately the build cost is not reflected correctly back to the Generator.

d. The fourth view related to the effect on the Generator Adjustment Tariff. With the current demand-weighted reference node, the collection from the TNUoS model is effectively capped at €2.5 /MWh. Both the forecast (Year 1-5) and projection (years 6-10) show a significant reduction in the Generator Adjustment Tariff that is applied to all generation to keep the average generation charges within the €2.5/MWh limit. The imposition of a cap that bites will lead to a reduction in the Adjustment Tariff applied to all generation. This has an effect on "uncapped generation zones" where generation that may have been anticipating these negative charges in commercial arrangement (capacity market bids) will have this expected benefit removed.

Terms of Reference (ToR) interaction

The Workgroup discussed interactions between CMP444 and CMP442, it was noted that CMP442 would be added to the interactions for CMP444, but it would be made clear that they are able to proceed separately as agreed by CUSC Panel members.

During discussions it was agreed that ToR (g) should be updated to include consideration of what TNUoS data set should be used for the modification.

It was also agreed to add an additional ToR to consider any additional protection required for Generators who make investment decisions while the cap and floor is in place.

The Terms of Reference were presented to November Panel 2024, and the changes were approved and updated (Annex 2).

Interaction with REMA

The Workgroup noted that to most appropriately devise a method to set a cap and a floor, information on the impact of this modification on CfD prices and the deliverability of Clean Power 2030 Action Plan should be accessible to the Workgroup. The Workgroup called for this information to be shared by DESNZ and Ofgem, but at the conclusion of the Workgroup stage of this code modification such information has not been supplied.

The Ofgem representative re-iterated that the intention behind raising this modification was chiefly to reduce uncertainty ahead of the next CfD Allocation Round. However, Workgroup members noted that, by definition, in order to decrease investment uncertainty this modification cannot work in isolation from REMA and other strands of reform.

Workgroup Consultation Summary

The Workgroup held their Workgroup Consultation between 23 January 2025 – 29 January 2025 and received 25 non-confidential responses and 5 confidential responses. The full non-confidential responses and a summary of those 25 responses can be found Annexes 8 and 9.

The key general points from the Workgroup Consultation responses are summarised below:

- The following numbers of respondents indicated that the Proposer's solution better facilitated the Applicable Objectives than the baseline (from the 25 respondents): 19 for (a), 8 for (b), 4 for (c) , 5 for (d) and 6 for (e), with 4 respondents stating the Proposer's solution didn't better facilitate any of Applicable Objectives than the baseline.
- 17 respondents agreed with the implementation approach, whilst 7 disagreed. Several respondents made mention to the need of an Ofgem decision by Summer

2025, prior to the Contracts for Difference (CfD) Allocation Round 7 (AR7) bidding window, as this would allow for developers to factor the impact of this modification into their auction bids. Concerns were raised about investor confidence and the need for robust evidence and justification for change, despite a speedy process.

- 19 respondents didn't believe the cap and floor should have an end date, whilst 6 believed it should. Some respondents believe that not having a defined end date would provide the most certainty for parties, as defining an exact date or trigger could introduce more uncertainty once the policy direction and implementation approach for REMA has been decided. Others believed that the cap and floor should have an end date, as leaving it open-ended implies it is in place indefinitely, which could send the wrong signal to potential developers.
- There were concerns that legal text with an enduring cap and no end date will not be interpreted as temporary and may have enduring unintended or unexpected implications for grandfathering of locational charges if granted under REMA. Some respondents felt that with no end date, the proposal will apply excessive limitations on location signals that are necessary with the TNUoS charging structure, whilst others supported not having an end date or clause tied to a specific REMA milestone due to uncertainties.
- 12 respondents believed that the Original solution with no specific end date provides developers with sufficient confidence to make an investment decision, whilst 11 disagreed. Some respondents emphasize the necessity of full grandfathering for existing assets and committed investments, ensuring investors can recover expected revenue based on the market structure at the time of investment. By contrast, other respondents believe that a 'grandfathering clause' shouldn't be included in this CUSC modification and suggests that UK policymakers should provide clear signals to investors regarding tapering, grandfathering, or alternatives.
- Concerns were raised about long-term uncertainty regarding charges, which may raise costs for Generators, inflate CfD prices, and hinder investment, jeopardizing the goal of a Clean Power system by 2030.
- 13 respondents agreed with the data set proposed for the calculation of the cap and floor, whilst 9 disagreed. Some respondents disagree with the data set proposed for calculating the cap and floor, suggesting that excluding forecasted large changes in charges triggered by strategically planned network delivery would better meet the objectives of the Ofgem's letter. Some respondents support

the data set used for the cap and floor calculation, emphasizing the importance of avoiding uncertainty regarding large increases in TNUoS charges from network investments.

- There were concerns about whether the 2029/30 data year should be included in the current Original solution, and one respondent supports using actual tariffs for 2025/26 to set the cap and floor.

Concerns raised in the Workgroup Consultation:

- One respondent suggested that until REMA has established a firm view on how locational signals will be incorporated, any temporary solution will fall short of giving developers the full confidence needed for investment decisions.
- Another respondent believed that the current code objectives do not allow for the exclusion of some or all of the network reinforcement that will be required as we progress from now to Net Zero.
- One respondent believed that without decisive action on TNUoS charges, the UK's goal of delivering Clean Power by 2030 is at risk, potentially forcing existing renewable generation in the North to cease operations and hindering ScotWind projects from coming to fruition.
- Another respondent believed that it is not in the remit of the CUSC to consider Clean Power 2030 Action Plan and transitional arrangements for Generators, and the Workgroup has not been supplied with the relevant information about Clean Power 2030 Action Plan from DESNZ or Ofgem.
- One respondent believed that the methodology used to derive the values should be incorporated into the legal text. Does not support the current legal text drafting that hard-codes specific cap and floor values within CUSC and then applies indexation for future years.
- One respondent believed that with the present TNUoS methodology, it is not really possible to achieve actual cost reflectivity, adhere to the EC limiting regulation, preserve locational signals amongst all zones, and keep charges within commercially realistic bounds, given the scale of investment that is anticipated.
- Several respondents considered that cost-reflective locational charges play an important role in ensuring network development is efficient. Suggesting that there is a risk that variants could reduce effective locational signals and lead to the

inefficient siting of generation. The less cost reflective charges become, the more likely it is that network development becomes sub-optimal.

- Another respondent believed that a fixed cap level cannot possibly be cost-reflective if it is written into the code so as to imply perpetuity.
- Several respondents asked for a thorough analysis to provide Workgroup members with necessary data and insights.
- Another respondent suggested that NESO should work with Ofgem and stakeholders to improve the accuracy of TNUoS forecasts, which would significantly improve the current arrangements and give market participants more certainty about their projected TNUoS costs.
- One respondent believed that it is crucial that work proceeds at pace to consider broader reforms to ensure network charges retain the important principle of being cost reflective and that the issue of tariff volatility is addressed.
- Another respondent considered that the majority of the Alternatives fail to address policy defects and there is a misalignment with the outcomes and the Government's aims to deliver Clean Power 2030 Action Plan at the lowest cost.
- One respondent considered that the cap and floor proposal need refinement to address systemic issues and ensure fairness for future projects, as the current approach lacks a complete evaluation of consumer costs and focuses more on process than outcome.

Post Workgroup Consultation Discussion

The Chair noted that one Workgroup Consultation respondent considered that this modification impacts EBR regulations and shared the response with the Workgroup. It was clarified that the Workgroup does not agree and does not believe that this modification impacts EBR regulations and that the proposed changes to the CUSC do not touch the CUSC sections that trigger EBR impacts.

After the review of the Workgroup Consultation responses, the Workgroup felt that further discussion was needed around the cap and floor end date and the additional protections required for Generators who make an investment decision while the cap and floor are in place.

The Workgroup had an in-depth discussion on grandfathering rights and end dates, with various Workgroup members sharing their views. The Ofgem representative shared

clarification of the intent of the Open Letter and the temporary nature of the cap and floor intervention.

A Workgroup member asked what grandfathering means especially in the context of REMA and how it relates to end dates. Another Workgroup member explained that grandfathering refers to legacy arrangements that protect existing projects from future changes, ensuring they stick with the arrangements at the time of financing.

The Workgroup discussed the feasibility of including grandfathering provisions in the CUSC, noting that it may not provide the desired long-term protection due to the potential for future changes under the CUSC or regulatory intervention. It was suggested that any enduring protections would need to come from primary legislation or specific DESNZ or Ofgem's decisions/ secondary legislation. Another Workgroup member agreed, advising that the CUSC can only provide limited comfort and that eligibility criteria for any proposed protection needs to be clear.

A Workgroup member mentioned that grandfathering rights within the CUSC could be seen as discriminatory and that REMA will ultimately supersede current arrangements.

The Workgroup debated the pros and cons of including an end date for the cap and floor. Some Workgroup members, advocated for the inclusion of an end date to mitigate uncertainty. Equally, others stated that an end date without a well-defined replacement could exacerbate uncertainty and result in abrupt changes in charges.
The Ofgem representative clarified that the cap and floor intervention is intended to be temporary, providing guardrails to prevent extreme charges from the 10-year TNUoS projections being used as the basis to assess future charges. Emphasising the need to focus on the locational signal for the next few years to support critical investments.

A Workgroup member noted that several responses to the Workgroup Consultation suggested that the cap and floor should be calculated based on a more up to date generation background. The Proposer had recognised that using the Clean Power 2030 Action Plan background would have been preferable but as the tariff data (April 2024) that was being considered to set the cap and floor was before this information was published it was not possible for this to be carried out in the limited time available.

Some Workgroup members pointed out that the proposed solutions do not accurately address Ofgem's problem statement, which aims to establish guardrails against the extreme tariffs in 2033, especially in Northern GB. In some Workgroup members view, the solutions primarily offer discounts to Northern Generators, leading to a significant cost

recovery burden on other Generators, thereby increasing their costs disproportionately. Additionally, it was noted by some Workgroup members that the modification fails to consider the impact on existing Generators and those with recent CfD contracts, focusing instead on maximising tariff discounts for Generators North of the B6 (Scottish boundary) to encourage new generation thereby disproportionately impacting existing and developing generation across GB. The Proposer disagreed with this statement, with the cap and floor in the Original proposal set at the extremes of the 5-year forecast, thereby acting as an effective guardrail to ensure that the significant escalation of charges in Northern GB signalled in the 10-year projection to do not materialise.

A Workgroup member suggested that existing Generators (including those that have already made a final investment decision) in Northern regions may receive significant financial gains as a result of the cap and floor, whereas those in Southern regions may face a significant financial loss compared to the baseline. Other Workgroup members disagreed with this assertion, as Northern Generators couldn't have foreseen the significant increase in charges in the 10-year projection and therefore would not see a windfall as a result of the cap and floor. Similarly, Generators in Southern GB could not have foreseen the significant escalation in credits from the generation Adjustment Tariff as a result of the 10-year projection, therefore wouldn't experience the significant financial loss asserted above.

Analysis discussion

The Original Proposer presented an updated comparison spreadsheet (Annex 6) showing the impact of the various WACMs on transmission charges, suggesting grouping zones together to simplify the data presentation. Several Workgroup members preferred keeping the data presentation as is, without grouping zones to avoid any misinterpretation.

A Workgroup member emphasized the need for analysis by technology type, particularly for Storage technologies like pump Storage or batteries. The Original Proposer agreed to include this in the analysis.

Another Workgroup member pointed out that some WACMs have zonal elements and suggested clearly showing these differences in the analysis. The Original Proposer agreed to include simplified graphs to highlight these zonal approaches.

The Workgroup agreed to include a comparison of each WACM against the Baseline rather than the Original proposal.

Some Workgroup members stressed the importance of clearly labelling the generation background and baseline assumptions used in the analysis to ensure transparency and understanding. The Proposer confirmed that all analysis had been carried out against the network/generation background included in the 2024 5-year forecast (charging years 2025/26 to 2029/30) and the 2023 10-year projection thereafter (charging years 2030/31 to 2033/34).

A Workgroup member presented to the Workgroup an alternative view on assessing the differentials the cap and floor has against different baselines. A chart was presented that show the range between the maximum and the minimum tariff values over time, with the intent to reflect the strength of locational signals and how they change under each proposal. The Workgroup reviewed and agreed that this would be a useful inclusion in the report.

Potential unintended consequences of a cap and floor

There were conflicting views from Workgroup members. Some Workgroup members highlighted that setting a low cap risks sending a distorted signal that could lead to greater generation investment in northern GB than is in the consumer interest.

Some Workgroup members felt that this is particularly the case if it leads to a displacement of other generation investments, and as a result incur greater curtailment and infrastructure investment costs on consumers. Some Workgroup members also cautioned that an accompanying high floor risks reducing the attractiveness for new investments elsewhere in GB, which includes the life extension or repowering of existing assets needed to reach Clean Power 2030 Action Plan. Other Workgroup members don't agree with this statement due to the lack of analysis.

The Workgroup discussed the potential impact of the cap and floor on the unrestricted tariffs (the underlying TNUoS signal without a cap and floor) compared to the baseline, and the potential unintended economic consequences of the cap and floor. Some Workgroup members believe that the potential impact on unrestricted TNUoS tariffs would need to be balanced against wider Government policy intent (CfD auction costs, Clean Power 2030 Action Plan and UK's ability to meet net zero), where other Workgroup members disagreed and have concerns with regards to Article 18 of the Electricity Regulation.

Three views became apparent:

a) The first view was that the impact could be limited dependent on the duration of the temporary arrangements. The cap and floor are designed to be a temporary

intervention whilst industry considered wider TNUoS reforms. The need and effect of the intervention would be limited once the revised industry charging arrangements are in place.

b) The second view was that if a cap was set at a level at which it became effective over a number of generation zones it could significantly dilute the locational signal. This reduced locational signal would then be reflected in commercial arrangements resulting in an increased number of successful projects (whether CfD supported or otherwise) in areas that have high network build cost. These projects would be insulated from the real physical network cost due to the effect of the cap. Costs would be borne by other Generators where these breached the limiting regulation (the requirement to ensure average transmission charges don't exceed the range of €0-2.5/MWh). Therefore, the effect of a cap considered in isolation may lead to higher unrestricted TNUoS tariffs than would otherwise be expected.

c) The third view was similar to b) above but included the moderating interaction associated with the connection reform program. Whilst capped and floored TNUoS would reduce locational TNUoS differentials, this would be unlikely to cause unrestricted TNUoS to rise to the level of the projection, as the new connection arrangements would effectively reorder the project queue. This reordering would effectively change (delay or bring forward) projects connections dates based on the revised criteria in the connection arrangements that includes plant type, location, readiness to connect and strategic network build plans, amongst other considerations.

The Workgroup felt it was important to share the above reflections and concerns in this report.

Consideration of other options

Following the Workgroup Consultation, a number of Alternative Requests were submitted by Workgroup members to add to the 7 Alternative Requests raised before the Workgroup Consultation was published. In Workgroup 8, Workgroup members voted on the Alternative requests and by majority Alternative 1, Alternative 6 and Alternative 14 were voted in as WACM1, WACM2 and WACM3 respectively.

Considering the Workgroup discussions, the feedback from the Workgroup Consultation and the feedback from the Authority (around impact assessment and having enough options to consider), the Chair evaluated each Alternative request and considered that

Alternative 2, Alternative 7, Alternative 8 and Alternative 10 may better facilitate the CUSC Applicable Objectives than the Original Proposal. The Chair decided to save those four Alternatives, and they have become WACM 4, WACM5, WACM6 and WACM7 respectively.

The table below provides an overview of each Alternative Request along with its status as to whether it was (a) withdrawn, (b) was voted upon by the Workgroup with those that received a majority support (of those Workgroup members eligible to vote) proceeding forward as a formal 'WACM' with those that failed to obtain majority support not proceeding forward (and thus not becoming a WACM) or (c) those that were considered and saved by the Chair. All Alternative requests forms submitted to the Workgroup can be found in Annex 5.

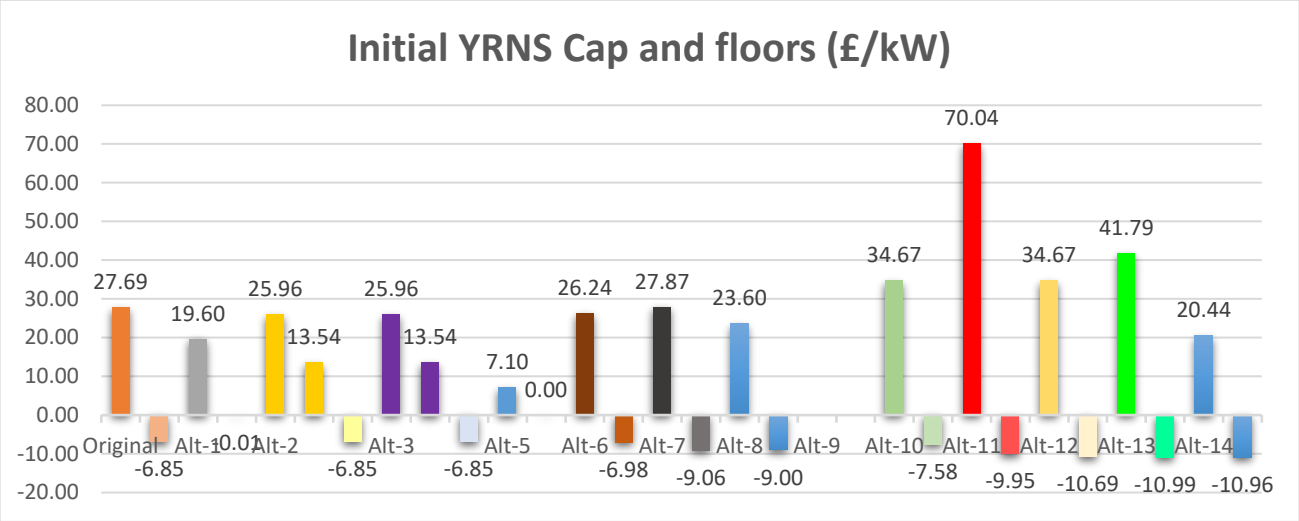
Original and Alternative requests	Rationale	Cap and Floor	Recovery of breached cap and floor charges	Data used to derive Cap and Floor	Statistical methodology to derive the Cap and Floor values	Implementation Date	Status
Original	Sets the cap and floor at the limits of the 5-year forecast, thereby stopping charges in the 10-year projection from out-turning	Single GB wide	Via the Generation Adjustment tariff	5-year NESO forecast (2024/25 to 2029/30) (published April 2024)	97.5th and 2.5th percentiles	1st April 2026	N/A
Alternative 1	Intends to address what the proposer believes is an ineffective floor in the Original proposal, by setting more stringent cap and floors levels	Single GB wide	Via the Generation Adjustment tariff	Same as original	90th and 10th percentiles	1st April 2026	Voted in by the Workgroup as **WACM1**
Alternative 2	Allows for locational signals to be better maintained	Two-tier	Via the Generation Adjustment tariff	Same as original	1 standard deviation	The decision date is far more important than the actual implementation.	Saved by the Chair as **WACM4**
Alternative 3	As Alternative 2 but does not redistribute risk to generators	Two-tier	Option to recover from demand residual	Same as original	1 standard deviation	The modification is not required to be implemented for a number of years, but the decision date needs to be in time to be taken into account in future auctions.	Not voted through
Alternative 4	Applies policy principles to derive an	Single GB wide	Via the Generation	Same as original	0.1 standard deviations above and below the	1st April 2026	Withdrawn

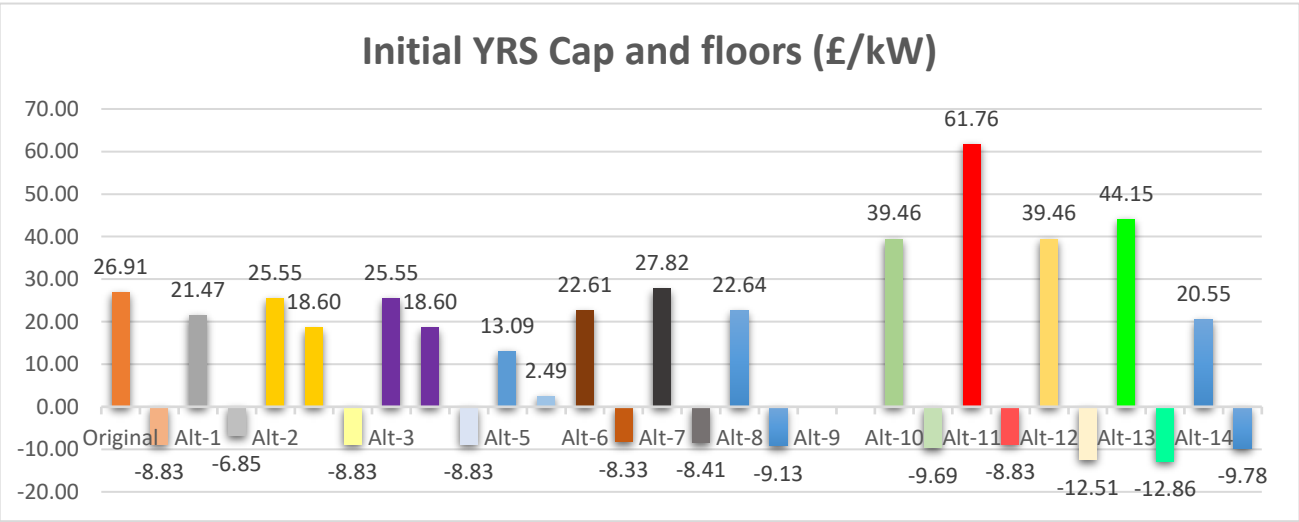
	appropriate level of cap & floor		Adjustment tariff		mean of the 5-year forecast		
Alternative 5	Applies policy principles to derive an appropriate level of cap & floor	Single GB wide	Via the Generation Adjustment tariff	Same as original	60th and 40th percentiles	1st April 2026	Not voted through
Alternative 6	Excludes data from 2029/30 year which has significant network investment modelled	Single GB wide	Via the Generation Adjustment tariff	4-year NESO forecast (2024/25 to 2028/29) (published April 2024)	Same as original	1st April 2026	Voted in by the Workgroup as **WACM2**
Alternative 7	A different approach to applying the cap and floor, by scaling charges in all zones to better retain the locational signals	Single GB wide	Via the Generation Adjustment tariff	4-year NESO forecast (2024/25 to 2028/29) (published April 2024	Uses the maximum value and range for each tariff component	1st April 2026	Saved By the Chair as **WACM5**
Alternative 8	Same as the original, but combines data from out-turn tariffs with forecast	Single GB wide	Via the Generation Adjustment tariff	2-years of Final Tariffs (2023/24 to 2024/25), combined with 3-years of NESO forecast (2025/26 to 2027/28)	Same as Original	1st April 2026	Saved by the Chair **as WACM6**

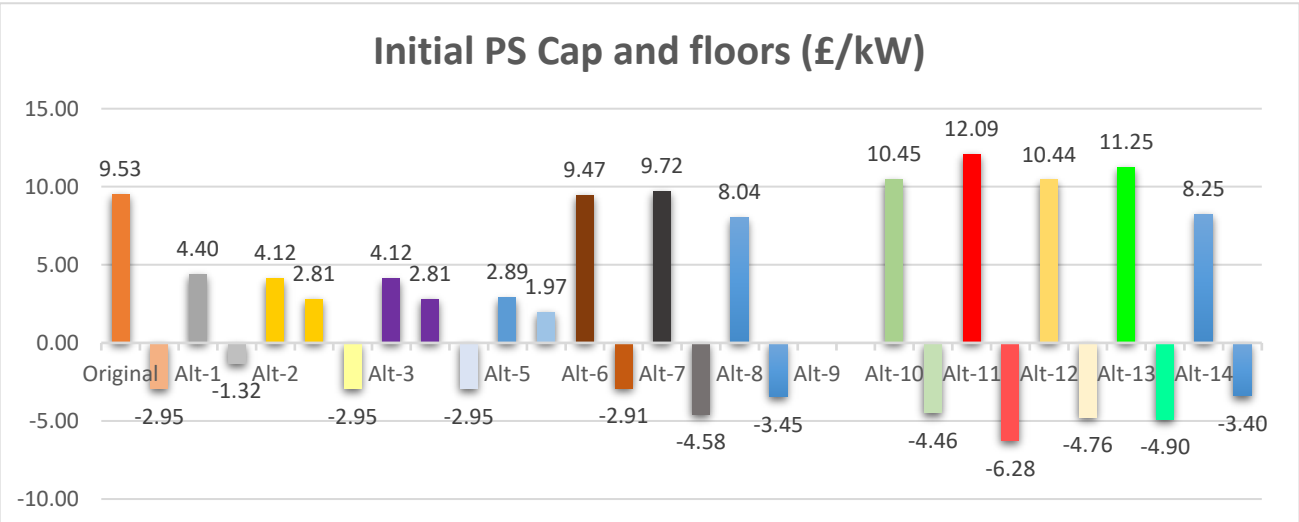
Alternative 9	Removal of ASTI works from tariff model	Single GB wide	Via the Generation Adjustment tariff	Final Tariffs for 2024/25 charging year	Sets the cap and floor at the maximum and minimum value for each component from the 2024/25 Final Tariffs	1st April 2026	Not voted through
Alternative 10	Sets the cap and floor at 2029/30 forecast levels	Single GB wide	Via the Generation Adjustment tariff	Final year of NESO 5-year forecast, published in April 2024	Sets the cap and floor at the maximum and minimum value for each component from the 2029/30 forecast year	1st April 2026	Saved by the Chair as **WACM7**
Alternative 11	Sets the cap and floor at 2030/31 forecast levels	Single GB wide	Via the Generation Adjustment tariff	Final year of NESO 5-year forecast, expected to be published in August 2025	Sets the cap and floor at the maximum and minimum value for each component from the 2029/30 forecast year	1st April 2026	Not voted through
Alternative 12	Phase in planned network reinforcement	Single GB wide	Via the Generation Adjustment tariff	2024 5-year forecast	Sets the cap and floor at the maximum and minimum value from the 2024 5-year forecast. The cap increases each year to phase in the impact of planned network reinforcement	1st April 2029	Not voted through
Alternative 13	Phase in planned network reinforcement	Single GB wide	Via the Generation Adjustment tariff	2025 5-year forecast, expected to be published in August 2025	Sets the cap and floor at the maximum and minimum value from the 2025 5-year forecast. The cap increases each year to phase in the	1st April 2030	Not voted through

					impact of planned network reinforcement		
Alternative 14	Sets the cap and floor at 2025/26 levels	Single GB wide	Via the Generation Adjustment tariff	Final Tariffs for 2025/26 charging year	Sets the cap and floor at the maximum and minimum value for each component from the 2025/26 Final Tariffs	1st April 2026	Voted by the Workgroup as **WACM3**

Annex 7 shows the comparison of the cap and floor levels (Original and Alternative Requests)







WACM Discussions

The Workgroup reviewed the legal text for all WACMs and the Original Solution, with the Proposers agreeing to consider the discussions around end date and grandfathering rights for each solution. After consideration, none of the Proposers decided to include the above provisions in their solutions.

WACM3: Cap and floor set using actual tariff values

This solution is proposing to calculate the cap and floor based on the prevailing outturn tariff values published by NESO. At the time of writing the proposal, the values from the final tariff publication 2024/25 were the most up to date.

During the presentation of the proposal in Workgroup meeting 7 it was highlighted by Workgroup members that a more up to date set of values were now available. The most recent outturn tariffs were published by NESO on 31 January 2025 in the 'Final TNUoS Tariffs for 2025/26' publication.

Therefore, based on the feedback from the Workgroup members , the WACM3 Proposer suggested to update the figures used to determine the cap and floor to the most up to date actual tariffs.

There is an overall increase in spread of tariffs from 2024/25 to 2025/26, having an impact on the calculated cap & floor values as shown in the tables below:

2024/25 Tariffs	System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff
	(£/kW)	(£/kW)	(£/kW)
Cap	8.25	20.55	20.44
Floor	-3.40	-9.78	-10.96

2025/26 Tariffs	System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff
	(£/kW)	(£/kW)	(£/kW)
Cap	7.75	23.98	21.39
Floor	-6.61	-12.52	-10.18

All Workgroup members agreed that this change does not alter their original voting position and is aligned with the original intent of the Alternative Proposal.

WACM5 – Scaling factor to all tariffs

When reviewing the legal text for WACM5, a Workgroup member expressed a concern about the potential impact if a specific zone that isn't the highest in the dataset used to derive the range breaches the cap and floor. WACM5 Proposer addressed this by explaining that the assessment in a given year will take account of the highest and lowest zones in that year when applying the scaling factors, rather than being tied to specific zones.

Another Workgroup member raised concerns about the predictability of the tariffs under WACM5, given the additional scaling factors. WACM5 Proposer acknowledged that while WACM5 is marginally more complex, it retains locational differentials between zones in Northern GB, unlike the other WACMs that flatline the tariffs.

One Workgroup member noted that the WACMs were developed recognising Ofgem's request to ensure they should not be overly complex, which was a contributory factor for the rejection of CMP413. The Proposer is comfortable that while there is additional complexity to WACM5, it is still less complex than the CMP413 solution.

In Workgroup meeting 11, WACM 5 Proposer presented the Workgroup with examples explaining the process of preserving locational signals through the WACM5 solution and provided the Workgroup with examples of how the scaling factor and cap adjustment are applied to maintain location signals.

WACM5 Proposer explained that the scaling factor is applied to bring the tariff range back to the defined maximum and that this involves multiplying every zonal tariff by the scaling factor to ensure the actual tariff range equals the maximum tariff range.

A Workgroup member asked about the derivation of the maximum tariff range and its adjustment for inflation. WACM5 Proposer confirmed the use of CPI-H inflation, as per the Original solution, and explained the rationale behind using the first four years of the forecast.

A Workgroup member questioned how the missing revenue due to the intervention is collected, which the WACM5 Proposer clarified would be managed the same as with the other proposals, through the generation Adjustment Tariff and confirmed there would be no impact on the Transmission Demand Residual.

Another Workgroup member highlighted the lack of an explicit floor in WACM5 and questioned its compatibility with CMP432. WACM5 Proposer explained that the floor is implicit by applying a cap and the maximum tariff range, with the scaling only applied if the tariff ranges exceeded the defined maximum.

A Workgroup member supported the inclusion of WACM5 as an option, emphasizing its value in maintaining locational signals and cost reflectivity. Another Workgroup member questioned the relevance of maintaining locational signals in the context of broader reforms like REMA and zonal pricing. The Ofgem's representative clarified the Ofgem's goal is to balance locational signals without nullifying them, ensuring they remain efficient and do not create obstacles to necessary infrastructures, mentioning the need for a temporary measure until a more enduring solution is found.

A Workgroup member pointed out that the current locational signals are not delivering the required network for 2030, and the focus should be on providing the right signals for future investment. Another Workgroup member argued that the current locational signals are effective, as evidenced by the high charges deterring investment in North Scotland. The Ofgem's representative reiterated the importance of maintaining a balance between locational signals and strategic planning, acknowledging the difficulty in objectively assessing the appropriate level of signals

WACM 7 – Cap set at the maximum value from the 2029/30 tariffs and the floor set at the minimum value from the 2029/30 tariffs

When reviewing the legal text for WACM7, WACM7 Proposer suggested considering eligibility criteria to prevent potential gaming of the system by projects that might not have been viable without the cap. Some Workgroup members pointed out that the Original proposal does not include eligibility criteria, and the intervention applies to all new and existing generation that use the transmission system in a given charging year. The Original Proposer clarified that the process would work the same as it does currently, with adjustments applied at tariff setting.

Legal text

The legal text for this change can be found in Annex 4.

What is the impact of this change?

Proposer's assessment against CUSC Charging Objectives	
Relevant Objective	Identified impact
(a) 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;	Positive This change would facilitate enhanced competition in generation, by decreasing uncertainty for projects, allowing them to proceed at competitive costs, whether CfD-supported or not
(b) 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);	Neutral The change is structured so that cost-reflective locational signals are largely preserved, though slightly blunted should the caps and/or floors be hit
(c) 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*;	Neutral No relevant developments apply
(d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and	Neutral Compliance with EC 838/2010 is maintained through the generation adjustment tariff. The chosen solution avoids undue discrimination between technology types, which EC 2019/943 prohibits.
(e) Promoting efficiency in the implementation and administration of the system charging methodology.	Neutral Tariff setting process ahead of each charging year is only made a little more complicated than baseline. The extra

	complexity and work are at this stage believed to be modest.
* See Electricity System Operator Licence	
**The Electricity Regulation referred to in objective (d) 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.	

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories	
Stakeholder / consumer benefit categories	Identified impact
Improved safety and reliability of the system	Neutral The change is neutral, though given that most new developments are zero carbon (nuclear or renewables, plus facilitating storage), we contend that by allowing developers to proceed undeterred by excess TNUoS uncertainty the impact/risk of catastrophic and irreversible climate change is ameliorated/mitigated; this should enhance security of supply.
Lower bills than would otherwise be the case	Positive By allowing developers of storage and generation to proceed undeterred by excess TNUoS uncertainty, with a lower risk premium in relation to TNUoS (whether CFD supported generation or not), the cost passed through to consumers through wholesale and balancing costs should reduce. Recovery of any revenue shortfall due to the cap/floor through the generator adjustment tariff will reduce the non-cost reflective credits to generators, thereby reducing the burden this place on the TDR (Transmission Demand Residual) standing charges
Benefits for society as a whole	Positive

	By allowing developers to proceed undeterred by excess TNUoS uncertainty, given that most new developments are zero carbon (nuclear or renewables, plus facilitating storage), we contend that the impact/risk of catastrophic and irreversible climate is ameliorated/mitigated; this would benefit society as a whole.
Reduced environmental damage	Positive By allowing developers to proceed undeterred by excess TNUoS uncertainty, given that most new developments are zero carbon (nuclear or renewables, plus facilitating storage), we contend that the impact/risk of catastrophic and irreversible climate is ameliorated/mitigated; this would reduce environmental damage.
Improved quality of service	Neutral

Workgroup Vote

The Workgroup met on 25 February 2025 to carry out their workgroup vote. The full Workgroup vote can be found in Annex 10. The table below provides a summary of the Workgroup members view on the best option to implement this change.

The Applicable CUSC (charging) Objectives are:

a) 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;
b) 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);
c) 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*;
d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and
e) To promote efficiency in the implementation and administration of the system charging methodology

* See Electricity System Operator Licence

**The Electricity Regulation referred to in objective (d) 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.

The Workgroup concluded by majority that the Original and WACM1, WACM2, WACM3 and WACM6 better facilitated the Applicable Objectives than the Baseline.

Option	Number of voters that voted this option as better than the Baseline (Out of 19)
Original	12
WACM1	12
WACM2	13
WACM3	12
WACM4	8
WACM5	3
WACM6	12
WACM7	6

Code Administrator Consultation Summary

The Code Administrator Consultation was issued on the 10 March 2025 closed on 14 March 2025 and received 27 non-confidential responses and 2 confidential responses. A summary of the non-confidential responses can be found in the table below, and the full responses can be found in Annex 13.

Code Administrator Consultation Summary
Question
Please provide your assessment for the proposed solutions against the Applicable Objectives? Mark the Objectives which you believe the proposed solutions better facilitates:
The following number of respondents noted that the Original, WACM1, WACM2, WACM3, WACM4, WACM5, WAMC6 and WACM7 better facilitated the CUSC charging objectives:

Proposed Solution	**a)**	**b)**	**c)**	**d)**	**e)**
Original	15	5	2	1	5
WACM1	18	7	5	1	8
WACM2	18	7	3	1	6
WACM3	18	7	2	1	6
WACM4	12	4	2	1	2
WACM5	5	3	2	1	1
WACM6	17	7	3	2	6
WACM7	9	3	2	1	3

Of the 27 respondent the following did not believe that the proposed solutions better facilitated any of the Applicable Objectives:

11 Original; 9 for WACM1; 9 for WACM2; 9 for WACM3; 14 for WACM4; 20 for WACM5; 9 for WACM6 and 15 for WACM7.

When asked for their preferred solution, the majority of the respondents stated WACM1 (15 respondents), 4 respondents supported WACM7, the baseline was supported by 2 respondents. WACM3, WACM4 and WACM5 were supported by 1 respondent respectively, the Original solution, WACM2 and WACM6 had no support. 2 respondents had no preference, and 1 respondent did not provide an answer.

Do you support the proposed implementation approach?

21 respondents supported the proposed implementation approach, while 3 did not support it and 3 did not provide a response.

The respondents were generally supportive of the implementation approach, with several respondents mentioning the need for Authority decision ahead of the AR7 window.

1 respondent supported the proposed implementation approach and suggested a review of progress to assess viability with successful implementation over timescales being the priority.

Do you have any other comments?

Support for WACM1:

- For those supporting WACM1, it was seen as the best solution for addressing the defect, due to its statistical method and effective cap and floor.
- The views were that WACM1 improves the Original solution by establishing a floor and narrowing the thresholds through a deciles approach. It sets appropriate individual upper and lower limits, retains regional and locational differences in charges, maintains compliance with Generator annual average transmission charges, and can be implemented without NESO needing to change its TNUoS forecasting approach or timetable.

Impact on Consumers and Generators

- Some respondents expressed concerns with how high charges in the North could hinder Clean Power 2030 Action Plan goals despite the cap and floor implementation.
- Some responses stated that the credits for Southern Generators increase consumer costs and disadvantage Northern Generators in the CfD auctions, also the Generation Adjustment Tariff poses an unforecastable risk to all Generators, complicating accurate cost calculations for CfD bids.

Reforms and Predictability

- There was a recognition by some respondents that reforms will improve predictability for investors while minimising distortion to other Users.
- The need for reforms were emphasised, to provide necessary predictability to investors, have a proportionate impact on other Users, and not materially affect locational signals or be discriminatory.

Cap and Floor Mechanism

- Some respondents view was that the cap and floor mechanism is necessary to protect the interests of current and future UK consumers, and to meet Clean Power 2030 Action Plan targets.
- It was suggested that the cap and floor mechanism could mitigate inefficient locational signals projected by TNUoS.

Long-term Certainty and Investment

- Respondents emphasised the importance of long-term certainty for securing necessary investment to meet targets outlined in Clean Power 2030 Action Plan.
- It was suggested that a temporary fix without appropriate assurances would not provide the long-term certainty needed for investment.

Impact on Market and Competition

- A number of respondents suggested that some CMP444 alternatives might hinder Northern projects from getting a CfD, reducing competition or increasing prices, which benefit Southern Generators.
- A respondent also highlighted the risk of 'cannibalisation,' where new projects might increase TNUoS costs and undermine existing developments.

Legal text issues raised in the consultation
No legal text issues were raised
EBR issues raised in the consultation
No EBR issues were raised

Public

Panel Recommendation vote

The Panel will meet on the 28 March 2025 to carry out their recommendation vote.

They will assess whether a change should be made to the CUSC by assessing the proposed change and any alternatives against the Applicable Objectives.

When will this change take place?

Implementation date

1 April 2026

Date decision required by

Summer 2025, to allow developers to factor in the impact of the change ahead of the likely CfD AR7 bid submission window.

Implementation approach

Will require minor changes to NESO TNUoS tariff setting process to apply the cap/floor to necessary tariff components in the DCLF (Direct Current Load Flow) ICRP (Investment Cost Related Pricing) Transport & Tariff Model.

Interactions

☐Grid Code	☐BSC	☐STC	☐SQSS
☐European Network Codes	☐ EBR Article 18 T&Cs[3]	☐Other modifications	☐Other

There are no interactions with other in flight modifications in terms of implementation as the single GB cap/floor allows for changes to the underlying methodology to calculate the wider charge, however modifications that impact the level of TNUoS charges, such as CMP423 (Generation Weighted Reference Node) or CMP315 (TNUoS: Review of the

[3] If the modification has an impact on Article 18 T&Cs, it will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

expansion constant and the elements of the transmission system charged for)/CMP375 (Enduring Expansion Constant and Expansion.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CfD	Contracts for Difference
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
DCLF	Direct Current Load Flow
EBR	Electricity Balancing Regulation
ICRP	Investment Cost Related Pricing
NESO	National Energy System Operator
Ofgem	Office of Gas and Electricity Markets
PS	Peak Security
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions
TDR	Transmission Demand Residual
TEC	Transmission Entry Capacity
TNUoS	Transmission Network Use of System
WACM	Workgroup Alternative CUSC Modification
YRNS	Year-round not shared
YRS	Year-round shared

Reference material

- https://www.ofgem.gov.uk/sites/default/files/2024-09/Open_letter_TNUoS_intervention_vF_Publications.pdf
- https://www.neso.energy/industry-information/codes/cusc/modifications/cmp419-generation-zoning-methodology-review
- https://www.neso.energy/document/317561/download

Annexes

Annex	Information
Annex 1	CMP444 Proposal form
Annex 2	CMP444 Terms of reference
Annex 3	CMP444 Urgency letters
Annex 4	CMP444 Original and WACMs Legal Text
Annex 5	CMP444 WACM and Alternative Request Forms
Annex 6	CMP444 Original and WACMs Comparison Spreadsheet
Annex 7	CMP444 Alternative Requests Comparison Spreadsheet
Annex 8	CMP444 Workgroup Consultation Responses (non-confidential)
Annex 9	CMP444 Workgroup Consultation Responses Summary
Annex 10	CMP444 Alternate and Workgroup Vote
Annex 11	CMP444 Action Log
Annex 12	CMP444 Workgroup Attendance Record
Annex 13	CMP444 Code Administrator Consultation Responses (non-confidential)
Annex 14	CMP444 Code Administrator Consultation Responses summary