

Public

CUSC Modification Proposal Form

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



Status summary: The Proposer has raised a modification and is seeking a decision from the Panel on the governance route to be taken.

This modification is expected to have a: High impact

Generators, Storage operators, NESO, Consumers

Proposer's recommendation of 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 Niall.coyle@nationalenergyso.com	Code Administrator Contact: Code Admin Cusc.team@nationalenergyso.com
--	---	--

Public

Contents

What is the issue?	3
Why change?	4
What is the proposer's solution?	4
Draft legal text.....	5
What is the impact of this change?	6
Proposer's assessment against CUSC Charging Objectives	6
Proposer's assessment of the impact of the modification	7
When will this change take place?	8
Implementation date.....	8
Date decision required by	8
Implementation approach	9
Proposer's justification for governance route.....	9
Interactions	9
Reference material.....	11

Public

What is the issue?

On 30 September 2024 Ofgem published an open letter¹ outlining their concerns around the uncertainty of long term TNUoS (Transmission Network Use of System) charges, and the risks posed by TNUoS volatility to HM Government's ambition of achieving a clean power system by 2030. That letter asks NESO to raise this modification.

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 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 workgroup; the proposer of each change contends that it would improve the locational signals sent to the market through TNUoS. The intervention necessary to reduce uncertainty for generators through

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

Public

a cap 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 element, and not a zonal cap, it is independent of the method used to define generation charging zones, which may be updated (via [CMP419](#) (Generation Zoning Methodology Review), if approved); it would still function as intended independent of a change to the zones. This change will provide more certainty to generators ahead of potential changes to energy pricing that could come in under REMA, under which electricity market arrangements are being reviewed by Ofgem and DESNZ.

For the avoidance of doubt, the intended scope of this modification is limited to the parameters stated above in Ofgem's open letter, by only considering options for a single GB cap/floor to each element 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 this modification to address the issues outlined above and deliver the stated benefits.

What is the proposer's solution?

Apply a single £/kW cap and floor for the whole of GB to each of the Year Round Shared, Year Round Not Shared and 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 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

Public

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.

Draft legal text

To be agreed/developed with Workgroup.

Public

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 C26 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;	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

Public

	technology types, which EC 2019/943 prohibits.
(e) Promoting efficiency in the implementation and administration of the system charging methodology.	<p>Neutral</p> <p>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.</p>
<p>**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.</p>	

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	<p>Neutral</p> <p>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.</p>
Lower bills than would otherwise be the case	<p>Positive</p> <p>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</p>

Public

	<p>passed through to consumers through wholesale and balancing costs should reduce.</p> <p>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 places on the TDR (Transmission Demand Residual) standing charges</p>
Benefits for society as a whole	<p>Positive</p> <p>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.</p>
Reduced environmental damage	<p>Positive</p> <p>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.</p>
Improved quality of service	<p>Neutral</p>

When will this change take place?

Implementation date

1 April 2026

Date decision required by

Public

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.

Proposer's justification for governance route

Governance route: We request this be processed as an Urgent modification, to proceed under a timetable agreed by the Authority (with an Authority decision), needing a workgroup to be established.

The request for urgency is because the proposal would address a current issue that if not urgently addressed may cause a significant commercial impact on parties, consumers or other stakeholder (especially generation and storage developers). The projected escalating TNUoS costs for generation in the north of GB risks driving up consumer costs via increased CfD 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 goals at risk.

Interactions

<input type="checkbox"/> Grid Code	<input type="checkbox"/> BSC	<input type="checkbox"/> STC	<input type="checkbox"/> SQSS
<input type="checkbox"/> European	<input type="checkbox"/> EBR Article 18	<input type="checkbox"/> Other	<input type="checkbox"/> Other
Network Codes	T&Cs ¹	modifications	

There are no interactions with other in flight mods 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 expansion constant and the elements of the transmission system charged for)/[CMP375](#) (Enduring Expansion Constant and Expansion

Public

Factor Review), could lead to the cap/floor being breached more or less frequently.

Public

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
PS	Peak Security
STC	System Operator Transmission Owner Code
SQSS	Security and Quality of Supply Standards
TDR	Transmission Demand Residual
TNUoS	Transmission Network Use of System
T&Cs	Terms and Conditions
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>