

# **CUSC Modification Proposal Form**

# CMP458: Prorating of transmission residual demand charges

**Overview**: This proposal seeks to change the way Demand Residual is billed and enable customers that consume for part of a year to pay demand residual charges for only that part.

# Modification process & timetable

Proposal Form 07 August 2025

**Workgroup Consultation** 

09 September 2025 - 12 September

Workgroup Report

03 October 2025

Code Administrator Consultation

03 October 2025 - 07 October 2025

Draft Final Modification Report

09 October 2025

Final Modification Report 15 October 2025

Implementation

01 April 2026

**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: Low impact

Making customers' charges cost reflective should have little impact on other stakeholders. The new customer being encouraged to use the system, when ready, still lowers the charges for other Users (assuming there is a net increase in customers on the system).

Retrospection may change the bills for some suppliers where new customers have connected within 2025. There is also an impact on NESO in having to reconcile the residual charges for new sites for the charging year 2025.

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:  Alistair Collins  alistair@jgpears.com  07838 120599	Code Administrator Contact:  Catia Gomes  Catia.gomes@neso.energy



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NESO
National Energy
System Operator

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### What is the issue?

Currently, when a new site connects or a site changes from being generation to demand, the Transmission Owner (TO) demand charges are levied for a whole year. While the charges associated with the triad are derived from actual usage, the demand residual charges are fixed for a year based on the connection capacity. The Proposer considers that the residual charge, which is already calculated on a daily basis, should be pro-rated where a customer is only consuming for part of the year.

Once connected or classified as demand (not generation) the site would go on paying charges in future years. This only changes the charges in their first year.

### Why change?

It is not cost reflective to charge a customer for a whole year when that customer is only consuming the total system for part of the year.

In the case of the Proposer's site, the Proposer will have been paying generation charges, then when the Proposer becomes a demand site, will pay double for some of the months. It is neither fair, nor cost reflective that charges are levied by NESO for periods of time when the site is not using the network (as it has yet to connect) or has changed its use of the network from generation to demand.

Where customers are very large Users, these TNUoS charges are millions of pounds. A chemicals company are able to spread the cost over their production all year. This will be at a significant advantage, in their own market, over a site who is paying the same charge, but only producing their own product, i.e. 2 months of the electricity year. The structure of the charges is therefore distorting competition in industrial markets, which contradicts the Government's industrial strategy<sup>1</sup> that looks to enhance the competitive position of British industry.

The structure of the charges is also unlike other costs of production that businesses face. Customers are not charged for energy that they do not use, telecoms they are not connected to, nor feedstocks, etc. just for what they do

<sup>1</sup> https://www.gov.uk/government/publications/industrial-strategy





use. The "pay all year" approach, given the scale of the charges, is making businesses consider delaying commissioning new plant to the start of the electricity year. This could see a delay in commissioning new hydrogen production, new green steel production, etc. Again, this is not in the interests of UK plc.

While this modification is being raised due to the Proposer's commercial issues, as appoint of principle, and in line with Ofgem's recently announced Energy Systems Cost Allocation and Recovery Review<sup>2</sup>, we believe that customers should only start to pay the demand charges when they start to use the system as a customer.

### What is the Proposer's solution?

Transmission Network Use of System (TNUoS) Demand residual charges should be pro-rated. The daily charge should only be applied for the days in which a customer is connected to the system or importing if it was previously a generation site. This new way of charging would start retrospectively on 1 April 2025.

### <u>Draft legal text</u>

Legal text to be developed by the Workgroup.

# What is the impact of this change?

The Proposer sees little impact of this change except on the directly impacted sites. Most customers are consuming/connected for a whole year. This proposal is only focussed on customers that consume/connect for part of a year.

The impact on the Proposer's site of paying charges that have not incurred will be c£6m above what is believed should be paid. On a first of a kind project, this is a material impact when deciding when to commission the plant.

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<sup>&</sup>lt;sup>2</sup> https://www.ofgem.gov.uk/call-for-input/energy-system-cost-allocation-and-recovery-review



Proposer's assessment against CUSC Charging Objectives _		
Relevant Objective	Identified impact	
(d) That compliance with the use of system charging	Positive	
methodology facilitates effective competition in the	Charging customers for	
generation and supply of electricity and (so far as is	the use of the system,	
consistent therewith) facilitates competition in the	and no more, will ensure	
sale, distribution and purchase of electricity;	effective competition	
	between customers.	
(e) That compliance with the use of system charging	Positive	
methodology results in charges which reflect, as far	It is clearly more cost	
as is reasonably practicable, the costs (excluding any	reflective to only charge	
payments between transmission licensees which are	customers for the use of	
made under and accordance with the STC) incurred	the system when they	
by transmission licensees in their transmission	are connected to it and	
businesses and which are compatible with standard	using it. The current	
licence condition C11 requirements of a connect and	annual charging system	
manage connection);	results in customers	
	being charged for use of	
	the system when they	
	are not using the	
	system.	
	Further customers who	
	had been generation	
	sites before adding	
	demand to their site will	
	find they have paid	
	twice for the use of the	
	system.	

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For some customers, they could be charged for a whole year and yet only have been connected to and using the system for one day. Such a regime, as well as not being cost reflective, sends perverse signals about when to connect. This could potentially delay developments across the economy. This goes against all the Government's Industrial Strategy it is trying to achieve.

(f) That, so far as is consistent with sub-paragraphs
(a) and (b), the use of system charging
methodology, as far as is reasonably practicable,
properly takes account of the developments in
transmission licensees' transmission businesses and
the ISOP business\*;

### **Positive**

Charging cost reflective charges does reflect developments in the licensees businesses. It would also help to encourage earlier connection for projects that could lower the costs of managing the TOs' networks. For example, adding data



	centres behind
	constraints to use
	excess renewables.
(g) Compliance with the Electricity Regulation and	Neutral
any relevant legally binding decision of the European	
Commission and/or the Agency **; and	
(h) Promoting efficiency in the implementation and	Neutral
administration of the system charging methodology.	

<sup>\*</sup> See Electricity System Operator Licence

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories		
Stakeholder / consumer benefit categories	Identified impact	
Improved safety and	Positive	
reliability of the system	The system is currently less stable than it might be with increasing volumes of intermittent generation, as evidenced by the pathfinder projects. Having more demand on the system will, in the longer term, help with system security and management of increasing renewable output.	
	This is a Hydrogen Allocation Round (HARI) project which will ultimately help to lower the carbon emissions from synchronous plant allowing more of it	

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



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	to run, with higher load factors, adding to system stability.
Lower bills than would	Positive
otherwise be the case	It will lower the bills of new demand, at a time
	when the government wants to add new
	demand to the system (see Flexibility Roadmap)
	by addressing the supply demand balance. For
	current Users, their bills will also reduce as
	revenue is spread over more customers in the
	charging year. However, that does depend on
	the allowed revenue and the total bill payers on
	the system.
Benefits for society as a	Positive
whole	Connecting customers when they are ready will
	add to economic growth, creating jobs and
	wealth. In the Proposer's case, this is a HAR1
	hydrogen project, a first of a kind and designed
	to be a world leader. The ability of the UK to
	capitalise on its commitment to climate change
	and combating industries will benefit GB plc. In
	the longer term, hydrogen could be a significant
	feedstock for the UK's generation and industrial
	customers. This would be a quantum leap away
	from the reliance on international and volatile
	gas markets to the benefit of all GB energy
	customers.
Reduced environmental	Positive
damage	We have significant volumes of demand that the
	government want to encourage to the UK
	including hydrogen, data centres, green
	chemicals production, etc. Encouraging these

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service	
Improved quality of	Neutral
	but not all will benefit from that.
	industries a discount on their network charges,
	Industries (EII) scheme does give some
	We recognise that the Energy Intensive
	of benefit to the global environment.
	industries with cost reflective charges would be

### When will this change take place?

### Implementation date:

The Proposer is asking for retrospection, so this would apply in the current charging year, though could be implemented as a reconciliation at the start of April 2026.

### Date decision required by

30 September 2025.

### Implementation approach

None that we are aware of.

### Proposer's justification for governance route

Governance route: Urgent modification to proceed under a timeline agreed by the Authority (with an Authority Decision)

The Proposer believes that this is a simple change to the way the Demand Residual is billed will have limited impact on other system Users. However, it has a significant commercial impact on some sites and could result in them delaying commissioning. In this case, it could result in a delay to bringing forward one of the UK's first hydrogen projects, which is backed by UK taxpayers.





The site had expected to be able to commission in early 2025 so the cost of transmission would have been spread over the charging year. However, the electrolyser provider then went into administration, and the Proposer did not know how long it would take to find a new provider and install the equipment. The Proposer now has the opportunity to start production this year, with the aim being to commission in October, meaning that the site will flip from generation to demand. The amount of the residual charge the Proposer will therefore have to pay is now a significant commercial consideration when considering whether to take the go or no go commissioning decision.

If the Proposer commissions late this year, the Proposer will be producing hydrogen for only a matter of a few months but paying a whole year of demand charges. This is despite also paying generation charges for the year. While hydrogen is an EII industry, companies cannot apply to be an EII until it has three months of auditable data. As this is a first of its kind project, the Proposer does not know if they will achieve EII status in this electricity charging year. However, to commission, under the HAR1 scheme, the Proposer is required to try to hit full output, with significant demand resulting.

Without an urgent, retrospective change to the CUSC, the Proposer may have to delay commissioning this Government backed project, instead of bringing it forward as quickly as they can, as the Proposer has been given the chance to do by the equipment providers. This will be to the detriment of the GB hydrogen strategy, its Clean Power 2030 Action Plan (CP30) targets and industrial strategy. The Proposer can see no benefit for anyone in delaying commissioning, but the charging regime is making it uneconomic.

While the Proposer is aware that they are in quite a unique position, the Proposer has nonetheless only recently become aware off the financial implications on them from commissioning mid-electricity year. The Proposer is not an energy expert, and having had a generation site connected for years, they were not fully

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aware of the way the demand residual charges would be levied on them for the whole year. However, it would be against the interests of the Proposer shareholders and our Government backers (tax payers) if the Proposer did not at least try to change the CUSC and bring forward the start date.

Given the very significant commercial impact on the Proposer hydrogen plant, which they could not have reasonably foreseen, the Proposer believes that this proposal meets Ofgem's urgency criteria.

The Proposer appreciates that retrospection will require NESO to adjust the bills of all new connecting sites for the year 2025. NESO will know which these sites are from when they started to bill them.

### **Interactions**

⊠CUSC	□BSC	□STC	□sqss
□European	☐ EBR Article 18	□Other	□Other
Network Codes	T&Cs1	modifications	

# Acronyms, key terms and reference material

Acronym / key term	Meaning
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BSC	Balancing and Settlement Code
CP30	Clean Power 2030 Action Plan





CUSC	Connection and Use of System Code
EBR	Electricity Balancing Regulation
EII	Energy Intensive Industry
GC	Grid Code
HARI	Hydrogen Allocation Round 1 <sup>3</sup>
sqss	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions
TNUoS	Transmission Network Use of System Charges
ТО	Transmission Owner

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/collections/hydrogen-allocation-rounds