Public

Transmission Charging Methodologies Forum and CUSC Issues Steering Group

30 April 2026

NESO
National Energy System Operator

Public

Agenda

1	Introduction, meeting objectives and review of previous actions - Alastair Owen, NESO	10:00 - 10:10
2	Generator synchronisation delays - Simon Wilson, CWP Energy Limited	10:10 – 10:30
3	Code Administrator update - Catia Gomes, Code Administrator NESO	10:30 – 10:40
4	AOB and Meeting Close - Alastair Owen, NESO	10:40 – 11:10

Public

TCMF Objective and Expectations

Objective
Develop ideas, understand impacts to industry and modification content discussion, related to the Charging and Connection matters.
Anyone can bring an agenda item (not just the NESO!).

Expectations
Explain acronyms and context of the update or change.
Be respectful of each other's opinions and polite when providing feedback and asking questions
Contribute to the discussion
Language and Conduct to be consistent with the values of equality and diversity
Keep to agreed scope

Public

Review of previous actions

ID	Month	Description	Owner	Notes	Target Date	Status
24-12	July	Post implementation analysis of CMP376: Inclusion of Queue Management process within the CUSC.	DA	NESO will reopen this action in April 2025, as that will be 12 months after CMP376 was included in contract terms.	Pending formed queue	On Hold
24-14	October	Data post CMP376 implementation on the TEC register around projects moving forward, backward or staying the same.	DA		Pending formed queue	On Hold
24-15	May	Consider how to report meaningful connections data following the recent 'Pause' in connections reform activity.	JS	Whilst there is a pause in the new connection data being shared at TCMF, JS to consider how data can be made more accessible to Industry	Pending formed queue	On Hold

NESO
National Energy System Operator

Public

Review of previous actions

ID	Month	Description	Owner	Notes	Target Date	Status
24-18	Nov	Overview on national pricing and market reform developments	Ofgem	Ofgem to arrange for an overview presentation on national pricing and market reform developments at TCMF. Update to provide details on process and timeline to be followed.	TBC – Ofgem to confirm timing	Ongoing

CWP Energy

User presentation on Generator Synchronisation delays

Generator Synchronisation delays

- Generator synchronisation is being delayed by up to 3 months after connection
- Procedures across CUSC, GC, BSC and NESO ahead of energisation
- Complicated processes not aligned to commissioning programmes
- Changes being made without consultation
- Users unable to mitigate

My contract

- NESO Connection agreement issued under CUSC
  - TEC, technology
  - Connection date
  - Construction agreement
  - Technical reqs from Grid Code
  - Charges Security/Rent
- Grid Code –Connection Conditions, Compliance Procs
- CUSC – right to be connected, BM, services
- BSC – settlement, BMU Reg

Not my contract

- STC – TO support for connections, Commissioning procs
  - ICCP data links
  - HVSCC
- NESO procs
  - BM
  - Ops

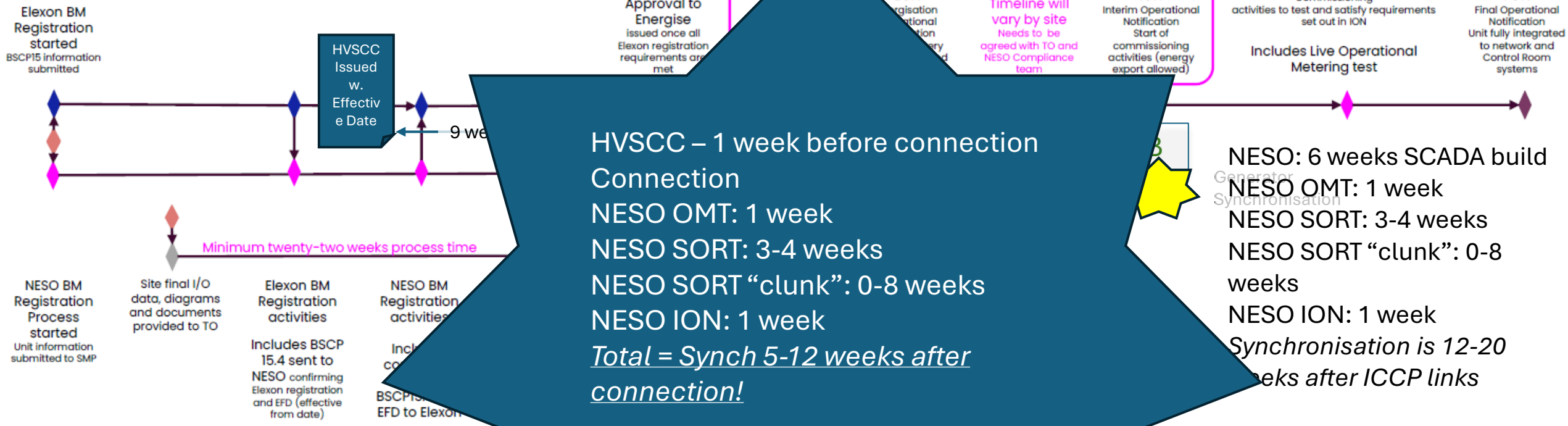
12 GW connections pa
*12GW *3/12*30%*8760 = **8***
TWh loss

2.5% of annual consumption
320 TWh, £640m @ £80

Public

UPDATED slide

Overview of route to SORT Upload and beyond for units directly connected to the transmission network



HVSCC – 1 week before connection Connection
NESO OMT: 1 week
NESO SORT: 3-4 weeks
NESO SORT "clunk": 0-8 weeks
NESO ION: 1 week
Total = Synch 5-12 weeks after connection!

NESO: 6 weeks SCADA build
NESO OMT: 1 week
NESO SORT: 3-4 weeks
NESO SORT "clunk": 0-8 weeks
NESO ION: 1 week
Synchronisation is 12-20 weeks after ICCP links

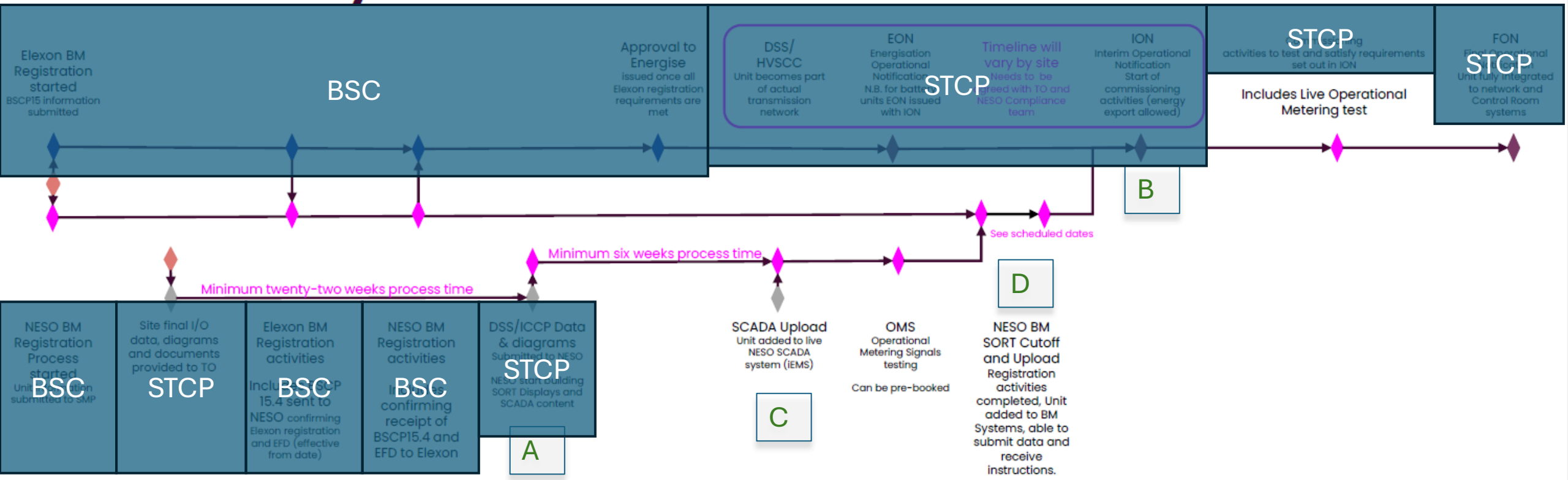
But ICCP links released only 6 weeks ahead of connection!

And now NESO making HVSCC EFD a requirement for SCADA Upload, OMT and SORT!

Key to activity owner	
Transmission Owner (TO)	
Customer	
NESO Compliance	
NESO Systems Change	
Elexon	

UPDATED slide

Overview of route to SORT Upload and beyond for units directly connected to the transmission network



Key to activity owner	
Transmission Owner (TO)	
Customer	
NESO Compliance	
NESO Systems Change	
Elexon	

For unit/site delivery plans to achieve their preferred SORT Upload the developer needs to ensure the project timeline includes the necessary lead time to meet all the requirements for Elexon, Transmission Owner, NESO Compliance team and NESO Registrations team. Typically, you should ensure initial discussions take place 12-18 months before the intended energisation date to confirm responsibilities and deliverables.

- The graphic is intended to show dependencies (solid arrows) between activities and does not otherwise represent the alignment or timing of activities.
- Not all detailed activities/deliverables in compliance and registration processes are shown

NESO National Energy System Operator

Our aims

- Earliest possible synchronisation (consumer benefit)
- Alignment with User Commissioning Programme
- Rendezvous at Connection Date

- Codify in CUSC to ensure managed change process
- Will you be synchronising? Group letter – support?
- simon.wilson@cwpenergy.uk

Public

Code Administrator Update

Catia Gomes - Code Administrator NESO

Public

Key Updates since last TCMF

New Modifications / Nominations

- **CMP469**: GC0186 Cost Recovery mechanism for CUSC Parties submitted on 11 March.
- **CMP471**: Interim Contract Variation Process Ahead of CMP434 Gated Application Window submitted on 17 April requesting urgent treatment.
- **CMP472**: Large Embedded Generators Original Red Line Boundary Sharing Without Customer Consent submitted on 09 April.
- **CMP473**: Clarification of contract updates required with a Gate 2 Modification Offer submitted on 13 April requesting urgent treatment.
- **CMP474**: Fixed BSUoS Price reset mechanism submitted on 14 April requesting urgent treatment. Nominations opened on 21 April and closed 27 April.
- **CMP475**: Amendment to the BSUoS tariff reset process submitted on 15 April. Nominations opened on 21 April and closed 27 April.

Decisions

- None

Implementations

- None

Public

Authority Expected Decision Date

Modification	FMR submitted	Expected Decision Date
CMP315 'TNUoS Review of the expansion constant and the elements of the transmission system charged for' and CMP375 'Enduring Expansion Constant & Expansion Factor Review'	07 February 2024	TBC pending update on REMA (previously 07 February 2025)
CMP316 'TNUoS Charging Methodology for Co-located Generation'	08 August 2025	May 2026 (previously April 2026)
CMP423 'Generation-weighted Reference Node'	09 December 2025	TBC
CMP330 & CMP374 'Allowing new Transmission Connected parties to build Connection Assets greater than 2km in length and Extending contestability for Transmission Connections'	10 August 2023	TBC subject to CMP414 send back
CMP344 Clarification of Transmission Licensee revenue recovery and the treatment of revenue adjustments in the Charging Methodology	09 July 2025	May 2026 (previously April 2026)
CMP397 'Consequential changes required to CUSC Exhibits B and D to reflect CMP316 (Co-Located Generation Sites)'	12 June 2024	May 2026 (previously April 2026)
CMP440 'Re-introduction of Demand TNUoS locational signals by removal of the zero price floor'	10 April 2026	30 September 2026
CMP453 'To Bill BSUoS on a net basis at BSC Trading Units'	11 November 2025	30 September 2026

The Authority's publication on decisions can be found on their website below:
https://www.ofgem.gov.uk/publications/code-modificationmodification-proposals-ofgem-decision-expected-publication-dates-timetable

NESO National Energy System Operator

Public

Key Consultations in April

Workgroup Consultations

- **CMP470** 'Introducing an Oversubscribed Technologies Commitment Fee' opens on 24 April and **closes 30 April**

NESO National Energy System Operator

Public

Key Consultations in May

Workgroup Consultations

- **CMP414**: CMP330/CMP374 Consequential Modification opens on 24 April and **closes 18 May**
- **CMP456**: Cost recovery for legacy plant in relation to GC0168 opens on 23 April and **closes 15 May**
- **CMP466**: CMP456 Consequential Charging Modification opens on 23 April and **closes 15 May**
- **CMP474:** Fixed BSUoS Price reset mechanism opens on 19 May and **closes 25 May**

Code Administrator Consultations

- **CMP417**: Extending principles of CUSC Section 15 to all Users opens on 28 April and **closes 19 May**
- **CMP469**: GC0186 Cost Recovery mechanism for CUSC Parties submitted opens on 27 April and **closes 19 May**
- **CMP473**: Clarification of contract updates required with a Gate 2 Modification Offer. Awaiting urgency decision from Ofgem before timelines can be confirmed.
- **Appeals Window**
- None.

Public

CUSC 2026 - Panel dates

	Panel Dates	Papers Day	Modification Submission Date	(TCMF) CUSC Development Forum
January	30	22	15	8
February	27	19	12	5
March	27	19	12	5
April	24	16	9	2
May	**22**	**14**	**7**	**30 April**
June	26	18	11	4
July	31	23	16	9
August	28	20	13	6
September	25	17	10	3
October	30	22	15	8
November	27	19	12	5
December	11	3	26 November	19 November

Public

Modifications Overview

Modification Number	Modification Title	Modification Overview	Impacted Parties
CMP315	TNUoS: Review of the expansion constant and the elements of the transmission system charged for	The expansion constant is a key input in setting the value of the locational element of transmission network use of system charges. This modification proposal would review how the expansion constant is determined such that it best reflects the costs involved.	High impact on all Users who pay TNUoS charges, NESO, Transmission Owners and Offshore Transmission Owners
CMP316	TNUoS Charging Methodology for Co-located Generation	Charging arrangements for Generation sites which comprise multiple technology types within one Power Station ("co-located")	Medium impact on Co-located Generators; Low Impact on NESO
CMP330/CMP374	Allowing new Transmission Connected parties to build Connection Assets greater than 2km in length	To amend the definition of Connection Assets in section 14 of the CUSC to allow cable and overhead line lengths over 2km to be contestable where agreed between the Transmission Owner and the User.	High Impact on New Transmission connected Users and Transmission Owners
CMP344	Clarification of Transmission Licensee revenue recovery and the treatment of revenue adjustments in the Charging Methodology	Clarifies that the allowed revenue for Transmission Owners recovered from Transmission Users under the Charging Methodologies is fixed for each onshore price control period for onshore transmission licensees and at the point of asset transfer for OFTOs.	High impact on Transmission Owners, Transmission Users including Generators and Suppliers; and a Medium impact on the ESO
CMP375	Enduring Expansion Constant & Expansion Factor Review	Seeks to amend the calculation of the Expansion Constant & Expansion Factors to better reflect the growth of and investment in the National Electricity Transmission System (NETS)	High impact on all Users who pay TNUoS charges, NESO, Transmission Owners and Offshore Transmission Owners
CMP397	Consequential changes required to CUSC Exhibits B and D to reflect CMP316 (Co-Located Generation Sites)	CMP316 makes changes to Section 14 of the CUSC. CMP397 facilitates CMP316 and proposes consequential changes to CUSC Exhibits B & D	Low impact on Co-located Generators and NESO

Public

Modifications Overview

Modification Number	Modification Title	Modification Overview	Impacted Parties
CMP414	CMP330/CMP374 Consequential Modification	Seeks to enact the Workgroup solution from CMP330/CMP374, by updating Exhibit B, Section 2 and Section 11 of the CUSC	Medium impact on Generators, Transmission Owner and NESO
CMP417	Extending principles of CUSC Section 15 to all Users	This modification seeks to extend the principles of CUSC Section 15 "User Commitment Methodology" to Users on Final Sums methodology, resulting in all Users being on the User Commitment Methodology. This will introduce equitable treatment across User groups and reduce barriers to entry as a User's security amount will better reflect the transmission liabilities they impose should they cancel connection or reduce capacity.	High Impact on National Energy System Operator, Distribution Network Operators, Transmission Owners, Users who remain on Final Sums methodology (Distributed connected Demand, Transmission connected Demand and DNOs where work is not triggered by an Embedded Generator e.g. asset replacement)
CMP423	Generation Weighted Reference Node	This modification proposes to switch from a demand weighted Reference Node to a generation weighted Reference Node instead.	High impact on Generation and Demand Users
CMP440	'Re-introduction of Demand TNUoS locational signals by removal of the zero price floor'	This CUSC modification proposes removing the current zero price floor from the Transmission Network Use of System (TNUoS) locational demand tariff for Final Demand, thereby re-introducing a locational investment price signal across all of Great Britain (GB). The potential for negative prices and the perverse incentive for Users to consume is removed by widening the period over which consumption is measured for charging against negative tariffs.	High impact on Suppliers.
CMP453	To Bill BSUoS on a net basis at BSC Trading Units	The move to gross billing of BSUoS means that customers forming part of a BSC Trading Unit are paying BSUoS when the net flows at the point of connection are exports, so the customers are not using the system and should not pay BSUoS.	Medium impact on customers and suppliers.

Public

Modifications Overview

Modification Number	Modification Title	Modification Overview	Impacted Parties
CMP456	Cost recovery for legacy plant in relation to GC0168	Modification GC0168 requires existing plants, upon request to obtain and submit Electromagnetic Transient (EMT) models. This is a significant and costly challenge for older plant with complex systems and with little direct benefit to the Generator. This modification enables appropriate cost recovery.	High impact on Generators and Suppliers
CMP466	CMP456 Consequential Charging Modification'	This modification is required to facilitate the implementation of CMP456. In discussions with the National Energy System Operator (NESO) it has become clear that a small change to the Balancing Services Use of System (BSUoS) within Section 14 'Charging Methodologies' will be required to ensure that any validated costs arising via the CMP456 solution are recovered, as happens today with black start costs, via BSUoS.	Generators and the System Operator
CMP469	GC0186 Cost Recovery mechanism for CUSC Parties	The GC0186 modification will place new obligations within the Grid Code, upon Connection and Use of System Code (CUSC) Parties who are not contracted with the National Energy System Operator (NESO) as Restoration Service Providers. Therefore, a one-year time extension of the codified cost recovery mechanism is required to prevent the affected parties being commercially disadvantaged by the implementation of the new obligations	High impact on Suppliers & Generators
CMP470	Introducing an Oversubscribed Technologies Commitment Fee | National Energy System Operator	This modification seeks to introduce a floor on securities through an Oversubscribed Technologies Commitment Fee for all technologies which are oversubscribed relative to Clean Power 2030 capacity targets.	High impact on generation developers and a Medium Impact on Transmission Owners

Public

Modifications Overview

Modification Number	Modification Title	Modification Overview	Impacted Parties
CMP471	Interim Contract Variation Process Ahead of CMP434 Gated Application Window submitted on 17 April requesting urgent treatment.	This modification proposes a temporary, limited amendment to the CUSC allowing Users to adjust elements of their NESO contracts before the first CMP434 Gated Application Window.	**High impact on** Generators, Transmission Owner and NESO
CMP472	Large Embedded Generators Original Red Line Boundary Sharing Without Customer Consent submitted	This proposal seeks to introduce a new clause in Section 17 of the CUSC to permit NESO to share the Original Red Line Boundary submitted by Large Embedded Generators with the relevant DNOs without requiring explicit customer consent. This change enables DNOs to independently and consistently verify distribution contract validity for LEGs applying for Gate 2 offers, ensuring that only projects with compliant and valid distribution arrangements progress through the gated connections process.	Medium impact on Large Embedded Generators, NESO and DNOs
CMP473	Clarification of contract updates required with a Gate 2 Modification Offer	This modification intends to clarify which updates to Existing Agreements shall be implemented. Currently, updates to Existing Agreement appendices included within Gate 2 Modification Offers lack consistent treatment, particularly in relation to a network company causing a Completion Date delay.	High impact on Generators, Demand Customers, Transmission System Operators and Transmission Owners
CMP474	Fixed BSUoS Price reset mechanism	Inclusion in the Connection and Use of System Code of a clear process for when the Balancing Services Use of System will be reset by the National Energy System Operator.	High impact on Suppliers and Transmission System Operators
CMP475	Amendment to the BSUoS tariff reset process	Amendment to the Balancing Services Use of System Tariff Reset process as per Connection and Use of System Code. To enable the National Energy System Operator due to wider market conditions to reforecast the fixed tariff periods and if needed recover financial position of the working capital fund	High impact for anyone who is impacted by BSUoS, primarily Suppliers

Useful Links

Ofgem's expected decision dates/ date they intend to publish an impact assessment or consultation, for code modifications that are with them for decision are available here

Updates on all Modifications are available on the Modification Tracker here

The latest CUSC Panel Headline Report and prioritisation stack are available here

If you would like to receive updates from the Code Administrator on CUSC modifications, please join the distribution list here

Public

Your CUSC Panel representatives

- Industry is represented at CUSC Panel by representatives, who would love your input. Their contact details can be found here.
- Panel members represent their industry segments at Panel; the more input they have, the more your voice can be heard.

Anthony Pygram	Independent Panel Chair		**Lauren Jauss**	Panel Member	
Catia Gomes	Panel Secretary and Code Administrator Representative		**Shane Cracknell**	Panel Member	
Ren Walker	Panel Technical Secretary		**Alastair Owen**	NESO Representative	
Andrew Enzor	Panel Member		**Daniel Arrowsmith**	NESO Representative	
Binoy Dharsi	Panel Member		**Tom Lowe**	Consumer Panel Representative	
Garth Graham	Panel Member		**Jacob Snowden**	BSC Representative	
Joe Colebrook	Panel Member		**Nadir Hafeez**	Ofgem Representative	
Kyran Hanks	Panel Member		**James Stone**	Ofgem Representative	

AOB and meeting close

Public

CUSC Section 15 Error

Paul Mott, NESO

Public

The Global Asset Re-use Factor

- The Global Asset Re-use Factor (GARF; 33%) is a factor used to dilute the cost of wider works in calculating wider cancellation charge amounts, introduced under CMP192. Another diluting factor (50%) is the user risk factor.
- The CMP192 Final Modification Report states that "*The GARF is 33% and represents the transmission assets which a TO could potentially reuse on another project*". This is reiterated in the wider annual cancellation charge statement: GARF "*represents the percentage of the wider transmission assets which a TO could potentially reuse on another project*".
- CMP192 FMR para 4.166/7 makes clear that GARF would be 100% for a transformer, which a TO can readily re-use. Whereas for other Transmission assets, that figure is only 21%. On average the GARF is 33%.
- For additional clarity, the CMP192 guidance note[1] states that: "*Step 2 – The wider VAR is then reduced by two factors, URF and GARF*". (simple pie chart shows 33% left)
- The purpose of the is GARF is quite clear, as well as how it should be applied, and in calculating wider cancellation charge amounts. NESO reduces TO capex by GARF (a 33% reduction).

[1] The CMP192 Guidance is available at the following address: https://www.neso.energy/document/46251/download

NESO National Energy System Operator

Public

Issue & Solution

- The CUSC states that the wider CAPEX is "*multiplied by the User Risk Factor and the Global Asset Reuse Factor, as set out in the Annual Wider Cancellation Charge Statement.*" (the word "multiplied" is misleading)
- No definition of GARF, that's effectively outsourced to the statement, and the guidance note
- The misleading text at CUSC S15 part 3.6 was noticed when reviewing CMP447 legal text. After considering the matter in context, members of the WG suggested that NESO raise a modification to clarify the arrangements in CUSC.
- NESO proposes to raise a modification suggesting self-governance (subject to CAC consultation) as its path to clarify CUSC section 15, replacing "multiplied by" (URF and GARF) with "reduced by", and adding a section 11 definition for GARF so it's no longer outsourced to the wider cancellation charge statement.

Public

Transmission Network Use of System (TNUoS) Tariff Model Training Workshop

In-person industry training | Hands-on | Limited places

We are holding an in-person Transport and Tariff Model (T&T) Training Workshop, an external industry training session designed to provide participants with a comprehensive, hands-on understanding of the T&T model that we use to calculate TNUoS tariffs.

This workshop represents an opportunity for industry professionals to engage directly with our team, ask questions, and develop confidence in using the T&T model effectively for your own TNUoS Tariff analysis and scenarios.

📅 Date: **9 June 2026**
🕘 Time: **09:30 – 16:00**
📍 Venue: **National Energy System Operator (NESO), Faraday House, Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA**

*The registration deadline is **22 May 2026.** Places will be allocated on a first come, first served basis and a confirmation of successful registration will be sent to you after the registration deadline. Please contact TNUoS.queries@neso.energy for any questions about this training.*

REGISTER YOUR INTEREST HERE

NESO National Energy System Operator