

# **CMP417: Extending principles of CUSC Section 15 to all Users**

Workgroup 7, 30 July 2025

Online Meeting via Teams

# WELCOME

# Agenda

Topics to be discussed	Lead
Introductions, Objectives and Actions	Chair
Proposer presentation	Proposer
Review Timeline and Terms of Reference	All
AOB & Next Steps	Chair

## Expectations of a Workgroup Member

Contribute to the discussion

Be respectful of each other's opinions

Language and Conduct to be consistent with the values of equality and diversity

Do not share commercially sensitive information

Be prepared – Review Papers and Reports ahead of meetings

Complete actions in a timely manner

Keep to agreed scope

Email communications to/cc'ing the .box email

## Your Roles

Help refine/develop the solution(s)

Bring forward alternatives as early as possible

Vote on whether or not to proceed with requests for Alternatives

Vote on whether the solution(s) better facilitate the Code Objectives



# Actions Log

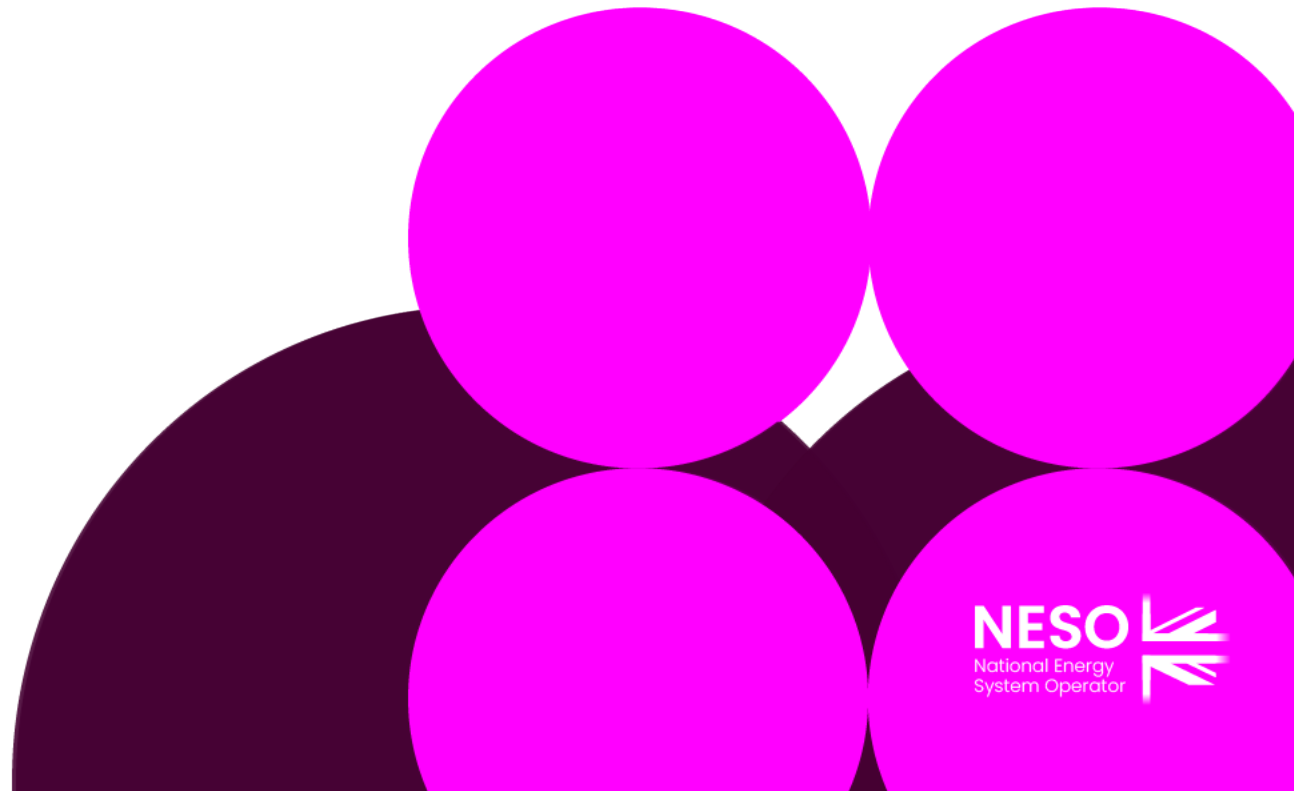
Action Number	Owner	Action	Update	Status
1	LT/SN	Add new Terms of Reference to cover off demand and generation Users connecting and needing the same projects and investments.	New Term of Reference submitted within CUSC Panel Papers for approval at the Panel on 27 June	Open
2	SN	Consider which principles of UCM are being transferred and any that aren't, include justifications.	SIF and LARF will continue to apply as proposed. The risk of over securing is acknowledged however. There is already an existing risk of double counting under securities methodologies in general. However, applying CMP192 to demand still significantly reduces the impact of this on customers regardless	Open
3	SN	Consider if FSM will still be applicable to some Users or if it will be removed altogether	Will be removed altogether. Meaning CMP192 applies across the board going forwards	Open

# Actions Log

Action Number	Owner	Action	Update	Status
4	SN	Consider how combined capacity is calculated for hybrid sites to avoid double counting.	As per current CUSC arrangements, TO will include works specific to each technology/ stage, with the securities sums being calculated accordingly. If there is a piece of work that is included under the generation element but also relevant to the demand (e.g because they share a connection date) the scope of work will be attributed to the highest factor, eg if demand technology is higher, it will be applied to the demand technology	Open
5	SN	Provide staged approach examples	We don't consider this action necessary at this time due to our position on SIF. However, we have included an example of an attribute cancellation charge in the slide deck.	Open
6	SN	Consider impacts on Grid Code and on changes to security statement timings and the impact this will have.	We reached out to our technical codes team who pointed us in the direction of NESO Customer Solutions & Engineering team and they believe there inst any impact on Gride Code.	Open
4	SN	Consider how combined capacity is calculated for hybrid sites to avoid double counting.	As per current CUSC arrangements, TO will include works specific to each technology/ stage, with the securities sums being calculated accordingly. If there is a piece of work that is included under the generation element but also relevant to the demand (e.g because they share a connection date) the scope of work will be attributed to the highest factor, eg if demand technology is higher, it will be applied to the demand technology	Open

# Proposer's Solution

Sean Nugent – NESO



# Wider Liability

**The total liability for a demand connection will, as with generation, be the sum of the attributable cancellation Charge and the wider cancellation charge**

- When CMP417 was first raised back in 2023 the solution only consisted of attributable works
  - We discussed last workgroup that our minded to position was to include a wider liability as well
  - Have considered this further since workgroup 6 and have updated the solution to include wider works
- 
1. Wider Charge is based on total Load Related and Non-Load Related Capex (so already includes generation as well as demand)
  2. Demand can have a wider impact on the network. From an operational perspective there is not much difference between an equally sized generator or demand connection in terms of network impact/triggering reinforcement
  3. Historically there has always been significant reinforcement triggered on the network from large generators connecting, whilst demand has steadily increased across the country.
  4. In particular, data centre clusters will continue to drive much larger demand connections



# Wider Liability

Data Centre growth is expecting to increase significantly in all FES scenarios

Will continue to see larger demand connections triggering network reinforcement

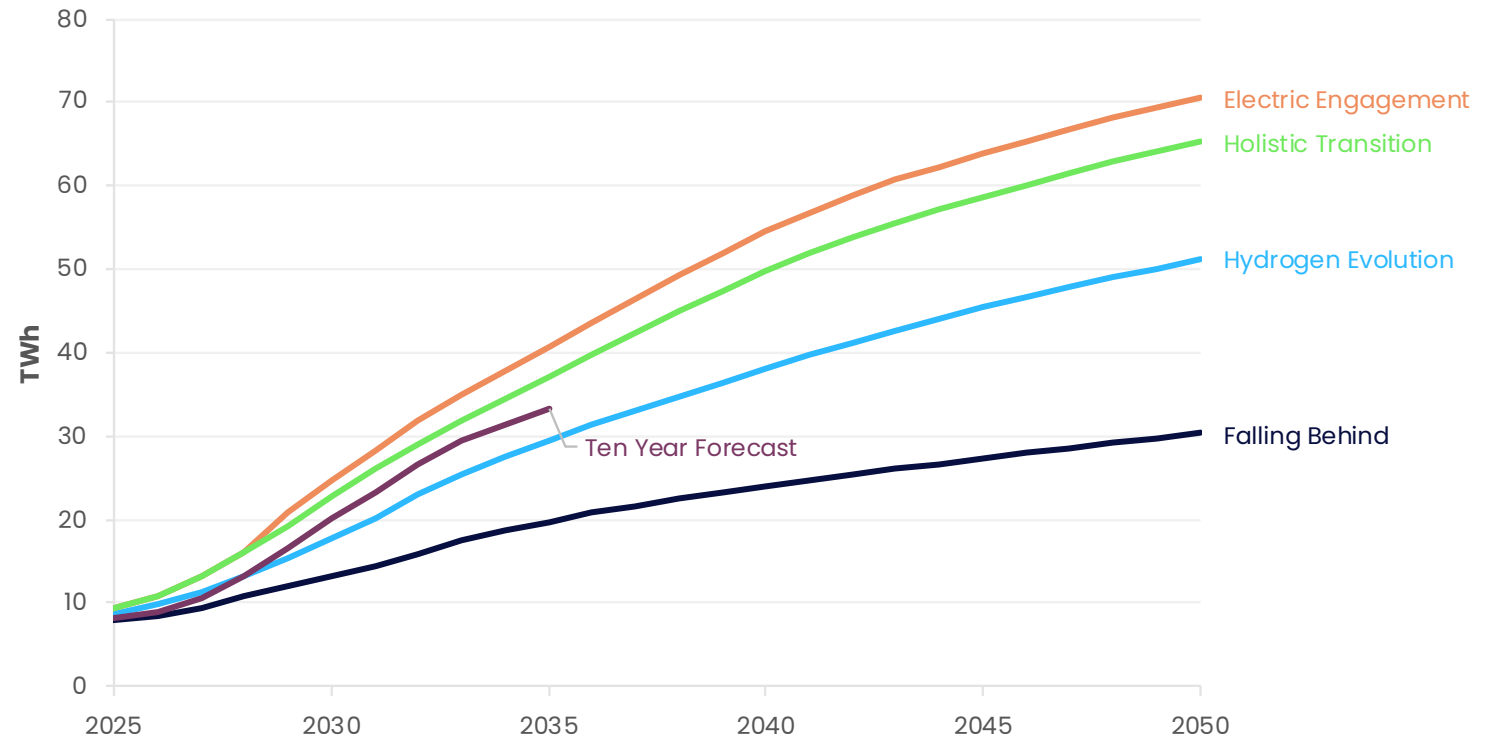


Figure 49 FES 2025

# Wider Liability

## Proposal is to use the same zones for the Wider Cancellation charge for demand as those used for generation

- These are based on ETYS zones
- Calculation already includes Capex driven by generation and demand
- Attributable works are excluded from the Wider Cancellation Charge Calculation. As there is currently no definition for demand attributable works, there is currently some potential for works included for those on Final Sums to be included in both the wider charge and final sums. This would no longer be the case under CMP417 as the solution will include a definition of attributable works for demand
- As per existing process TOs provide total forecast Capex to NESO, and NESO apportion to each zone

The wider cancellation charge is calculated using each Transmission Owner's (TO) forecast of both load related and non-load related wider capex. The apportionment of wider capex to each zone is based on the following factors.

Input	Source/Fixed Factor	Description
User Risk Factor	50%	The share of the wider risk between generation and consumers.
Global Asset Reuse Factor	33%	The percentage of the wider transmission assets which a TO could potentially reuse on another project.
Boundary levels	As per latest FES Scenarios / ETYS	Depth of each ETYS boundary multiplied by the increase in required capability on that boundary.
Boundary non-compliance factors	As per latest FES Scenarios / ETYS	Ratio between available capacity and required capability on each boundary.
Generation base	TEC and Interconnector Registers	Current and Future Generation by zone.
Capex data	TO forecasts	TO forecasts of load related and non-load related wider capex

Table 2.1 – Calculation Inputs

# Strategic Investment Factor (SIF)

**Following further consideration, we are not planning on including any scaling within the solution for SIF**

- It is already possible under CMP192 for total SIF for a scheme to exceed 100%
- If we were to include scaling across all generation and demand associated with a scheme so that total SIF does not exceed 100%, this would require a further change to section 15 to change the way which SIF is calculated for generation.
- Doing so would go beyond the scope of CMP417 which only proposes to extend the principles of CMP417 to Demand, and not to change the principles of CMP192

*Where the **Strategic Investment Factor** is a factor calculated for each component within the **Attributable Works** as a ratio of the **Transmission Entry Capacity** and/or **Developer Capacity** and/or **Interconnector User Commitment Capacity** sharing those **Attributable Works** against the secured capability of the **Transmission** assets and set out in the **Notification of Fixed Cancellation Charge** by reference to which an election is made in accordance with Paragraph 6.*

# Strategic Investment Factor (SIF)

**It would in theory be possible to apply scaling to demand only under this modification, but the aim of this modification is to align generation and demand.**

**Any future change could be carried out more efficiently by having aligned generation and demand securities, where equivalent principles can be used**

# Demand Capacity

- The demand connection application form asks for 'Demand Capability'. This should reflect the long term needs of the connection
- This is the figure that should be used instead of TEC to calculate liability for demand
- Legal text will need to be written in a way which reflects this – i.e. this is the figure used for calculating Attributable and Wider liabilities for demand, but it is not used as an equivalent for TEC elsewhere
- Forecasted demand may be lower than this, but this is the figure that is more appropriate as it is what the network is designed to so more appropriate to secure against

## 04 Connection type

Please select your intended **Connection Type**.

Demand capability

# Hybrid Sites

- A co-located site with generation and demand connecting today would get two security statements
  - Demand: Final Sums
  - Generation: User Commitment
- Under CMP417 proposal, there will still be two separate security statements calculated, but with steps taken to ensure that separate attributable charges
- TOs to identify which schemes are import driven, export driven, or applicable to both in data provided to NESO
- For a scheme which is applicable to both generation and demand, at a co-located site the scheme will only be included in the attributable works calculation for:
  - Generation (if the TEC is higher than demand capacity)
  - Demand (if the demand capacity is higher than TEC)
- If TEC and demand capacity are equal then the scheme will be included for the generation attributable works



# Full Process

## Data Inputs:

### Demand Connection

Demand Capability

Preference for fixed or variable securities

### Transmission Operator

List of Demand Attributable Schemes with MW rating and LARF. Include whether this is import driven, export driven or both

Total Load Related and Non Load Related Capex (no change to what is provided currently)

### NESO

Boundary Levels (unchanged)

Generation/Demand Base

Boundary non-compliance factors (unchanged)

# Full Process

## Attributable Cancellation Charge

TO provides a list of projects with scheme MW Capability

Scheme A: 2000MW, LARF 20%

Scheme B: 1500MW, LARF 40%

Scheme C: 5000MW, LARF 0 %

As these schemes have associate attributable works, they would not be included in the calculation of the wider cancelation charge

Demand site has a 'demand capacity' of 1000MW, SIF would be calculated (approximately) as dividing this by the scheme capability

Liability = Spend to date x (1-LARF) x SIF

If Scheme A has spent £2,000,000 to date then liability for generator for Scheme A =  
 $£2,000,000 \times (0.8) \times (0.5) = £800,000$

If Scheme B has spent £1,000,000 to date and Scheme C £3,000,000 then total liability for generator =  
 $£800,000 + £396,000 + £600,000 = £1,796,000$

Customer has the opportunity to fix based on forecast costs.

# Full Process

## Wider Cancellation Charge

Wider Cancellation Charge is based on the same zones as for generation  
One Wider tariff is produced for each zone (same for generation and demand)  
TOs provide the total Capex which goes into this calculation, NESO produce the zonal tariff

Wider Cancellation Charge = Demand Capacity x Wider Tariff x Wider Profile  
Wider works only required post-trigger

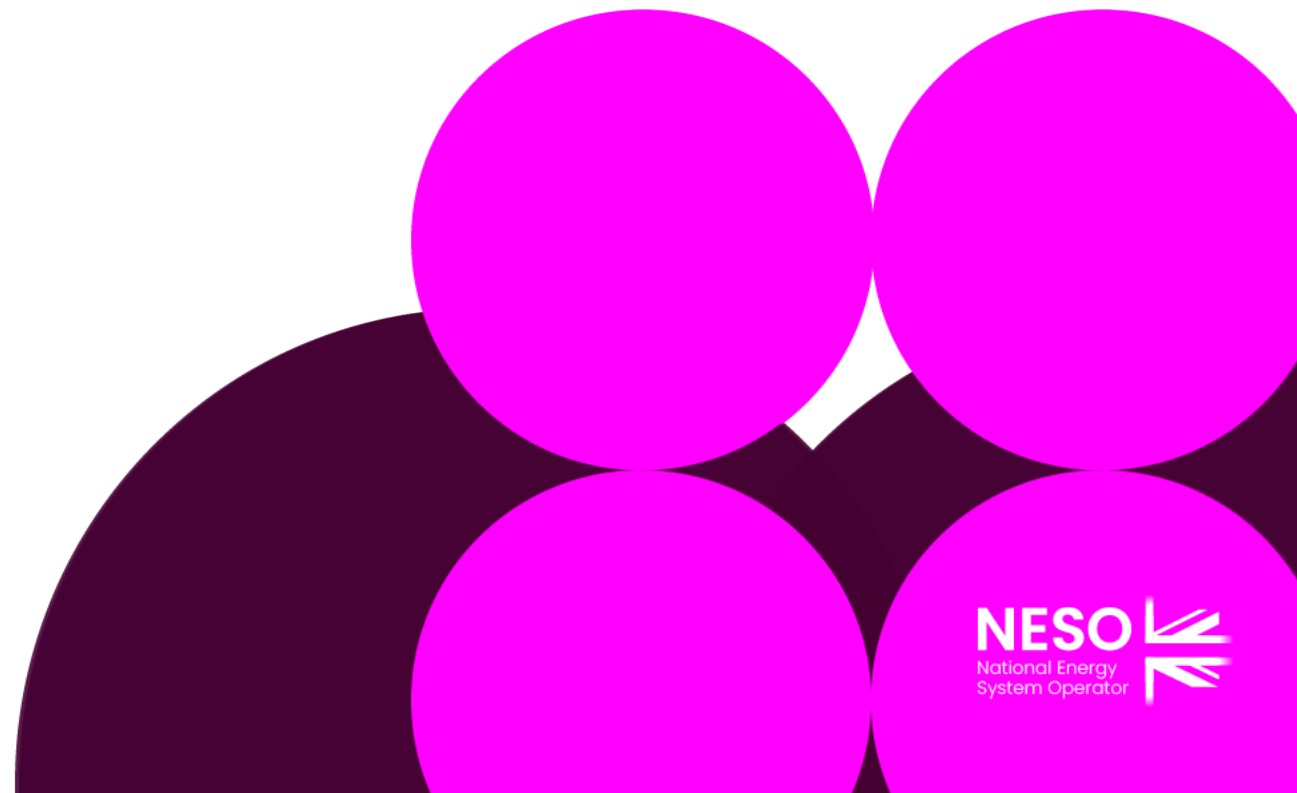
If Wider tariff is £1500, and Wider Profile is 50%, then:

Wider Cancellation charge =  $1000\text{MW} \times £1500 \times 0.5 = £750,000$

Wider profile is 0% up until trigger then 25% year 1, 50% year 2 etc

# Review Timeline and Terms of Reference

Lizzie Timmins – NESO Code Administrator



# CMP417 Timeline

Milestone	Date
Workgroup 6	21 May 2025
<b>Workgroup 7</b>	<b>30 July 2025</b>
Workgroup 8	03 September 2025
Workgroup 9	23 September 2025
Workgroup 10	21 October 2025
Workgroup Consultation (20 Business Days)	28 October 2025 – 18 November 2025
Workgroup 11	04 December 2025
Workgroup 12	13 January 2026
Workgroup 13	19 February 2026
Workgroup Report to Panel	20 March 2026
Panel for ToR sign off	27 March 2026
Code Administrator Consultation (20 Business Days)	02 December 2025 – 02 January 2026
Draft Final Modification Report (DFMR) issued to Panel	14 May 2026
Panel undertake DFMR recommendation vote	22 May 2026
Final Modification Report issued to Panel to check votes recorded correctly	26 May 2026 to 02 June 2026
Final Modification Report issued to Ofgem	03 June 2026
Ofgem decision	TBC
Implementation Date	10 Business Days following Authority Decision

# Terms of Reference

## Workgroup Terms of Reference

- |   |
|---|
| a) Consider EBR implications  |
| b) Consider the transitional arrangements                             |
| c) Consider interactions with other codes or code modifications       |
| d) Consider interactions with NESO connections reform recommendations |
| e) Consider financial consequences to Users                           |
| f) Consider cash flow implications on NESO                            |
| g) Consider the interaction between Demand and Generation securities  |



# AOB & Next Steps

Lizzie Timmins – NESO Code Administrator

