

CUSC Alternative Form

CMP375 Alternative Request 2:

CMP375 OW Alternative

Overview:

This alternative proposes adapting CMP375 Original to:

- Use longer range of historical data for the purpose of calculating the Expansion Constant (EC) at first implementation (up to 30 years at first implementation then adding new actual cost data points when they become available from the TOs), and;
- Weighting works types when calculating weighted average works costs for EC.

The deviation from the CMP375 original is to drive improvement in cost reflectivity and reduce volatility, as well as providing a more stable forward-looking signal.

Proposers:

- Nicolas Lescal – Ocean Winds

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What is the proposed alternative solution?

This alternative proposal suggests the following:

1. Works included in the calculation of the expansion constant: new circuits, circuit reinforcements, circuit life extensions. (same as CMP 375 Original)
2. Weighting methodology: Each EC or Expansion Factor is calculated as a weighted average of cost data based on a set of expected works (a “basket of works”). The basket of expected works will be forward-looking and based on the future works set out in the TO’s price control business plans for each voltage level and circuit type. Introduction of MW km to weight the costs of reinforcements. When calculating the representative basket of works, propose to use km weightings as this data is already produced as part of TO’s regulatory reporting.
3. Data - Time period and Historic and/or Future: In year 1, this WACM uses up to 30 years of historic data for the purpose of calculating the EC at first implementation. The calculation after year 1 is performed each year using last year’s data bundled up with the previous 30 years (without dumping the project cost data for projects from the oldest year, Y-30, but rather increasing the overall historical data to 31 years in the second year, 32 years in the third year and so on) and apply a "smoothing" factor (0.13 smoothing factor for all years and not just for first year) to mitigate volatility.

Areas of alignment with CMP375 Original

The table below summarises the key methodology components for the alternative proposed. For each component, the table shows whether it is aligned with CMP375 Original and points to the relevant sections of this document for more detail.

Component	Aligned with CMP375 Original?	Approach
Works included	Yes	Include: new circuits, circuit reinforcements, circuit life extensions Exclude: non-circuit reinforcements, substations.
Weighting methodology of works costs	Yes	MW-km weighted average cost
Data – cost of works	No	See section – “Calculating works costs”
Data – weighting between works types	No	See section – “Calculating basket of works”

What is the difference between this and the Original Proposal?

Calculating works costs

This WACM uses up to 30 years of historic costs when calculating Expansion Factors to estimate a proportion of costs which should be included. This approach reflects a practical element of forward-looking change in expected basket of works whilst using historic data to calculate relative costs of works at different voltage levels.

Calculating basket of works

Each EC or Expansion Factor is calculated as a weighted average of cost data based on a set of expected works which we refer to here as a 'basket of works'. This alternative would change this 'basket' of expected works to be forward-looking.

The basket would be set based on the future works set out in the TO's price control business plans for each voltage level and circuit type. Given the set of works included, this will produce a split between new build and replacement for circuits, weighted by length of circuits. Where there is no data, we will assume that 100% is new build as under the current methodology.

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;	<p>Positive</p> <p>A fair and predictable signal will facilitate competition in the generation of electricity by removing barrier to investment and risk premium priced by investors which should in turn lead to more effective competition in the wholesale market and supply of electricity.</p>
(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);	<p>Positive</p> <p><i>Use of forward-looking basket of works</i></p> <p>The basket of expected works will be forward-looking and based on the future works set out in the TO's price control business plans for each voltage level and circuit type. This will enable a more accurate representation of the basket of works expected on the NETS and thus drive improvement in cost reflectivity and reduce volatility, as well as providing a more stable forward-looking signal.</p> <p><i>Weighting method for reinforcement costs</i></p> <p>The expansion constant is defined in £/MW-km. It should therefore represent the average cost of providing a MW-km of network capacity.</p> <p>Using MW-km as a weighting between reinforcement types achieves this aim, as it calculates the total cost of all reinforcements considered and divides by total MW-km provided.</p> <p>Continuing to use length (km) would maintain a distortion which assigns higher weighting to high length circuits even if they provide the same level of network capacity as shorter circuits.</p> <p>This would mean that the average cost of transmission licensees providing a MW-km of network capacity is not as accurately reflected.</p>

(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;	Positive <i>Use of 30 years historic data</i> Expanding the time period of historic data from 10 (CMP 375 Original) to 30 years, in line with investment horizon of new build generation projects, will ensure enough data is gathered to accurately calculate the long-term relative costs of works at different voltage levels.
(d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and	Positive Should facilitate compliance with EU €2.50/MWh cap for generator transmission charges.
(e) Promoting efficiency in the implementation and administration of the system charging methodology.	Positive
*Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).	

When will this change take place?

Implementation date:

1 April 2024

Implementation approach:

1. In year 1, gather 30 years of historic data for the purpose of calculating the EC at first implementation.
2. The calculation after year 1 is performed each year using last year's data bundled up with the previous rolling 30 years and apply a "smoothing" factor (0.13 smoothing factor for all years and not just for first year) to mitigate volatility.
3. When calculating the representative basket of works, use km weightings applied to the forward-looking basket of expected works based on the TO's price control business plans for each voltage level and circuit type.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CMP	CUSC Modification Proposal
CUSC	Connection and Use of System Code
EC	Expansion Constant
ESO	Electricity System Operator
NETS	National Electricity Transmission System
STC	System Operator Transmission Owner Code
TO	Transmission Owner
WACM	Workgroup Alternative CUSC Modification

Reference material:

None