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CUSC Alternative Form – Non Charging

CMP446 WACM3: Capping the capacity of projects benefitting from the higher threshold, per GSP, per 5-year period – using Registered Capacity for measuring the threshold

Overview: Introducing a limit to total Registered Capacity of 1-5MW projects that can connect under a GSP per 5-year without a Transmission Impact Assessment in England and Wales.

We propose a cap of 25MW per GSP per 5-year period.

Proposer: Kate Teubner, Low Carbon.

I/We confirm that this Alternative Request proposes to modify the non - charging section of the CUSC only



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What is the proposed alternative solution?

We are proposing to introduce (at a GSP level) a limit on the total Registered Capacity of 1-5MW projects that can connect without a Transmission Impact Assessment in England and Wales (and therefore benefit from the uplift provided by CMP446).

We propose a limit of 25MW of 1-5MW projects per GSP per 5-year period (e.g. first period being implementation of CMP446 until December 2030; second period = 2031-2035; etc).

What is the difference between this and the Original Proposal?

The Proposal Form notes that “NGET analysis shows the limited Transmission System impact of 1-5MW DG within the design and connection process”.¹ This implies that the solution might be different if the cumulative impact of 1-5MW schemes had a large (i.e. not limited) impact on the transmission system.

Throughout the Workgroups, we believe it has become clear that this proposal introduces gaming opportunities for customers to split projects into multiple 4.9MW sites, including via IDNO connections. In our view, this is a major risk, as developers should be expected to use this potential loophole to secure grid connections.

If these risks materialise, then the cumulative impact of 1-5MW schemes on the transmission system is likely to be large (i.e. not limited). The Workgroup also identified that an increased number of 1-5MW schemes connecting under a GSP would negatively impact the Technical Limits curtailment of existing schemes that are either connected or are in the connections queue.

To mitigate these risks, we believe there should be a limit, at each GSP, on the total Registered Capacity of 1-5MW projects that can connect without a Transmission Impact Assessment.

We propose a limit of 2 MW of 1-5MW projects per GSP per 5-year period (e.g. first period being implementation of CMP446 until December 2030; second period = 2031-2035; etc). This is equivalent to one 4.9MW project per GSP per year, based on the threshold of 5MW – or multiple smaller projects.

We consider that 4.9MW of projects per GSP per year is likely to have a limited impact on the transmission system (including Super Grid Transformers). If there was more time, then we would have sought to derive a more sophisticated cap, perhaps taking into account the capacity of each GSP. However, there is not sufficient time within the urgency timeline to allow this. This could be introduced a later stage through a future Modification if desired.

If the Registered Capacity of projects seeking to benefit from the higher threshold is limited, then the cap would not be binding. However, if the raised threshold is exploited by many projects (including the gaming opportunities highlighted above), then this change removes the risk of a large (non-limited) impact on the transmission network.

¹ Page 7 of proposal form.

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By including this safeguard now, it reduces the risk of needing to introduce a retrospective Code Modification later to close the identified loopholes.

How would this work for the existing queue as part of the planned Gate 2 to Whole Queue Exercise?

If there is less than 25MW of existing 1-5MW projects contracted to connect under a GSP (that are subject to transmission reinforcements that were identified in a previous project progression outcome), then all of those projects would benefit from the changes outlined in the Original Proposal.

If there is more than 25 MW of existing 1-5MW projects contracted to connected under a GSP, then only projects falling within the 25MW cap would be allowed to benefit from the changes outlined in the Original Proposal.

Any projects above the cap would be given two options:

1. Enter the Transmission Impact Assessment (the same as for projects above 5MW); or
2. Connect in the second period (2031-35), third period (2036-2040), et cetera.

How would this work for new projects?

Under this WACM, NESO and the DNOs would retain a list of 1-5MW projects contracted to connect at each GSP. If the 25MW cap is breached, then further projects must choose one of the two options outlined above (enter the TIA process or connect in the next 5-year period where the 25MW cap is not exceeded).

What happens to the first project that causes the cap to be exceeded?

The first project that causes the cap to be exceeded would be counted as being within the cap. For example:

- If there are 6 x 4MW projects contracted (sum = 24MW) at a GSP, then
- A new 4.9MW would be allowed to benefit from the higher 5MW threshold, as the cap is currently not exceeded.
- This would take the total at that GSP to 28.9MW, and thus the cap is now considered exceeded.
- Any subsequent 1-5MW project would have to choose between one of the 2 options outlined above (enter the TIA process or connect in the following 5-year period).



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What is the impact of this change?

Proposer's assessment against CUSC Non-Charging Objectives	
Relevant Objective	Identified impact
(a) The efficient discharge by the Licensee of the obligations imposed on it by the Act and by this licence*;	Neutral Per the Original Proposal.
(b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;	Positive This Alternative better facilitates competition as the Original Proposal allows for a negative impact on larger generation schemes which are subject to Technical Limits Transmission ANM which would have a detrimental effect on investor confidence. This Alternative also scores positively on this metric as it reduces the potential for gaming, i.e. unfair competition from Users exploiting loopholes in the Original Proposal.
(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and	Neutral Per the Original Proposal.
(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive Additional benefit of placing a limit pre-emptively, rather than having to apply for a retrospective Code Modification if the risks identified in the Workgroup and Workgroup Consultation become reality.

* See Electricity System Operator Licence

**The Electricity Regulation referred to in objective (c) 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.

When will this change take place?

Implementation date:

Aligned with the Original Proposal.

Implementation approach:

The proposed legal text would need to be updated to reflect this change.

NESO and/or the DNOs would need to monitor the capacity of 1-5MW schemes contracted under each GSP in each five-year period. NESO and/or the DNOs should be required to publish this data.

Acronyms, key terms and reference material

Acronym / key term	Meaning
ANM	Active Network Management
CUSC	Connection and Use of System Code
DG	Distributed Generation
DNO	Distribution Network Operator
GSP	Grid Supply Point
IDNO	Independent Distribution Network Operator
kA	Kiloampere
MW	Megawatt
NESO	National Electricity System Operator
TIA	Transmission Impact Assessment

Reference material:

- 1.