






Workgroup Alternative Proposal Form		At what stage is this document in the process?	
<h1>CMP343:</h1> <h2>Transmission Demand Residual Bandings and allocation (TCR)</h2>		01	Proposed Alternative
		02	Proposed Workgroup Alternative
<p>Purpose of Alternative: WACM 9</p> <p>All of the options presented in the CMP343 workgroup consultation had the number of Transmission bands determined in respect to percentiles of consumption. One potential way of segregating transmission connected demand is by voltage rather than capacity or consumption and this is what the alternative is proposing.</p>			
<p>Date submitted to Code Administrator: 10th August 2020</p> <p>You are: A Workgroup member</p> <p>Workgroup vote outcome: Formal alternative</p>			

Contents		 Any questions?
1	Alternative proposed solution for workgroup review	2
2	Difference between this proposal and Original	2
3	Justification for alternative proposal against CUSC Objectives	4
4	Impacts and Other Considerations	5
5	Implementation	6
6	Legal Text	6
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1 Alternative proposed solution for workgroup review

This alternative intends to mirror the Original in all regards except the number and type of Transmission Bands.

All of the options presented in the CMP343 workgroup consultation had the number of Transmission bands determined in respect to percentiles of consumption. This is because a suitable proxy for capacity (MIC is used at Distribution) is not available for Transmission connected demand. One potential way of segregating transmission connected demand is by voltage rather than capacity or consumption.

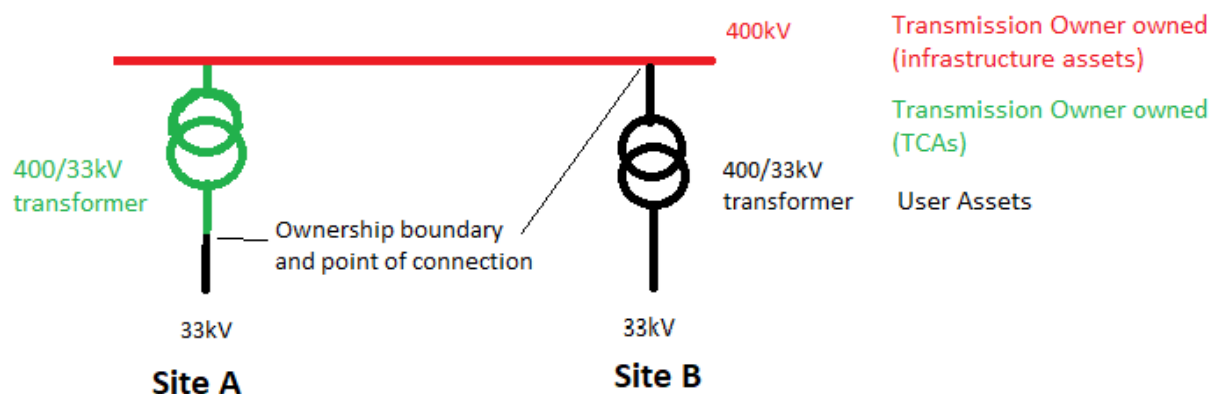
2 Difference between this proposal and Original

This proposal looks to create the following bands into which Transmission connected Final Demand Sites will be allocated;

1. >132kV

2. $\leq 132\text{kV}$ ¹

There will be no further segregation (e.g. by percentiles) within a voltage level due the low numbers of sites that would occur in each band if this was to be applied. There will also be no voltage levels below 132kV (at this point) due to only 1 site having a connection (subject to the following point) at $<132\text{kV}$. This will require defining a new point from which this voltage is derived (i.e. the boundary between shared and sole use/User assets) as using the point of connection voltage is not suitable due to the effect of Transmission Connection Assets as illustrated below;



Site A and Site B are identical in all respects except in who owns the 400/33kV transformer, for Site A this is owned by the Transmission Owner and Site B owns its transformer. To ensure fair and consistent treatment between these sites, the transmission connection assets need to be ignored when determining what voltage band these sites should be allocated to.

Based on initial analysis, this approach is likely to result in the following tariffs;

Voltage	Sites		Consumption			% of Total FDS volume	Annual Tariff	
	Count	%	MWh	%	MWh/Site	%	(£)	
>132kV	43	69.4%	4,414,757	83.4%	102,669	1.7%	£	842,979.26
$\leq 132\text{kV}$	19	30.6%	879,165	16.6%	46,272	0.3%	£	379,922.56
	62	100%	5,293,922	100%				

To compare, the equivalent data for Extra High Voltage (EHV) bands used by DNOs is also shown below; this data is from the TCR webinar on 16th July². The min, max and average values are shown to capture the differences between DNO areas in the total DUoS and TNUoS charges.

Band	Sites		Consumption			% of Total FDS volume	Annual DUoS + TNUoS Tariff		
	Count	%	MWh	%	MWh/Site		Min	Max	Avg

¹ for the avoidance of doubt, these will not be applied to distribution connected sites as the methodology in DCUSA will be used for these sites

² Spreadsheet is available here - <http://www.chargingfutures.com/about-charging-futures/charging-futures-forum/16-july-2020-forum-webinars/>

EHV Band 1	358	40.3%	1,375,366	5.4%	3,842	0.5%	£31,781.04	£55,537.79	£40,087.37
EHV Band 2	284	32.0%	5,601,377	22.0%	19,723	2.1%	£171,454.36	£227,173.66	£200,586.81
EHV Band 3	113	12.7%	4,693,609	18.5%	41,536	1.8%	£356,245.39	£456,143.98	£400,301.91
EHV Band 4	133	15.0%	13,735,161	54.1%	103,272	5.3%	£877,529.57	£1,460,965.24	£1,043,491.67
Total	888	100.0%	25,405,513	100.0%					

Using voltage as the basis of transmission banding has a variety of differences compared to consumption;

Benefits	Pitfalls
<ul style="list-style-type: none"> More equivalent treatment between 132kV transmission and 132kV distribution connected sites 	<ul style="list-style-type: none"> May influence what voltage potential connectees wish to use.
<ul style="list-style-type: none"> Difficult to game without significant engineering works 	<ul style="list-style-type: none"> Can be gamed with significant engineering works to change the connection design.
<ul style="list-style-type: none"> The TDR charge the band faces is directly proportional to the band's usage 	<ul style="list-style-type: none"> The TDR charge a site pays doesn't directly reflect the site's usage of the network (and therefore less cost-reflective).
<ul style="list-style-type: none"> Simpler and more transparent charging methodology 	<ul style="list-style-type: none"> Potential mismatch between where the 'Site' boundary is and where the voltage is taken
<ul style="list-style-type: none"> Difficult to dispute 	<ul style="list-style-type: none"> Assumes sites within a voltage band are similar
<ul style="list-style-type: none"> More stable charges as not subject to rebanding 	<ul style="list-style-type: none"> Impacts legacy sites whose connection voltage is a product of history

It should also be noted that whilst this approach does not rely on Consumption/Capacity it is consistent with the DCUSA approach which does segregate by voltage (LV, HV and EHV) before percentiles are applied.

3 Justification for alternative proposal against CUSC Objectives

Mandatory for the Alternative Proposer to complete.

Impact of the modification on the Applicable CUSC Objectives (Standard):

Relevant Objective	Identified impact
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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;	None
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);	None
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 as NGESO has been directed to raise this modification and implement its effects by the Authority.
d. Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1 *; and	None
e. Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive as it allows more clarity to and is simpler to administer for all industry participants.
*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).	

4 Impacts and Other Considerations

This will impact all Transmission connected Final Demand Sites as it will change the basis of banding from consumption to voltage and will therefore affect the amount of TNUoS due from individual sites compared to other options.

Consumer Impacts

This alternative is expected to be positive compared to other alternatives as it removes long-term uncertainty introduced by percentiles and the recalculation of percentile

boundaries at the beginning of each price control. It is also simpler and easier to manage compared to other alternatives reducing administration and costs.

5 Implementation

As per the original.

6 Legal Text

To be developed