

CMP316: TNUoS Arrangements for Co-located Generation Sites

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Co-location and the Current TNUoS Arrangements

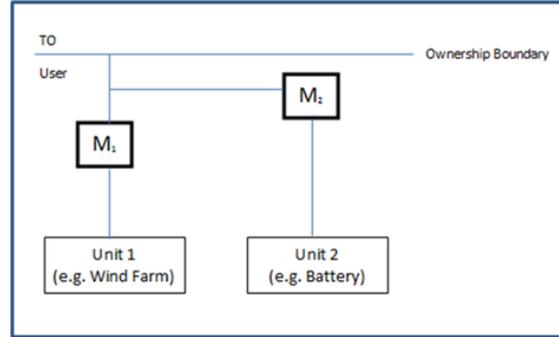
What is Co-Location?

A situation where multiple generation technologies are “co-located” within one **Power Station**.

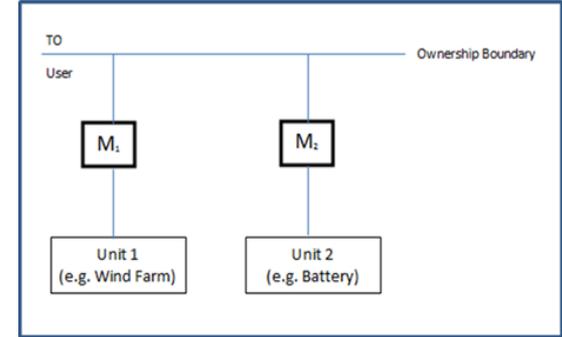


Power Station

Consolidated Connections



Parallel Connections



TNUoS guidance note for co-located sites was published by NGENSO in March. It advised that co-located sites should be charged in accordance with their **pre-dominant technology type**.

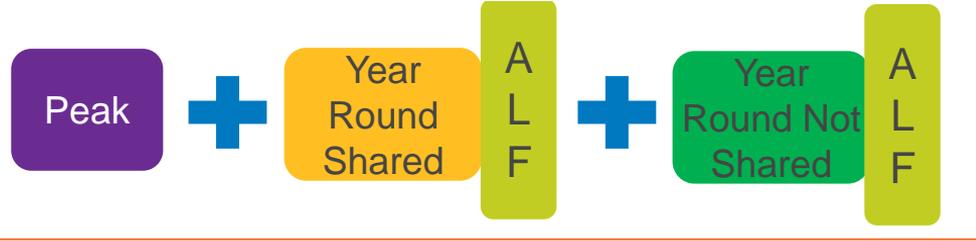
An installation comprising one or more **Generating Units** or **Power Park Modules** or **Power Generating Modules** (even where sited separately) owned and/or controlled by the same **Generator**, which may reasonably be considered as being managed as one **Power Station**.

What defect does the modification seek to address?

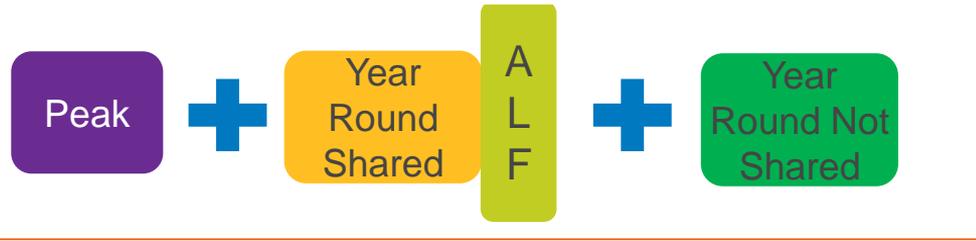
The non-dominant technology type is not considered in the calculation process at a co-located site. This means there is the potential to improve the cost reflectivity of the charging arrangements by catering for these particular configurations in the CUSC.

Transport Model Categories			
Tariff Model Categories	Co-Location and Predominant Fuel Type	Carbon	Low Carbon
	Conventional	Gas	
	Intermittent		Wind

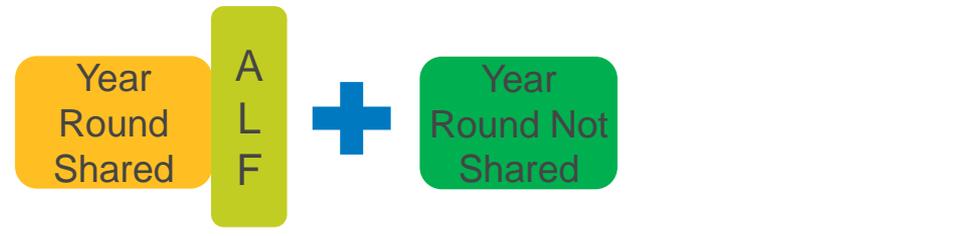
Conventional Carbon Generation:



Conventional Low-Carbon Generation:



Intermittent Generation:



What's in scope, what's out of scope?

In Scope

- 'Co-located' generation only – where a single Power Station has multiple generation technologies
- All technology types/combinations
- Any number of co-located technology types
- New stations (i.e. built with co-located generation) & retrofitted stations (i.e. built with a technology with a other technologies added on)

Out of Scope

- Shared Access connections – where two or more Users share a connection – as covered in Access & Forward Looking charges SCR
- 'Fundamentals of TNUoS' – Who does/doesn't pay, how the charge is calculated (per technology type) etc

Need to be mindful of existing work currently underway in the industry (e.g. Ofgem's Access and Forward Looking Charges SCR) and so need to precisely define the scope of this work.

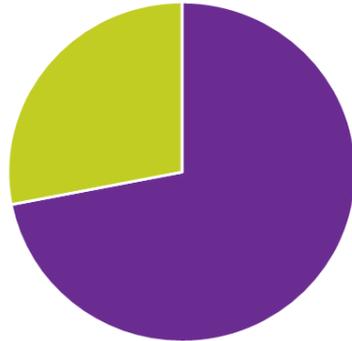
Outputs of the Co-Location Workshops

- Two workshops
- London/Warwick
- Representatives from 14 companies

The workshops explored four different methodologies for TNUoS charging on co-located sites. These largely fell into two categories:

Pro-Rata Approach

More accurately reflects the generator's network impact as multiple technologies are taken into consideration

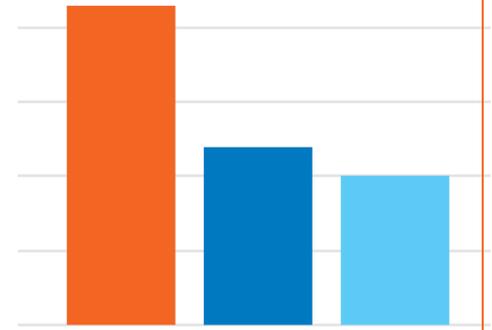


Clarify "Pre-dominant" Approach

Simple

Easy to Review

Minimal Change



Potential Solution: – “Pro-Rata” ing TEC

- Apportioning TEC between different components on the site using a new “multi-fuel site” formula
- Second CMP to make Section 11 and other template changes

Pro Rata Formula

$$MFSTEC_{is} = \frac{CAP_i}{\sum_{i=1}^n CAP_i} \times TEC_s$$

Where;

$MFSTEC_{is}$ = Multi-Fuel Sites' TEC for technology i at station s

CAP_i = Capacity for technology i

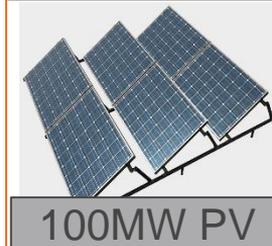
TEC_s = TEC of Power Station as defined in the Connection Agreement

n = number of different technologies on site

Example of site with TEC = 500MW



$$MFSTEC_{CCGTs} = \frac{500}{600} \times 500 = 416\frac{2}{3} MW$$



$$MFSTEC_{PVs} = \frac{100}{600} \times 500 = 83\frac{1}{3} MW$$

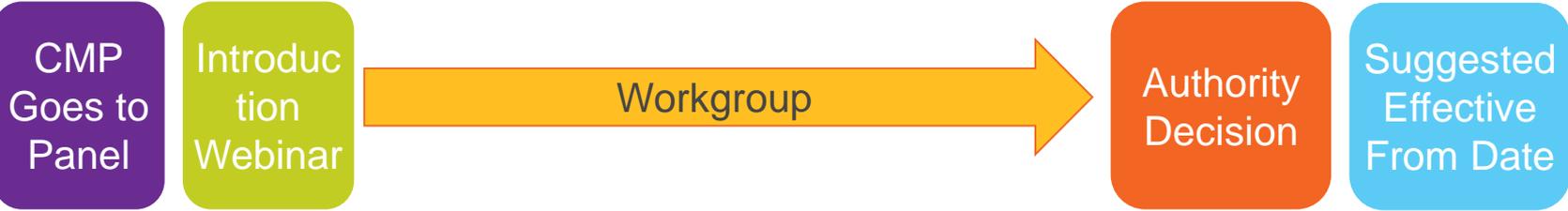
Timelines for the Modification Process

April '19 May '19

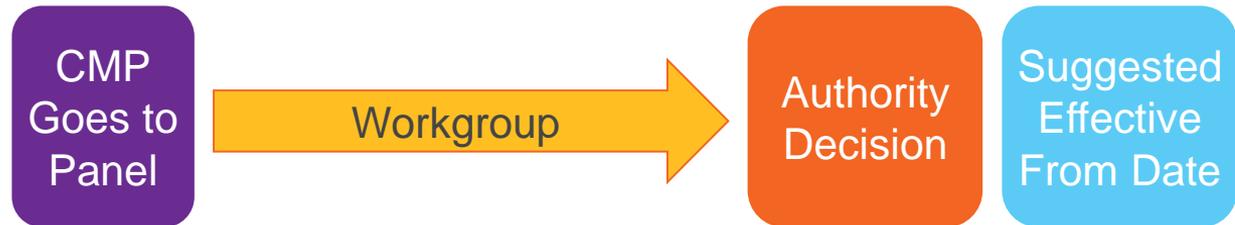
Nov '20

April '21

Co-Location Section 14 CMP



Co-Location Section 11 and BCA/BEGA updates CMP



TBC

**Thank you for
listening**

Any Questions?

