

CMP264/265

Implementation to TNUoS

Tariffs

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What are these Mods?

CMP264

Embedded Generation Triad Avoidance Standstill

CMP265

Gross charging of TNUoS for HH demand where embedded generation is in Capacity Market

- Considered by Joint Workgroup during Summer/Autumn 2016
- Ofgem made a decision 22nd June to approve WACM4
 - <https://www.ofgem.gov.uk/publications-and-updates/embedded-benefits-decision-industry-proposals-cmp269-and-cmp270>

Approved Solution (WACM4)

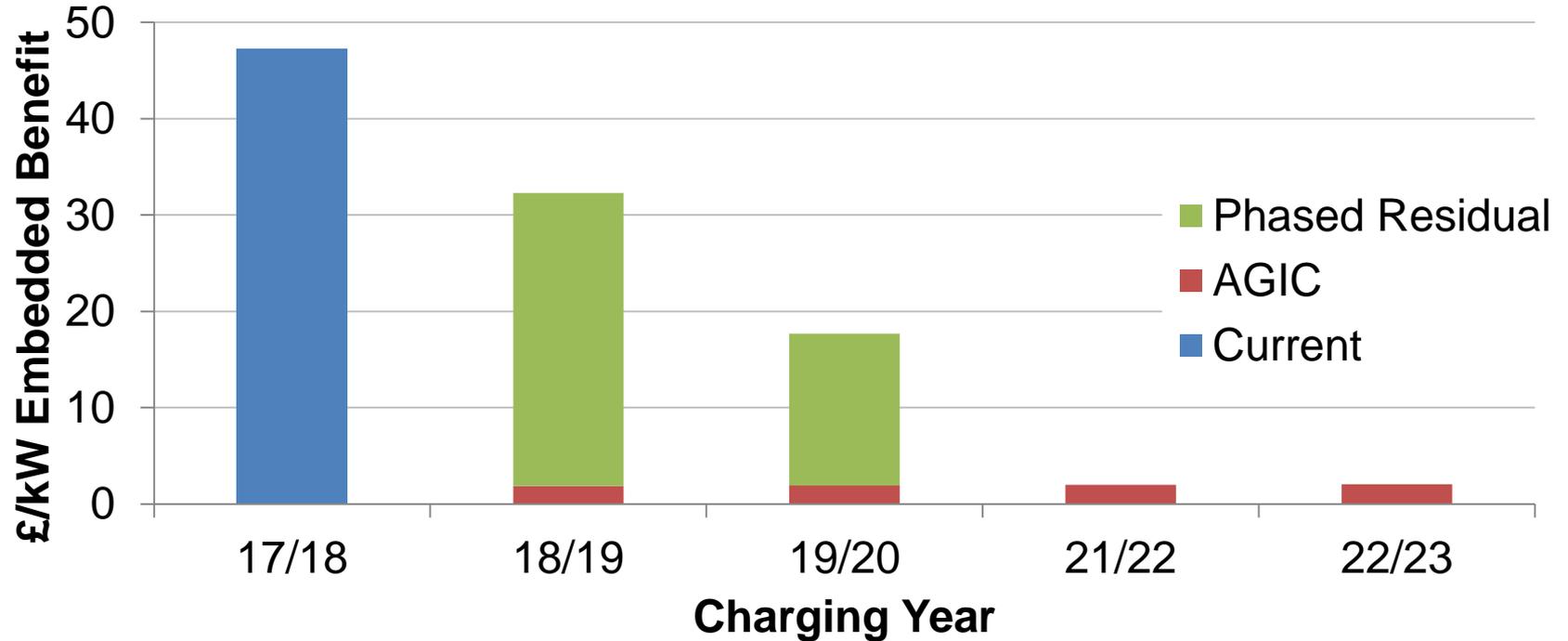
- Introduces “**Gross Charges for Demand**”
 - **Two tariffs for Half-Hourly (HH) Demand**
 - HH Gross Demand Tariff
 - Embedded Export Tariff
 - **NHH tariff** continues to be net
- Implementation from 2018/19 TNUoS Tariffs (1 April 2018)
- Phased Implementation over three years

Approved Solution (WACM4)

■ Embedded Export Tariff

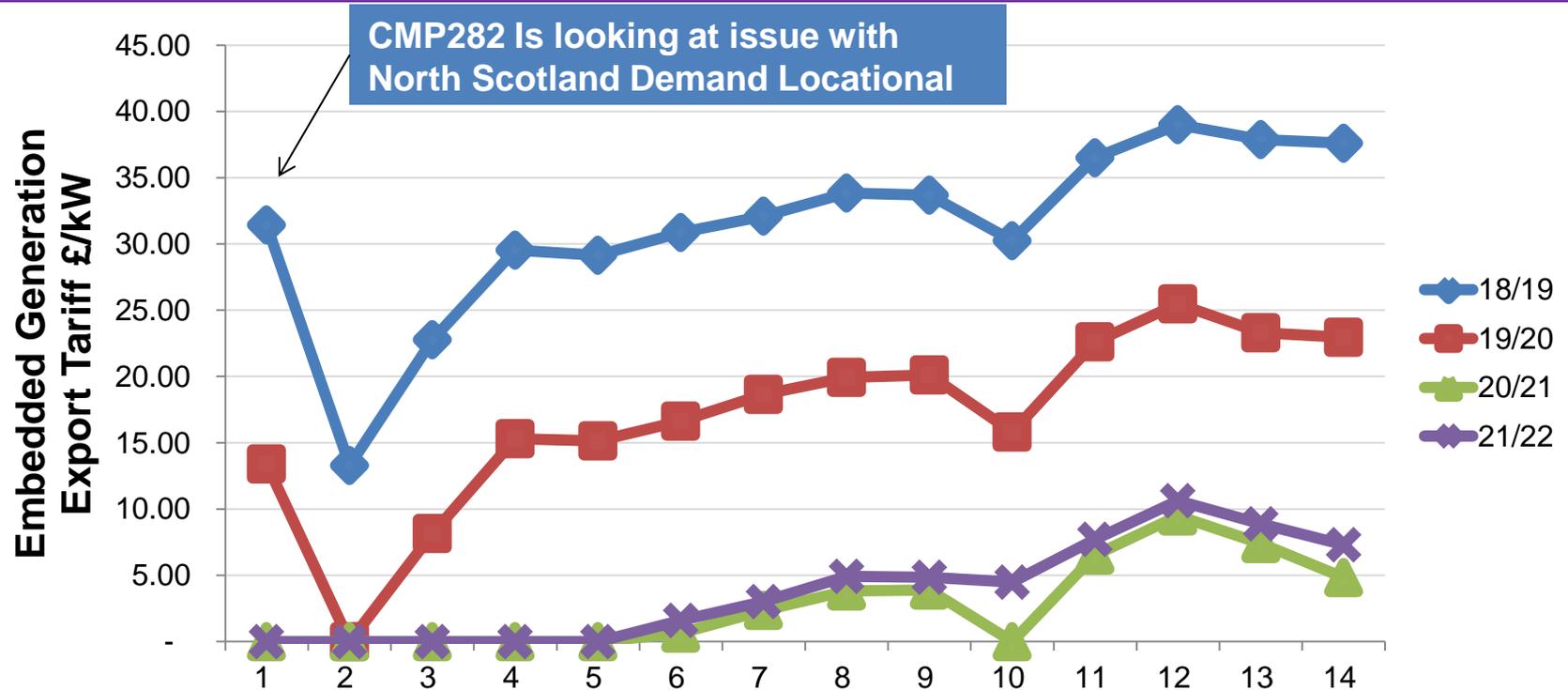
- Current Demand Locational tariffs (per DNO area)
- Avoided GSP Infrastructure Cost (AGIC)
- Phased residual for 18/19 and 19/20; zero afterwards
- Floored at zero to avoid negative tariffs

Value of TNUoS Demand Residual Embedded Benefit



Based on last estimate of AGIC £1.62/kW in 2011/12 prices, inflated to 18/19 prices. (See later in presentation)

Values of Embedded Export Tariff per zone



Locational Tariffs from June Forecast for 18/19, and Five Year Forecast for other years

Data Table

In the tables below
'dash' (-) equals zero.

Indicative Embedded Export Tariffs

Zone	Zone Name	Locational Demand Tariff (£/kW)			
		18/19	19/20	20/21	21/22
1	Northern Scotland	-0.88	- 4.28	- 4.77	- 4.76
2	Southern Scotland	-19.02	- 21.04	- 21.10	- 22.53
3	Northern	-9.52	- 9.54	- 10.99	- 10.94
4	North West	-2.78	- 2.39	- 2.97	- 2.60
5	Yorkshire	-3.15	- 2.54	- 3.43	- 3.11
6	N Wales & Mersey	-1.44	- 1.06	- 1.37	- 0.45
7	East Midlands	-0.21	0.97	0.37	0.97
8	Midlands	1.54	2.25	1.83	2.87
9	Eastern	1.37	2.43	1.89	2.79
10	South Wales	-2.06	- 1.87	- 2.03	2.43
11	South East	4.20	4.92	4.53	5.67
12	London	6.68	7.78	7.49	8.57
13	Southern	5.56	5.62	5.39	6.84
14	South Western	5.28	5.27	2.84	5.24

Zone	Zone Name	Indicative Embedded Generation Export Tariff (£/kW)			
		18/19	19/20	20/21	21/22
1	Northern Scotland	31.43	13.41	-	-
2	Southern Scotland	13.29	-	-	-
3	Northern	22.78	8.15	-	-
4	North West	29.52	15.30	-	-
5	Yorkshire	29.15	15.15	-	-
6	N Wales & Mersey	30.86	16.63	0.63	1.60
7	East Midlands	32.09	18.66	2.36	3.02
8	Midlands	33.84	19.94	3.82	4.92
9	Eastern	33.68	20.12	3.88	4.84
10	South Wales	30.25	15.81	-	4.48
11	South East	36.51	22.60	6.53	7.73
12	London	38.99	25.47	9.48	10.62
13	Southern	37.86	23.31	7.39	8.89
14	South Western	37.59	22.96	4.83	7.29
	<i>including</i>				
	Phased Residual	30.43	15.75	-	-
	AGIC	1.88	1.93	1.99	2.05

Forecasting the Gross Demand HH Tariff

- In order to **forecast the Gross Demand HH Tariff** (and NHH tariffs) we need to forecast the quantity of embedded generation and gross demand in each zone.
- The cost of the Embedded Export Tariff is added to the Demand TNUoS, prior to calculating the residual, to ensure overall revenue recovery.
- We are receiving historic data under P348/P349, to allow us to prepare our demand forecast for the October TNUoS Forecast

What will the tariff / bill look like

- Instead of two demand tariffs (HH and NHH) you will have three:
 - **HH Gross Demand** (kW at Triad)
 - **HH Credit for Embedded Generation** (kW at Triad)
 - **NHH** (kWh, annually between 4pm and 7pm)
- Suppliers will need for forecast, and be billed against all three

Avoided GSP Infrastructure Credit (AGIC)

■ CMP264/265 legal text defines as AGIC methodology as:

- The Avoided GSP Infrastructure Credit (AGIC) which represents the unit cost of infrastructure reinforcement at GSPs which is avoided as a consequence of embedded generation connected to the distribution networks served by those GSPs.
- It is calculated from the average annuitised cost of that infrastructure reinforcement divided by the average capacity delivered by a supergrid transformer.
- The Avoided GSP Infrastructure Credit is calculated at the beginning of each price control period and in the first applicable charging year following the implementation date of CMP264/265 using data submitted by onshore TSOs as part of the price control process.
- The data used is from the most recent [20] schemes submitted under the price control process and indexed each year by the RPI formula set out in 14.3.6 until the end of the price control.
- For the avoidance of doubt, this approach does not include the cost of the supergrid transformers or any other connection assets as they are paid for by the relevant DNOs through their connection charges.

Analysis to determine AGIC is ongoing

- **Initial (NGET) sample of schemes** suggest that this tariff **between £3-7/kW**.
- What we are doing now:
 - Gathering data from 20 most recent GB GSP infrastructure build projects
 - We are looking at the cost and capacity of shared infrastructure assets and not sole-use connection assets (connection assets).
- Parties involved:
 - NG TO, Scottish Power Transmission, Scottish Hydro Electricity Transmission
- Value to be published in September 2017

Timetable Forecasts – National Grid Letter 21 June

Summer 2017	Guidance on the structure of the new tariffs through forums and guidance notes.
September 2017	Update value of “Avoided GSP Infrastructure Credit (AGIC)” to apply to the 2018/19 tariffs for embedded generation as outlined in the legal text.
October 2017	A revised forecast of tariffs for 2018/19 TNUoS tariffs, in line with CMP264/265 methodology, and using the new AGIC
November 2017	A revised Five Year Forecast of TNUoS tariffs, in line with the CMP264/265 methodology.
December 2017	Draft tariffs for 2018/19 TNUoS, in line with CMP264/265 methodology, and using the new Avoided GSP Infrastructure Cost
January 2018	Final tariffs for 2018/19 TNUoS, in line with CMP264/265 methodology, and using the new Avoided GSP Infrastructure Cost

Link to Letter: <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589940926>

Any Questions

