Final TNUoS Tariffs for 2020/21 - Webinar

NGESO Revenue Team

Thursday 06 February 2020

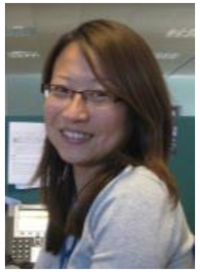
10:30 – 11:30am

Click here to view the webinar recording

Agenda

1	Introduction
2	Tariff timetable
3	Forecast process & key messages
4	Revenue
5	Generation tariffs
6	Onshore and offshore local tariffs
7	Demand tariffs
8	Timetable for 2021/22 Tariffs
9	Q&A and feedback

Revenue team: TNUoS Tariff Forecasting & Setting



Rebecca Yang

Forecasting, setting and billing TNUoS to recover £2.8bn of revenue per year from generators, demand and suppliers

Sarah Chleboun

- Offshore
- Annual Load Factors (ALFs)

Jo Zhou

- Revenue
- Onshore Local Circuits

Alice Grayson

- Generation
- Local substation

Matt Wootton

- Demand
- EET

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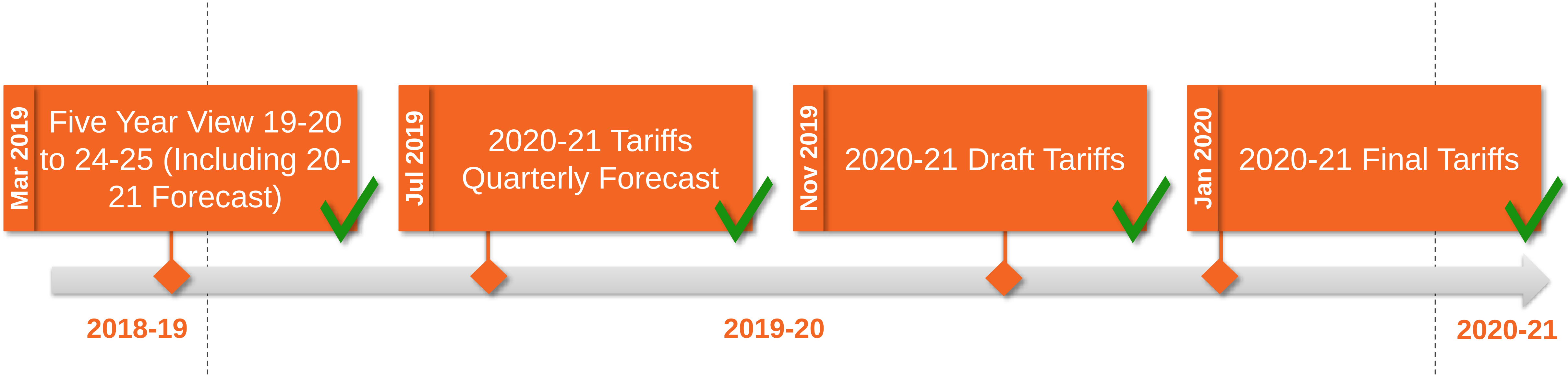
Tariff Timetable



- The final tariffs take effect from 01 April 2020.
- The only new CUSC modification that has been implemented for 2020/21 is CMP318, impacting the demand charging base.
- Ofgem's recent decision for the Targeted Charging Review does not have any impact for the 2020/21 TNUoS tariffs. The decision document can be found here

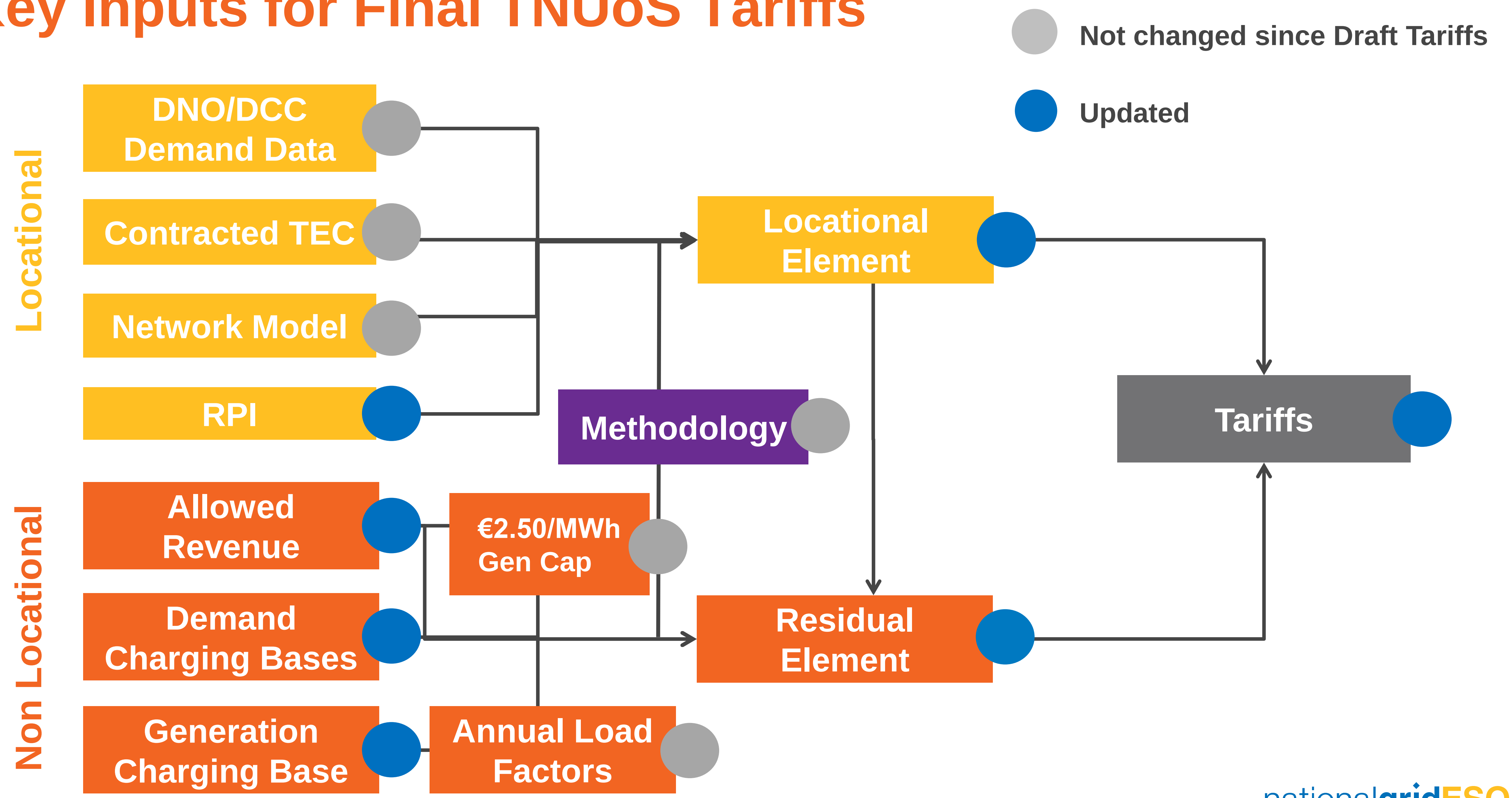
Forecast Processes and Key Messages

Input changes in our tariff publications

Not changed since last forecast | Updated | Updated and locked down

		Five-year forecast	March	July	DRAFT Nov	FINAL Jan
Methodology		Open to industry governance				
Locational	DNO/DCC demand data	Demand forecast provided by DNOs/DCCs in 2018			DNOs/DCCs update by week24	As per Draft Tariffs
Locational	Contracted TEC	Latest TEC	Latest TEC	Latest TEC	TEC Register frozen at 31 October	As per Draft Tariffs
Locational	Network model	As modelled in ETYS 2018 (except new local circuits)			Updated with ETYS 2019	As per Draft Tariffs
Residual	Allowed revenue	Update financial parameters	Update financial parameters	Update financial parameters	Latest TO forecasts	Final TO revenue submissions
Residual	Demand charging bases	Revised forecast	Revised forecast	Revised forecast	Revised forecast	Final forecast
Residual	Generation charging base	ESO best view	ESO best view	ESO best view	ESO best view	ESO final best view
Residual	Generation ALFs	As in 2018 ALF report			As in 2019 ALF report	As per Draft Tariffs
Residual	Generation revenue	Forecast	Forecast	Fixed gen rev £m	As per July	As per July

Key Inputs for Final TNUoS Tariffs



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Key Messages

- The total revenue in year 20/21 has now been finalised at £2,843m. This was a reduction of £42.8m from November forecast (£2,885.8m).

- The generation charging base has decreased by 5GW due to the updated best view on generation connection projects, resulting in an increase to average generation tariffs of £0.37/kW to £5.30/kW.

- Tariffs for individual generators have all decreased. The generator residual has decreased by £0.07/kW to £-4.85/kW.

- HH demand charging base increased, taking into account the year on year trend, relevant CUSC modification impact and outturn data so far for the current winter period.

- Average HH demand tariffs decreased by £0.85/kW and average NHH tariffs decreased by 0.40p/KWh.

Revenue

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Revenue

£m Nominal	TNUoS Revenue 2020/21 Nov Draft	TNUoS Revenue 2020/21 Jan Final
NGET Income from TNUoS	1,674.0	1,661.3
SPT Income from TNUoS	368.0	364.3
SHE Income from TNUoS	365.9	373.8
Other Pass-through from TNUoS	43.9	12.2
Offshore (offset by IFA contribution)	433.9	431.5
Total to Collect from TNUoS	**2,885.8**	**2,843.0**

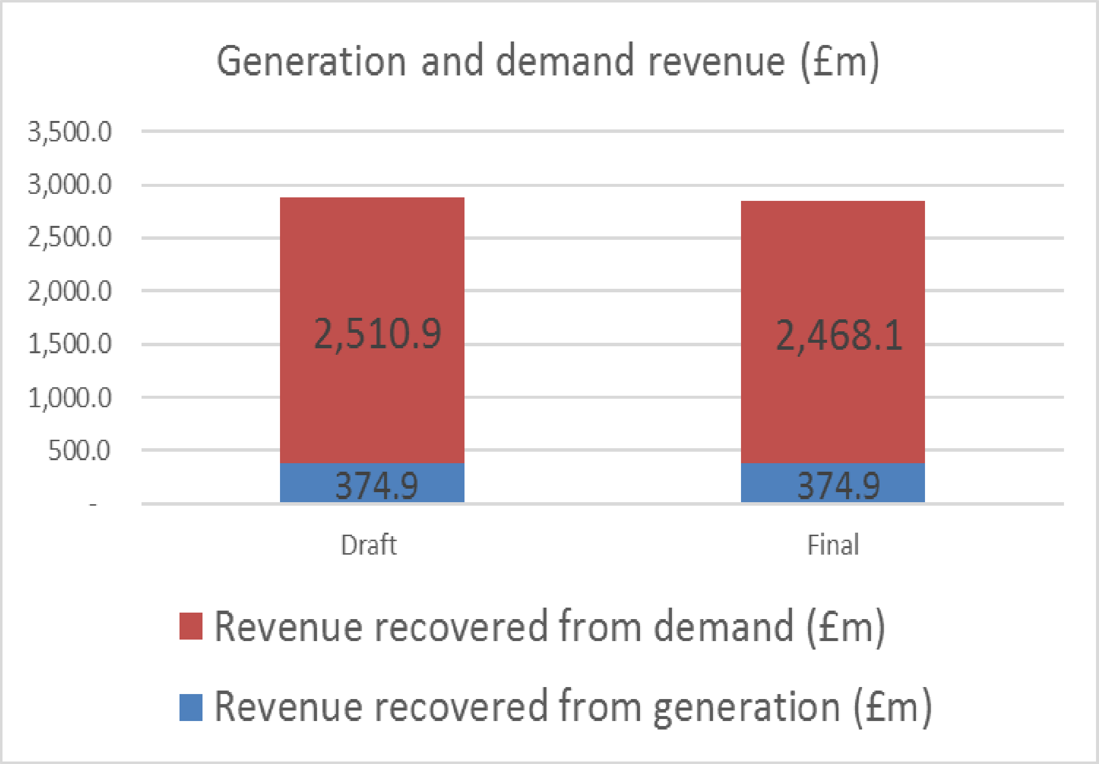
- Total revenue is £2,843.0m, £42.8m less than the November forecast, driven by updated forecast by TOs and latest pass-through revenue items.

Of the £42.8m of reduction:

- £11m is attributed to TOs' allowed revenue reduction
- £17.7m is from Network Innovation Competition (NIC) fund forecast
- £14.1m is from adjustments to site-specific Charges Discrepancy (DISt) and Termination Sums (TSt)

Summary of revenue to be recovered

	2020/21 Tariffs	
Revenue	Draft	Final
Total Revenue (£m)	2,885.8	2,843.0
Generation Output (TWh)	199.8	199.8
% of revenue from generation	13.0%	13.2%
% of revenue from demand	87.0%	86.8%
Revenue recovered from generation (£m)	374.9	374.9
Revenue recovered from demand (£m)	2,510.9	2,468.1



- Generation revenue has been locked down since July
- Thus the reduction to total revenue is passed on to demand users (by £42.8m)

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Generation Tariffs

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Generation charging base changes since Draft Tariffs

- Generation chargeable TEC decreased by 5.3GW due to our updated internal view of what will be connecting in the next financial year
- The decrease to the charging base, whilst the revenue for generation is fixed, has led to a increase in average generation tariffs
- It has also led to a decrease in the generation residual, decreasing generation tariffs across all zones

	2020/21 Tariffs			
Generation (GW)	**March**	**July**	**Draft**	**Final**
Contracted TEC	90.8	84.3	84.9	84.9
Modelled Best View TEC	82.6	80.7	84.9	84.9
Chargeable TEC	74.1	71.8	76.0	70.7

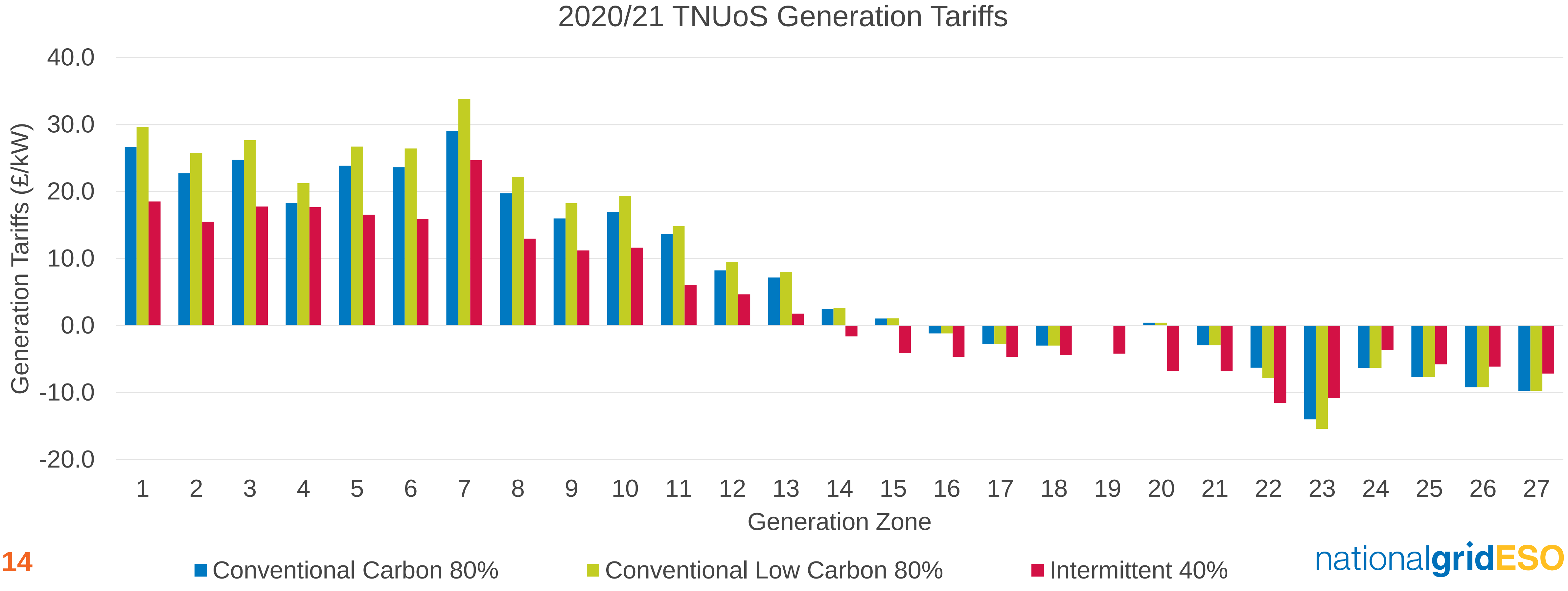
Contracted TEC – TEC as set out in the TEC register, fixed 31st Oct.

Modelled Best View Locational TEC – best view that the NGESO has for the forecasted locational TEC, fixed 31st Oct, for transport model.

Chargeable TEC – our best view, taking into account the TEC used for charging purposes from the TEC register, excluding non chargeable generators, for example interconnectors.

Generation tariffs for 2020/21

- The below graph shows the different wider generation tariffs for each zone
- The tariffs are higher in the north and go negative in the south due to the locational signals given by the tariffs



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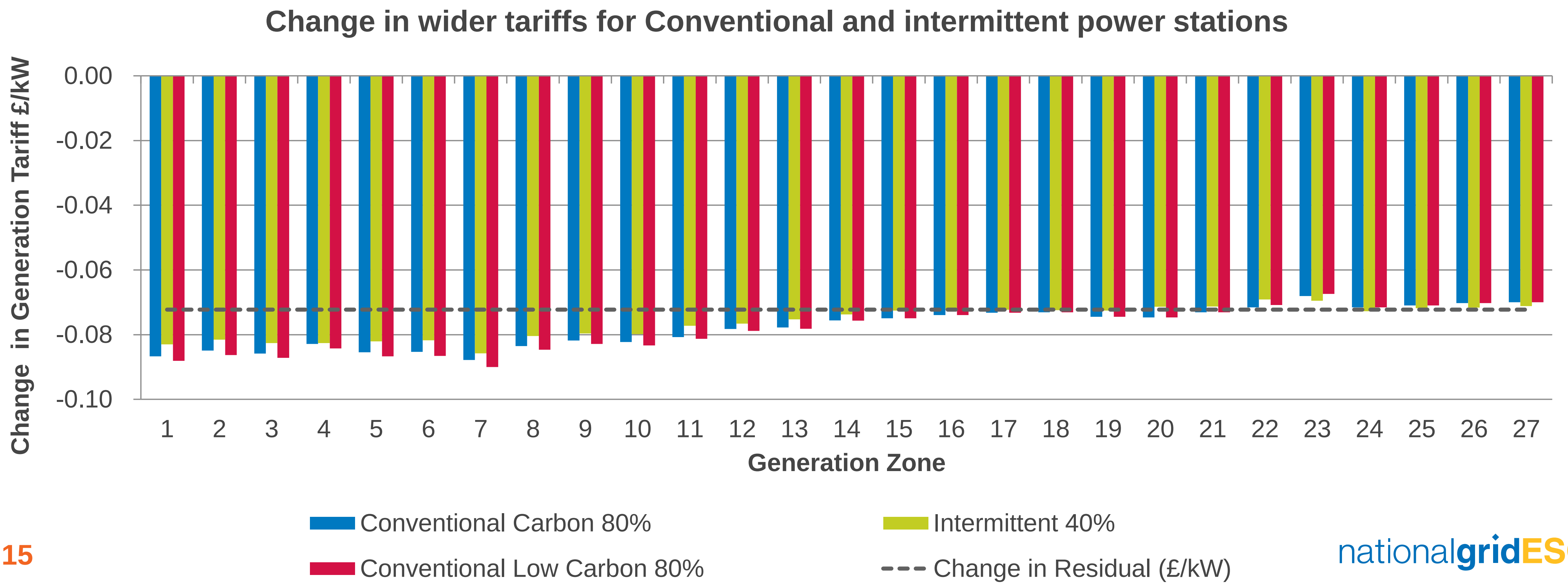
Generation tariff changes

- Residual has decreased by £0.07/kW which accounts for majority of changes to generation tariffs
- The slight variance in change between zones is due to the RPI update which has caused the locational tariffs to vary slightly



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Local Tariffs

Onshore Local Circuits Tariffs

- Tariffs have decreased slightly, in line with RPI.

Substation Name	(£/kW)	Substation Name	(£/kW)	Substation Name	(£/kW)
Aberarder	1.674800	Dunhill	1.449479	Mark Hill	0.886056
Aberdeen Bay	2.638574	Dunlaw Extension	1.526206	Middle Muir	2.005933
Achruach	4.345091	Edinbane	6.927489	Middleton	0.150275
Aigas	0.661862	Ewe Hill	2.463019	Millennium Wind	1.848216
An Suidhe	- 0.969437	Fallago	0.438701	Moffat	0.189262
Arecleoch	2.101823	Farr	3.608124	Mossford	2.915511
Baglan Bay	0.770013	Fernoch	4.451403	Nant	- 1.243308
Beinneun Wind Farm	1.519952	Ffestiniogg	0.256029	Necton	1.136934
Bhlaraidh Wind Farm	0.653386	Finlarig	0.324035	New Deer	0.762008
Black Hill	1.571596	Foyers	0.296426	Rhigos	0.102846
Black Law	1.768307	Galawhistle	3.541018	Rocksavage	0.017912
BlackCraig Wind Farm	6.370470	Glendoe	1.861454	Saltend	0.017558
BlackLaw Extension	3.749925	Glenglass	4.869173	South Humber Bank	0.418643
Clyde (North)	0.110981	Gordonbush	0.241519	Spalding	0.286811
Clyde (South)	0.128344	Griffin Wind	9.829899	Strathbrora	0.109582
Corriegarth	2.931749	Hadyard Hill	2.801053	Strathy Wind	1.898434
Corriemoillie	1.685397	Harestanes	2.554720	Stronelairg	1.088627
Coryton	0.049976	Hartlepool	0.207898	Wester Dod	0.481568
Cruachan	1.846679	Invergarry	0.370326	Whitelee	0.107401
Crystal Rig	0.137216	Kilgallioch	1.065057	Whitelee Extension	0.298574
Culligran	1.753949	Kilmorack	0.199859		
Deanie	2.881488	Kype Muir	1.501022		
Dersalloch	2.437668	Langage	0.665581		
Dinorwig	2.428025	Lochay	0.370326		
Dorenell	2.123778	Luichart	0.582090		
Dumnaglass	1.146983	Marchwood	0.386209		

Onshore Local Substation Tariffs

- Tariffs have decreased slightly, in line with RPI.

2020/21 Local Substation Tariff (£/kW)				
Substation Rating	Connection Type	132kV	275kV	400kV
<1320 MW	No redundancy	0.203179	0.116232	0.083748
<1320 MW	Redundancy	0.447587	0.276925	0.201402
>=1320 MW	No redundancy	n/a	0.364438	0.263562
>=1320 MW	Redundancy	n/a	0.598313	0.436719

Offshore Local Tariffs

- Tariffs are set at asset transfer and are indexed in line with the revenue of the associated Offshore Transmission Owner.
- Most tariffs have decreased slightly due to inflation updates or have not changed since Draft tariffs.
- There are still projects expected to asset transfer during 2019/20 and therefore will have tariffs calculated this year.

Offshore Generator	Tariff Component (£/kW)		
	Substation	Circuit	ETUoS
Barrow	8.162444	42.705899	1.060446
Burbo Bank	10.580601	20.257999	0.000000
Dudgeon	15.326966	23.898895	0.000000
Greater Gabbard	15.324099	35.213271	0.000000
Gunfleet	17.665294	16.218123	3.031261
Gwynt Y Mor	18.654651	18.377138	0.000000
Humber Gateway	15.005644	33.857735	0.000000
Lincs	15.268405	59.779295	0.000000
London Array	10.412718	35.465138	0.000000
Ormonde	25.233893	47.008379	0.374617
Race Bank	9.624985	26.420532	0.000000
Robin Rigg	-0.466793	30.921041	9.583854
Robin Rigg West	-0.466793	30.921041	9.583854
Sheringham Shoal	24.410421	28.627705	0.622282
Thanet	18.575960	34.613653	0.833273
Walney 1	21.778046	43.370922	0.000000
Walney 2	21.619660	43.753022	0.000000
West of Duddon Sands	8.423723	41.565850	0.000000
Westermost Rough	17.737529	30.004308	0.000000

Demand Tariffs

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Demand volumes

- The HH demand charging base has been increased, taking into account the year on year trend, relevant CUSC modification impact and outturn data so far for the current winter period.
- As a result it is expected that more revenue will be collected from HH demand.
- This has decreased the revenue to be collected via NHH demand and decreased NHH tariffs
- Previous forecasts anticipated that there would be a greater reduction in the HH charging base due to the impact CMP266. Taking into outturn data so far, we have re-adjusted our calculations and have moved the 'Average Gross Triad' to be more inline with our simulations.

	2020/21 Tariffs			
Charging Bases	**March**	**July**	**Draft**	**Final**
NHH Demand (4pm-7pm TWh)	24.1	24.3	25.1	25.1
Total Average Gross Triad (GW)	50.2	50.4	50.4	50.4
HH Demand Average Gross Triad (GW)	19.2	19.2	18.1	19.6
Embedded Generation Export (GW)	7.1	7.2	7.2	7.2

Demand Tariffs

- There has been a decrease in the amount of revenue to be collected causing the demand tariffs to decrease
- Tariffs include the Small Generator Discount levy
- £17.1m payable to eligible embedded generators (7.2GW) through EET (embedded export tariffs)

Demand Zone		HH Demand Tariff (£/kW)	NHH Demand Tariff (p/kWh)	Embedded Export Tariff (£/kW)
1	Northern Scotland	21.126849	2.742642	-
2	Southern Scotland	28.760295	3.528995	-
3	Northern	40.022002	4.768367	-
4	North West	46.674676	5.735191	-
5	Yorkshire	47.834680	5.645414	-
6	N Wales & Mersey	48.904955	5.811644	0.587601
7	East Midlands	51.387929	6.281123	3.070575
8	Midlands	52.648445	6.525494	4.331091
9	Eastern	53.488450	6.994220	5.171096
10	South Wales	50.613794	5.594905	2.296440
11	South East	56.501849	7.511337	8.184495
12	London	59.267002	5.828242	10.949648
13	Southern	57.772417	7.136303	9.455063
14	South Western	57.020402	7.608806	8.703048

Residual charge for demand:	51.031645	
Tariffs include small gen tariff of:	0.700635	0.085865

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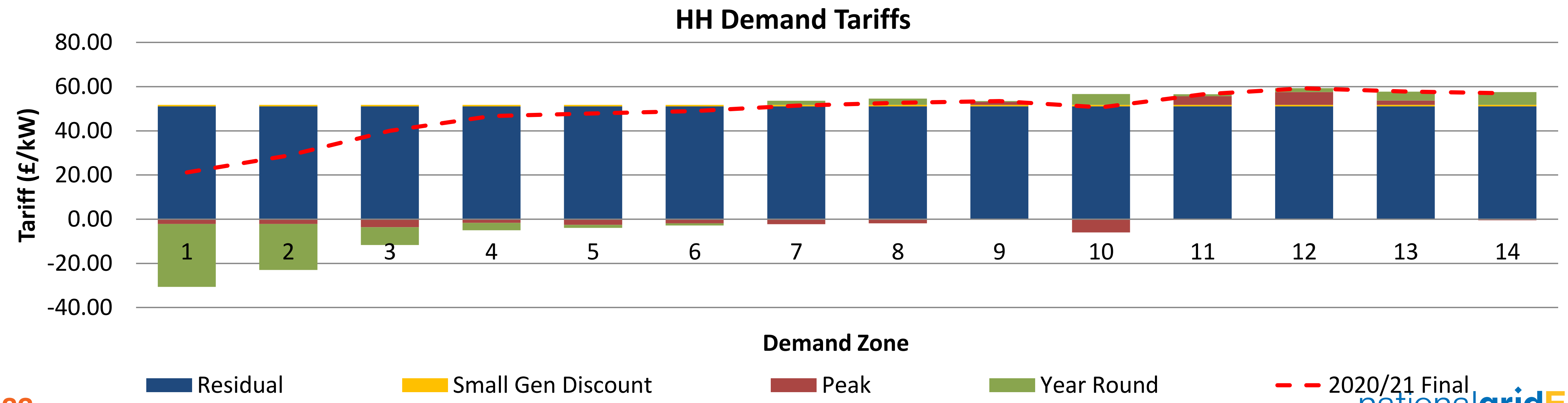
HH Demand Tariff

- The average tariff is £49.56/kW, a decrease of £0.85/kW since the November Draft Tariffs due to the decrease in revenue to be recovered from demand tariffs
- More revenue is expected to be collected from HH demand, thus decreasing the revenue to be collected via NHH demand and decreasing NHH tariffs
- The average tariff does not include the Small Generator Discount
- The residual element of the tariffs has decreased by £0.85/kW



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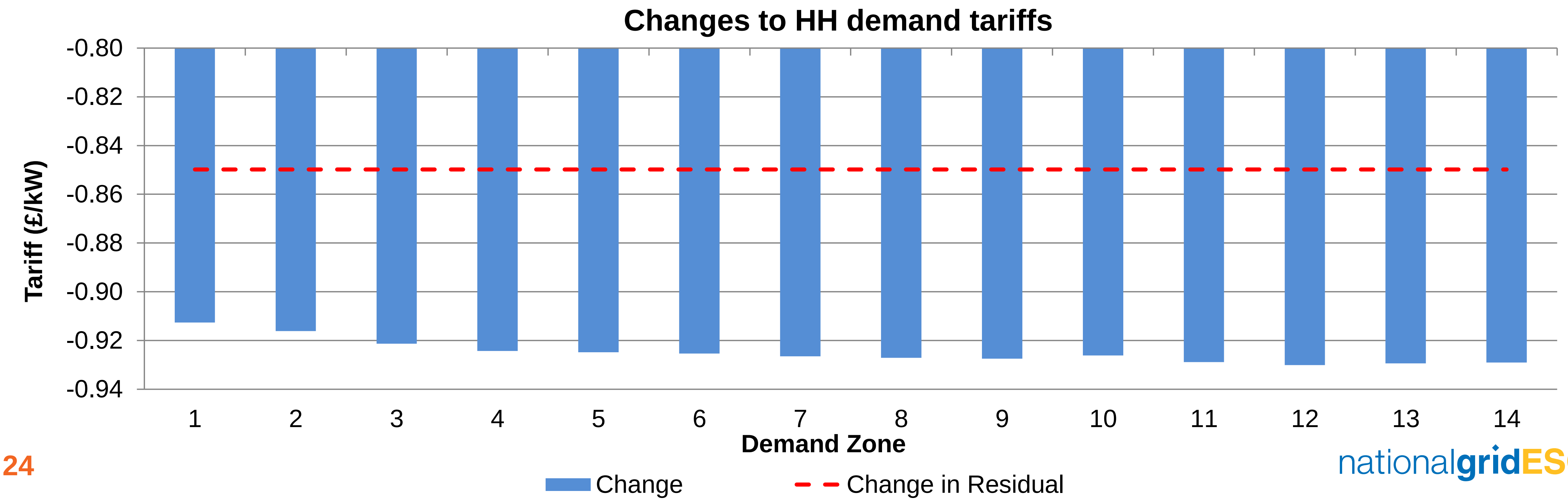
Changes to HH tariffs

- The tariff has decreased in all zones, the decrease is spread relatively equal across the 14 zones with a slightly lower reduction seen in zones 1–3
- Overall the HH demand tariffs have decreased due to the decrease in overall revenue to be collected



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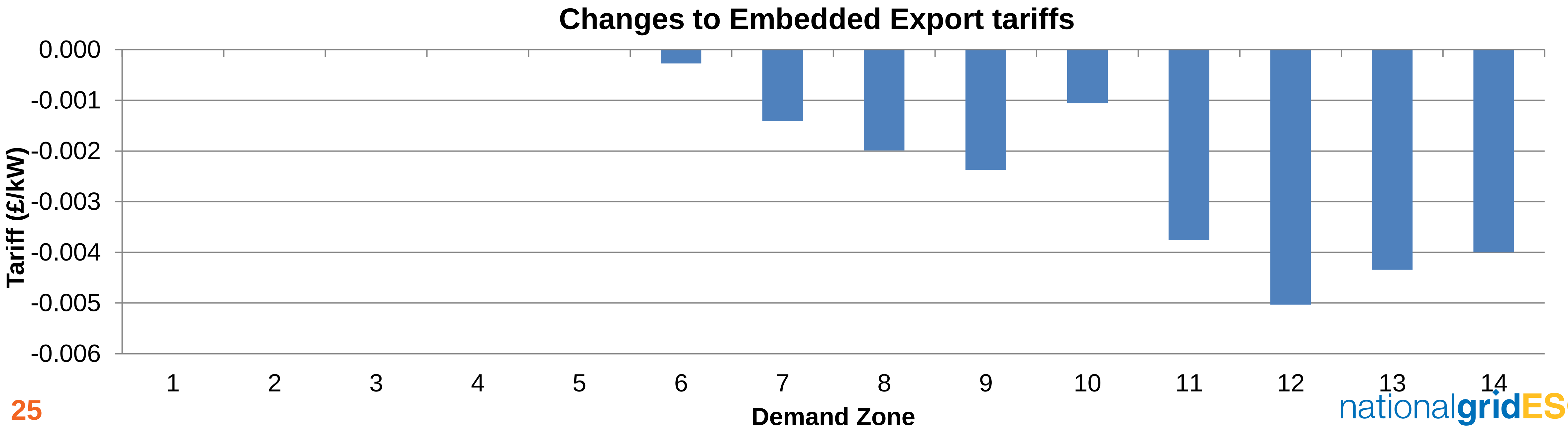
Embedded Export Tariff

- There has been minimal change since the November Draft Tariffs, the average tariff remains at £2.37/kW and the EET charging base stays at 7.2GW
- There has been a slight decrease in the AGIC (Avoided Grid Supply Point Infrastructure Credit) due to an RPI update, but this has had no noticeable impact on the EET
- Zones 1 to 5 have an EET of £0.00/kW due to the phased residual reduction under CMP264/265
- Zones 6 to 14 have decreased marginally, with zone 12 decreasing the greatest by 0.005p



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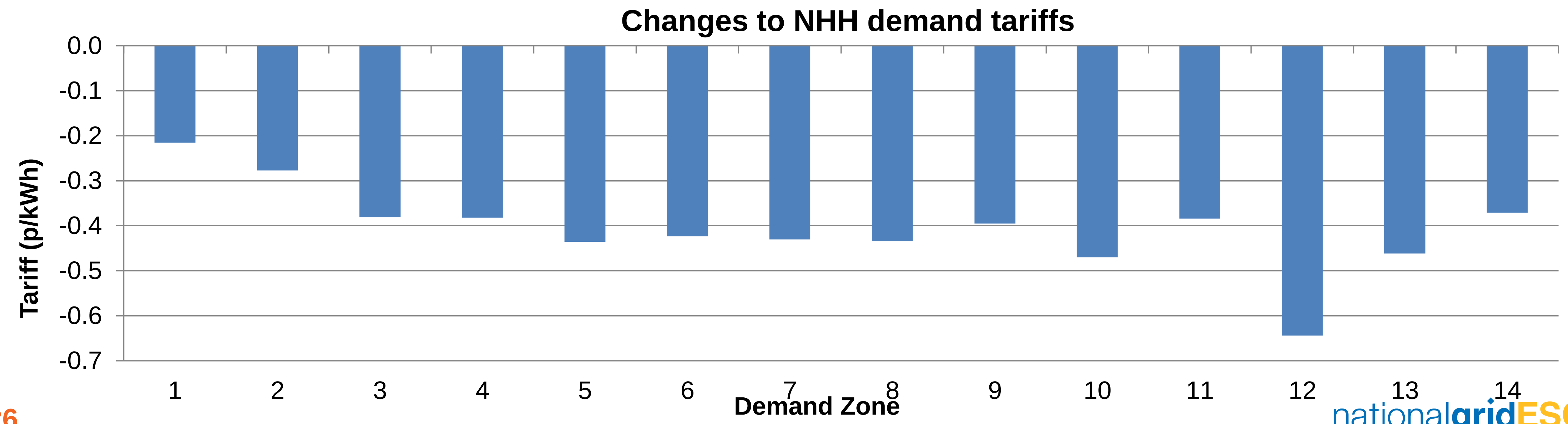
NHH Tariffs

- The average NHH tariff is 6.02p/kWh which has decreased by 0.40p/kWh since the November Draft Tariffs
- This is due to the impact of the HH demand charging base increasing, which will increase the expected revenue to be collected from HH
- The NHH tariffs have decreased in all zones, zones 1 & 2 have reduced the least (0.20p - 0.30p/kWh) whilst zone 12 has decreased the most (0.64p/kWh). The remaining zones have adjusted around the 0.40p/kWh.



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Timetable for 2021/22 Tariffs

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TNUoS Tariffs Forecast Timetable for 2021/22 Tariffs

There are currently many ongoing changes that will impact the TNUoS charging methodology and will therefore affect the value and accuracy of our forecasts.

SCR
April 2021 onwards

- TCR – April 2021
- Network Access and Forward Looking Charging – likely April 2023

RIIO2 Reset
April 2021 - 2026

- Generation re-zoning
- Local elements – substation tariffs, onshore security factor, offshore tariffs
- Other parameters

- We requested your feedback on our proposed approach for the forthcoming publications
- Taking into account the feedback received, we have finalised the timetable for 2021/22 tariffs forecast publications as below:

Initial 2021/22 Tariff Forecast

5 Year View of 2021/22 to 2025/26 of TNUoS tariffs (incl. updated 2021/22 forecast)

Draft 2021/22 Tariffs

Final 2021/22 Tariffs

FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN

Save the date

Transmission Charging Methodology Forum (TCMF)

- We will continue to engage with you on the content of our forecasts via the monthly TCMF meetings.

Interested? Further details can be found on the NGESO website

Charging Future Forum

- One place to learn, contribute and shape the reform of GB's electricity network access and charging arrangements
- Next meeting is expected in March 2020

Interested? Further information can be found on the Charging Futures **Website**

If you’re not already subscribed to our mailing list you can **subscribe here**

Q & A (Included in recording)

Contact us:

TNUoS.Queries@nationalgrideso.com

T: 01926 654633

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Your feedback

We are continuously looking at ways we can improve the experience of all our customers

We welcome your feedback on your experiences of the TNUoS tariff forecasting and setting process

Feedback survey:

Go to: www.slido.com
Event code: #FinalTariffs
Respond to 3 questions

TNUoS Queries

E: Tnuos.Queries@nationalgrideso.com
T: 01926 654633

Thank You

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E: Tnuos.queries@nationalgrideso.com

T: 01926 654633

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