Third Party Costs

A guide to what's changing in TPCs and how it could affect your business April 2021





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Introduction

Third Party Costs (TPCs) make up around 60% of a typical electricity bill, with around 40% paying for the cost of the actual power your business uses. Any changes to them could make a significant difference to your energy costs.

Some TPCs cover policy costs that help pay for the investment needed to decarbonise the electricity sector. Others are network costs that help pay to construct, maintain and balance our electricity networks, getting power from where it's produced to where it's needed.

We've seen a lot of change to TPCs recently with increasing renewables, higher balancing costs and demand reductions due to lockdowns and ongoing restrictions. Going forward, Ofgem's Targeted Charging Review will restructure the way parts of the network related TPCs are charged, thus bringing further change.

We've produced this guide to help you understand the likely impact of these changes. It may even help you to reduce your exposure to them. We hope you find it useful.

2020 was a remarkable year for electricity

At the height of the first national lockdown (April-July 2020), we saw national demand fall by an unprecedented 15%.

As a result of this, in 2020 renewable generation overtook fossil fuels for the first time to become Britain's biggest source of electricity for the whole year. Between them, wind, solar, hydropower and biomass produced 104 TWh of electricity, or 39% of Britain's consumption.



The demise of fossil fuels for generating electricity in Britain

This has been a dramatic change in a very short time. Just 10 years ago, fossil fuels produced three-quarters of our electricity – 20 times as much as renewables. In 2020, supply from coal, gas and oil fell below 37.5% of Britain's consumption (100 TWh) for the first time since 1960. The electricity grid of the future's beginning to take shape.

"2020 saw Britain edge closer to the power system of the future with renewables generating more power than fossil fuels. Flexible technologies like pumped hydro storage kept the system stable as supply from renewables increased and demand for power fell."

Drax Electric Insights, Q4 2020 - electricinsights.co.uk

The largest ever fall in demand for electricity

As the economy ground to a halt after the first lockdown began in spring 2020, it led to the greatest fall in electricity demand that we've ever seen in Britain. The coronavirus pandemic also led to a worldwide drop in commodity prices, with oil futures prices turning negative for the first time in history. In the UK, supressed demand and weak commodity prices saw power prices fall to their lowest in over a decade, with 2020 delivery averaging £36/MWh.

Since then, we've seen some recovery in national demand, and power prices have rebounded beyond their pre-pandemic levels. There are several reasons for this:

Firstly, the subsequent lockdowns had lower levels of demand reduction, partly due to more businesses being open during the second and third national lockdowns, and partly due to timing. The latest lockdown happened over winter, when demand's generally higher. This is particularly true for the residential sector and has been amplified with more people working from home. We also had the coldest winter in a decade, with demand on some days higher than winter 2019/20, despite the lockdown.

We've also seen a recovery in commodity prices in Q1 of 2021, driven by a combination of factors. Bullish sentiment following successful vaccine developments, which caused crude oil - a key driver for carbon, gas, and power prices - to rally. In addition, cold weather across Asia in late Dec2020 caused LNG demand to spike. This caused a subsequent uptick in gas prices across all markets. Finally, carbon pricing hit all-time highs of \$42/tonne in response to EU recovery packages focussing on climate measures

As we reach the end of the 2020/21 charging period, we're estimating that national demand will outturn at 6.5-7% lower than 2019/20. Looking forward, there remains some uncertainty around the easing of lockdown restrictions, but we'd expect to see an increase in demand as restrictions are lifted. However, the speed and level of the economic recovery post-pandemic will be the key factor in the overall level of recovery for the coming year.

How this changing environment has affected TPCs

We have seen the demand reductions from COVID-19 impact many of TPCs, but these aren't the only challenges facing the industry.

The increased intermittent renewable generation needed to meet our Net Zero goals also has an impact. Where previously system balancing and stability services were provided automatically by thermal generation, the ESO must procure these services through other mechanisms

It's been a busy year for regulations, too. Industry has raised or agreed changes and modifications, to lessen the impact of COVID-19 to suppliers and consumers, but also in response to the outcomes of the BSUoS Taskforce and the Targeted Charging Review (TCR), due to their impact on TPCs and how they're charged in the future.

Make up of a bill

This chart shows the rise and falls in TPC forecast (middle case) from our team of experts at Haven Power.

These figures are indicative and rounded to two decimal places. Please be aware DUoS and TNUoS charges can significantly vary from customer to customer. The below are portfolio averages.

	Charge (£/MWh)	2020/21	2021/22	2022/23	2023/24	2024/25
Energy	Energy Average Wholesale Cost at 22/03/2021***	33.99	60.82	55.61	52.24	51.92
Lossos	Distribution Losses (Average 8%)	2.72	4.87	4.45	4.18	4.15
LUSSES	Transmission Losses (Average 1.4%)	0.48	0.85	0.78	0.73	0.73
	Distribution Use of System (DUoS)	10.82	11.28	12.03	12.16	12.83
Distribution/ Transmission	Transmission Use of System (TNUoS)	7.10	7.27	7.40	7.58	7.86
Hunsmission	Balancing Service Use of System (BSUoS)*	4.55	4.17	4.37	7.91	8.58
	Renewables Obligation (RO)	23.57	24.99	24.64	25.04	25.60
Levy Control Framework charges	Levy Control Feed in Tariff (FiT)	7.09	6.71	6.93	7.22	7.52
	Contracts for Difference (CfD)*	9.27	10.86	12.21	13.43	14.00
	Capacity Market (CM)**	4.77	2.22	1.46	2.99	3.58
	Climate Change Levy (CCL)**	8.11	7.75	7.91	8.06	8.22
Other charges	Elexon*	0.08	0.08	0.08	0.08	0.08
	Assistance for Areas of High Electricity Distribution Costs (AAHEDC)**	0.30	0.41	0.47	0.49	0.50
	Total	112.85	142.28	138.34	142.11	145.57

National Balancing Point (NBP)

Grid Supply Point (GSP)

2020/21 uses the price from 31/03/2020

Cost Breakdown, 2021/22





RO (18.0%)

Distribution Use of System (DUoS)

The DUoS charge will rise over the next few years due to various adjustments to allowed revenue. The way the residual element is charged will change from April 22 onwards as a result of the Targeted Charging Review.

	2020/21	2021/22	2022/23	2023/24	2024/25	
DUoS High Case				8.26%	12.81%	
DUoS Middle Case	1.80%*	4.25%*	4.25%*	2.40%*	1.04%	5.50%
DUoS Low Case			-	-5.98%	-1.61%	

*Actual rates are known. The above table uses Haven Power's portfolio average - charges for individual customers will vary depending on geographical location, connection type and usage pattern.

In more detail

2021/22

- Following the revised tariff structures which will be implemented as a result of Ofgem's DCP268, from April 2021, NHH customers will now be charged using the variable 'RAG' methodology ('Red/Amber/Green'). This aligns non-half-hourly (NHH) with half-hourly (HH) customers.
- Intermittent and non-intermittent generators are also now aligned using the same RAG methodology. As a result of these changes, the existing 33 tariff structure bands will be reduced to 16.

2022/2023 and onwards

There are serval factors contributing to the increase in tariffs: an under-collection of revenue in 2020/21 as a result of COVID-19; revised adjustments to base revenue for 2020/21 and 2021/22 as directed by Ofgem; and underlying increases in base revenues due to RIIO-2 starting in 2023/24 (which determines how much revenue DNOs can collect over a five-year period).

 From 2022/23, the residual element will now be recovered via the fixed charge (as laid out in Ofgem's Targeted Charging Review).

This residual charge varies by meter type – low-voltage, high-voltage, extremely highvoltage and NHH – and by sub-banding depending on whether the customer falls into band 1, 2, 3 or 4. Each meter point administration number's (MPAN) banding is determined by its capacity for HH customers and by EAC for NHH customers. Find out more here.

On average this will increase the proportion of the fixed charge from around 1% to anywhere between 50% and 90% for low voltage and high voltage sites, though this will vary depending on Distribution Network Operator, connection, and sub band.

Transmission Network Use of System (TNUoS)

TNUoS charges are set to increase in 2021 and over the coming charging years on average due to rising tariffs and an increase in chargeable revenue. With the introduction of the TCR from 2022/23 onwards there will be significant changes to the residual (i.e., long-term fixed costs) charging methodology (please see below).

	2020/21	2021/22	2022/23	2023/24	2024/25
TNUoS High Case			19.69%	13.58%	3.14%
TNUoS Middle Case	-0.3%	2.31%	1.85%	2.37%	3.75%
TNUoS Low Case			-10.06%	-16.47%	4.66%

In more detail

2021/2022 and onwards

Final tariffs for 2021/22 were published in Feb-21. National Grid increased their 2021/22 tariffs by c10%, compared to their previous forecasts for the year. The significant increase was driven by updated revenue forecasts submitted by Transmission Owners (TOs) following the start of the new price control period.

Overall tariffs have increased by 2% for half-hourly (HH) tariffs, or 6% for non-half-hourly (NHH) compared to the previous charging year (2020/21).

Targeted Charging Review (TCR)

From 2022/23 onwards the TCR is significantly changing the charging methodology used in recovering the residual element (i.e., long-term fixed network infrastructure costs) of TNUoS.

Residual costs for HH Customers will no longer be allocated to only November to February (i.e., Triads) but across the entire charging year (April to March). The residual element (yet to be determined, however the majority) will be charged on a fixed charge basis (i.e., p/day) not £/kW.

The rates will vary by meter type (i.e., low, high and extra-high voltage), and then further into 4 sub bands with each meter type. For more information, please refer to DUoS.

Balancing Services Use of System (BSUoS)

BSUoS costs for 2020/21 are likely to exceed £2bn for the first time. Going forward, we expect costs to continue increasing as we see more wind generation come online, making it harder to balance the system.

However, the expected recovery in national demand post-pandemic means that, overall, BSUoS charges are likely to be lower in the next couple of years than they were in 2020/21. Looking further forward, BSUoS charges will then increase dramatically in charging year 2023/24 as a result of CMP308., They'll move from being charged across both generation and demand to being recovered solely from demand.

£/MWh	2020/21	2021/22	2022/23	2023/24	2024/25
BSUoS High Case	5.36	5.14	5.90	11.41	13.26
BSUoS Middle Case	4.55	4.17	4.37	7.91	8.58
BSUoS Low Case	3.83	3.11	3.14	3.23	3.32

In more detail

2021/22

2020 saw a 'perfect storm' of suppressed demand for electricity and a huge rise in the proportion of power generated by renewables. This resulted in National Grid increasing their in-year forecast for 2020/21 by around £500m in April 2020.

Several measures were introduced during the pandemic, including:

- An initial cap on the half-hourly BSUoS charge at £15/MWh between 15 June 2020 and 13 August 2020. If actual costs exceeded this cap, the additional charges were deferred into the 2021/22 charging year.
- This was superseded by a further cap, which limited the half-hourly charge to £10/MWh between 14 August 2020 and 25 October 2020. If actual costs exceeded this figure, additional costs were deferred to 2021/22, with a maximum total amount capped at £100m.
- The eventual total deferral figure under both caps was £21m. This will add roughly £0.04/ MWh to the BSUoS charge for the 2021/22 charging year.
- From 1st April 2021 BSUoS will be charged on gross demand, which means embedded generators will no longer receive an embedded benefit. Consequently, this also means that the volume charging base will increase by around 10%, reducing the £/MWh value.

Following the findings of the second BSUoS taskforce released late last year, several modifications were raised to find the best way to implement these, including CMP308 which proposes the removal of the liability to pay BSUoS charges from GB transmission generators. The cost's currently recovered equally across demand and generation (apart from interconnectors) and will nearly double the £/MWh value. These modifications continue to progress through industry channels and are expected to be implemented in April 2023.

Renewables Obligation (RO)

The cost of the Renewables Obligation (RO) for 21/22 has been set, around 2.5% higher than expected. This is mainly because the fall in demand due to Covid-19 is predicted to continue into '21/22. Since September 2020, more suppliers have exited the market. This will likely trigger mutualisation for a fourth consecutive year, in 2020/21.

£/MWh	2020/21	2021/22	2022/23	2023/24	2024/25	
RO High Case		24.99	27.18	28.92	30.99	
RO Middle Case	Middle Case 23.57		24.99	24.64	25.04	25.60
RO Low Case			22.33	21.61	21.06	

In more detail

2021/22

For the charging period April 2021 to March 2022, Renewable Obligations were published at 49.2% (compared to 47.1% in 20/21).

In February 2021, the Buy-Out Price for the 2021/22 charging year was published at £50.80/ ROC. This sets the RO charge for consumers at £24.99/MWh for 2021/22. The main driver for this increased charge was a reduction in the demand figure used in the calculation to set the obligation level. This reduction incorporated both the continued impact of the coronavirus pandemic and energy efficiency measures.

For the 2021/22 reporting period onwards, BEIS has raised the mutualisation trigger value (for England and Wales only) from £15.9m to 1% of the total scheme costs (around £65m). This will make mutualisation less likely, but will likely lead to a reduction in the Renewables Obligation Certificates (ROC) recycle value.



Feed-in Tariff (FiT)

The FiT charge has risen in 2020/21 due to the pandemic and higher than normal renewable generation. However, it's expected to reduce in 2021/22 then continue to increase in line with inflation, given that the scheme has closed to new entrants.

£/MWh	2020/21	2021/22	2022/23	2023/24	2024/25
ss-FiT High Case	7.65	7.48	7.96	8.55	9.19
ss-FiT Middle Case	7.09	6.71	6.93	7.22	7.52
ss-FiT Low Case	6.55	6.06	6.07	6.13	6.20

Seasonal fluctuations in FiT levels are evident, and swings of over £1/MWh from quarter-toquarter are quite common. The table below shows quarterly costs since 2017.

£/MWh	Q2 (Apr-Jun)	Q3 (Jul-Sep)	Q4 (Oct – Dec)	Q1 (Jan-Mar)	Value including Annual Rec
2017/18	5.96	6.81	4.57	3.74	5.19
2018/19	6.31	7.39	5.17	4.14	5.58
2019/20	7.11	8.03	5.19	4.42	6.21
2020/21	9.88	9.00	5.65		

In more detail

The expected cost of the FiT scheme has increased by around 8% for the 2020/21 charging year compared to our pre-pandemic expectations.

This is due to a combination of reduced demand due to Covid and the record-breaking sunny spell seen during April and May 2020 increasing scheme costs as the scheme is made up of 79% solar PV generation. The FiT charge has risen by almost 20% comparing the actual out-turn quarters from 2019/20 with their equivalent quarters in 2020/21.

We've updated our metered export cost assumptions to reflect the increased take up of the export tariff in 2020. This increases our annual cost forecast by around £17m each year (or approximately £0.07/MWh). However, power prices have significantly increased since our last update, so we continue to monitor this situation closely.

Contracts for Difference (CfDs)

Charges have fallen compared with our previous assumptions due to an increase in wholesale market prices. However, as more generators commission the CfD charge will increase.

£/MWh	2020/21	2021/22	2022/23	2023/24	2024/25
CfD-FiT	10.28	12.26	14 29	16.21	1754
High Case	10.20	12.20	17.20	10.21	17.24
CfD-FiT	0.07	10.86	12.21	13.43	14.00
Middle Case	9.27				14.00
CfD-FiT	9.60	0.61	10.41	11.00	11 17
Low Case	Low Case 8.60		10.41	11.08	CI.II

The table below details the average daily Levy Rate for the CfD scheme, at the time of publishing (July 2021).

Quarter	Total Costs (£)	Total Demand (MWh)	Scheme cost £/MWh
Q1 18	205.11	81.78	2.51
Q2 18	180.95	64.51	2.80
Q3 18	229.22	62.90	3.64
Q4 18	287.86	75.26	3.83
Q1 19	281.95	76.83	3.67
Q2 19	326.33	63.67	5.13
Q3 19	383.53	61.41	6.25
Q4 19	503.33	75.17	6.70
Q1 20	595.20	75.87	7.84
Q2 20*	450.39	57.69	7.81
Q3 20**	519.95	61.79	8.41
Q4 20	658.79	74.59	8.83

* Loan amount included

** Includes Ad-Hoc Generator payments made by LCCC

In more detail

Market prices on average have increased by c10% since our previous update, therefore the top-up payment levied on consumers to cover the difference between strike price and market reference price (MRP) has reduced by c£0.60/MWh.

As referenced in our last TPC guide, BEIS agreed to provide the Low Carbon Contracts Company (LCCC) with a one-off, interest-free loan. This enables LCCC to cover the shortfall in funds when making generator payments in the second quarter of 2020 caused by the drop in eligible demand due to the pandemic.

LCCC has confirmed that this loan totals £75.1m. This has been deferred into the second guarter of 2021. In their latest Interim Levy Rate (ILR) publication for the second guarter of 2021, LCCC have included an additional cost of £1.217/MWh to cover this loan.

BEIS have recently confirmed that they'll start the next auction round (4) later this year. This will be for generators due to deliver from 2025 onwards.

Capacity Market (CM)

The CM cost is due to reduce from 2021/22 onwards due to lower T-4 clearing prices. In March 2021, both the T-1 2021/22 and T-4 2024/25 Capacity Market auctions took place.

The 2021 T-1 auction cleared at £45/kW with 2.3GW of capacity gaining an agreement, the joint highest auction clearing price to date. The T-1 auction had 4.2GW of capacity competing for 2.4GW (up from the 0.4GW target set in July), with the high clearing price likely to have been driven by West Burton (1.7GW) exiting the auction. The 2024 T-4 auction cleared at £18/kW with 40.8GW of capacity gaining an agreement.

Cost in £/MWh, over customers' annual consumption (EAC)	2020/21	2021/22	2022/23	2023/24	2024/25
CM High Case	4.84	2.03	1.85	3.36	5.07
CM Middle Case	4.77	1.94	1.46	2.99	3.58
CM Low Case	4.69	1.86	1.36	2.71	1.20
Cost in £/MWh, 4pm-7pm, Mon-Fri, Nov-Feb	2020/21	2021/22	2022/23	2023/24	2024/25
CM High Case	117.83	50.37	45.99	83.41	125.79
CM Middle Case	115.37	47.92	35.46	72.99	87.98
CM Low Case	115.38	46.67	34.08	67.94	30.12

Assistance for Areas of High Electricity Distribution Costs (AAHEDC)

National Grid ESO have set the draft tariff for 2021/22 at £0.40566. The draft tariff includes the Shetland assistance programme, which adds £27m or £0.21/MWh.

Other TPCs

The following TPCs have seen no significant changes in the short to medium term:

- Climate Change Levy (CCL)
- Elexon

Jargon Buster

BEIS	The Department for Business, Er
BSUoS	Balancing Services Use of Syster
CCL	Climate Change Levy
CM	Capacity Market
CfD	Contracts for Difference
CP	Compliance Period
CPIH	A new additional measure of cor measure of owner occupiers' how
DECC	Department of Energy and Clima
DNO	Distribution Network Operator
DSBR	Demand Side Balancing Reserve
DUoS	Distribution Use of System
EII	Energy Intensive Industries
EMR	Electricity Market Reform
ESO	Electricity System Operator
GoOs	Guarantees of Origin
HH	Half Hourly
ILR	Interim Levy Rate
LCCC	Low Carbon Contracts Company
LCF	Levy Control Framework
NBP	National Balancing Point
NHH	Non Half Hourly
OFGEM	The office of Gas and Electricity
RO	Renewals Obligation
ROC	Obligation Certificates
SBR	Supplemental Balance Reserve
ss-FiT	small-scale Feed-in-Tariffs
TNUoS	Transmission Network Use of Sys
TPCs	Third Party Costs

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Who are we?

At Haven Power, we're helping to enable a zero carbon, lower cost energy future. We're one of the largest suppliers and supporters of renewable power in the UK, and a leading provider of renewable energy solutions to business and industrial customers. We're always looking for new partners to join us on the journey.

How can we help you?

If you'd like to find out more about how we can help you and your business, we'd love to talk to you.

Get in touch

A better use of energy



