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A Drax Group company

Your guide to

Third Party Costs

September 2018

Contents

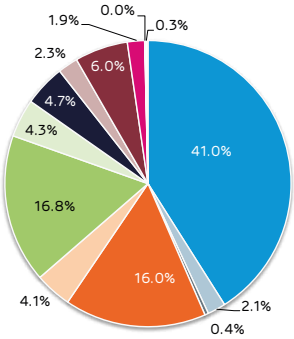
Electricity's less than half of your power bill

The Government's policy-driven charges under the Levy Control Framework (LCF) and Control for Low Carbon Levies (CLCL), plus other charges, are likely to form an increasing proportion of end users' bills.

The graph below uses out turn data, published rates and forward-looking estimates to provide a guide to the make-up of a typical energy bill. You should only use this for indicative purposes.

Cost Breakdown for 2019/20

- Average Wholesale Cost at 03/09/18 (38%)
- Distribution Losses (Average 5%) (2.1%)
- Transmission Losses (Average 1%) (0.4%)
- Distribution Use of System (16%)
- Transmission Network Use of System (4.1%)
- Renewables Obligation (16.8%)
- Feed-in-Tariffs (4.3%)
- Contracts for Difference (4.7%)
- Capacity Market (2.3%)
- Climate Change Levy (6%)
- Balancing Services Use of System (1.9%)
- Elexon (0%)
- Assistance for Areas of High Electricity Distribution Costs (0.3%)



Industry Changes

Brexit

The energy industry and the Department for Business, Energy & Industrial Strategy (BEIS) are currently preparing for Brexit. A number of EU regulations and initiatives - including the ability to create network codes and the Security of Gas Supply Regulation Functions - will be retained within UK law. It is expected that Brexit won't have a significant effect on Third Party Costs (TPCs); however, any fall out has the potential to effect commodity and energy prices in the UK, which is likely to affect the end users' bill.

Triad benefit changes

Transmission Network Use of System (TNUoS) tariffs for import customers for 2018/19 are now finalised, following the dismissal of the CMP264/265 judicial review. Therefore, the Office of Gas and Electricity Markets (Ofgem) will implement its planned changes to distributed generation tariffs, effectively cutting the Triad benefit. Ofgem made the change due to concerns that these benefits were effectively distorting the competitiveness of the capacity and wholesale markets. Export and import meters used to share the same tariff, meaning that distribution connected generation could directly offset costs. Export customers now have their own tariff, with lower rates, meaning that the payments they receive for generating in peak times have been cut. Customers with demand-side flexibility may also lose out, as the effective import tariff has reduced the savings they can make as a result of their investment in generation, batteries or other methods of reducing load.

Energy Intensive Industries (EIIs) update

The government granted state aid approval exempting Energy Intensive Industries (EIIs) from the Contracts for Difference (CfD) scheme in December 2015. It did the same for the Renewables Obligation (RO) in June 2017. The industry is still awaiting news on state aid approval for the Small Scale Feed-in-Tariff (ss-FiT) scheme.

The aim of these changes is to protect EIIs operating in international markets (e.g. steel producers, chemical producers) from the increasing costs of energy and climate change policy.

In addition, the Department for Business, Energy and Industrial Strategy (BEIS) has issued a consultation into whether it should widen eligibility criteria for EIIs in future. This follows concerns over competition between companies receiving the exemption and their non-exempt competitors that have to pay the indirect costs of renewable energy policies. While the consultation is still in its early stages, the expected impact on customer bills is likely to be around £0.20-£0.60/MWh across the three charges (CfD-FiT, ss-FiT and RO). The exact figure will depend on the level of exemption, if any, added to the current scheme.

Transmission Network Use of System (TNUoS)

TNUoS charges recover the cost of installing and maintaining the transmission system in England, Wales, Scotland and offshore.

National Grid - the System Operator - owns and operates the electricity transmission system in England and Wales.

National Grid bases its TNUoS charges on electricity demand during the Triads (average of the three highest half-hour settlement periods of demand that are at least 10 days apart). Charges are finalised every January for the following year (April-March) for each of the UK's 14 Grid Supply Point groups – which refer to the connection between the national network and each Distribution Network Operator (DNO) area.

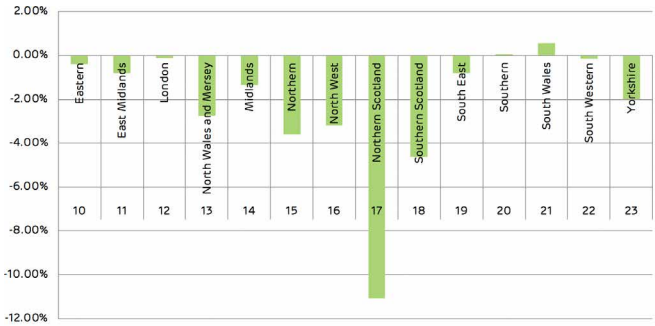
Across all areas, average Half Hourly (HH) TNUoS charges decreased by 2.16% and average Non Half Hourly (NHH) charges decreased by around 4.15% from 2017/18 to 2018/19.

The Triad dates for winter 2017/18 were on Monday 11th December 2017, Tuesday 05th February 2018 and Monday 26th February 2018 in settlement periods 35, 36 and 37 respectively.

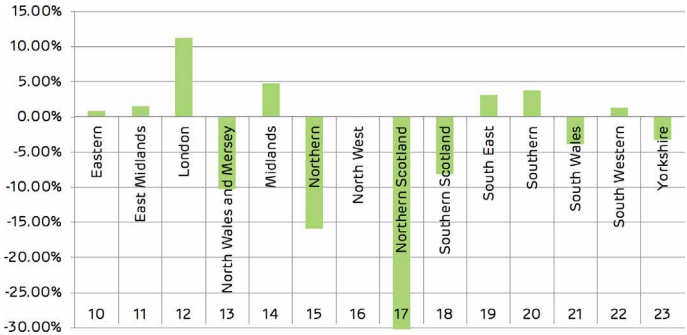
The Office of Gas & Electricity Markets (Ofgem) is engaging with stakeholders regarding a Targeted Charging Review (TCR): Significant Code Review (SCR). This will consider a variety of issues in the current electricity transmission and distribution network and, in particular, how residual charges should be set and recovered.

In addition, there are several modifications under review that - if agreed - could have an impact on future TNUoS costs.

Percentage Change HH TNUoS 17/18 to 18/19



Percentage Change NHH TNUoS 17/18 to 18/19



Balancing Services Use of System (BSUoS)

BSUoS charges are levied on generation and supply volumes and paid to the System Operator, National Grid. The aim is to recover the cost of operating and balancing the electricity system.

Calculated half hourly, BSUoS charges continue to be volatile -particularly when demand is low and the impact of intermittent generation (e.g. wind turbine output) is greatest. Wind generation, and higher demand in winter, remains the largest driver of BSUoS charges throughout the year.

In 2018, charges have generally been higher than forecast, in part due to the outage on the high voltage direct current (HVDC) electrical link. The industry anticipated that the link would reduce constraint costs by allowing more flow from Scotland to England/Wales.

It now expects the link to be up and running again by the end of October 2018, hopefully reducing costs for the remainder of the year.

Distribution Use of System (DUoS)

DUoS charges cover the cost of installing, operating and maintaining a safe and reliable distribution network.

The charges are paid to the 6 Distribution Network Operators (DNOs) that own and operate the networks of the UK's 14 distribution areas (see table on next page). Each regional DNO hosts a large number of supply meters.

The next set of price controls, RIIO-2 (Revenue=Incentives+Innovation+Outputs) starting April 2023 have been published; sector-specific methodology consultations will take place in December 2018. These may provide tougher controls on DNO profits, and extend the role of competition in monopoly activities.

For future years, we've used the DNOs' revenue estimates and other data available from their DCP066 statements to project future increases (see table on the next page: two right-hand columns). Please note that Haven Power reviews the data in line with the DNOs' quarterly updates. Since the 14 DNOs cover a wide range of population densities and diverse geographies, there are likely to be large variations between the rates they publish. Historically, we've also seen changes between the publication of DCP statements throughout the year and the actual out turns.

Area	Detail	Date of forecast	Forecast based on
10	Eastern	Aug-18	DCP066 supplier briefing
11	East	Aug-18	
12	London	Aug-18	
13	Manweb	Aug-18	
14	West	Aug-18	
15	Northern	Aug-18	
16	Norweb	Aug-18	
17	Hydro	Aug-18	
18	Scottish Power	Aug-18	
19	South East	Aug-18	
20	Southern	Aug-18	
21	South Wales	Aug-18	
22	South Western	Aug-18	
23	Yorkshire	Aug-18	

Index	Unit	2019/20	2020/21
Latest Forecast 2019/20 Position	% change on index	10.55%	4.62%
		5.10%	-0.48%
		7.01%	5.21%
		12.20%	4.48%
		2.41%	0.01%
		6.00%	6.10%
		6.57%	1.66%
		7.00%	-2.04%
		3.89%	2.91%
		8.95%	8.62%
		1.18%	-3.69%
		2.07%	-2.29%
		1.29%	0.45%
		2.90%	4.06%
Average % increase from previous year		**5.51%**	**2.12%**

Levy Control Framework (LCF)

The Government previously managed its support for renewable energy by imposing levies on suppliers, which - in general – they passed on to their customers. Suppliers did so by adding an amount to customer bills and by including forecasted costs within the prices of offered tariffs. A budget - known as the Levy Control Framework (LCF) - set the cap on the amount of funding while ensuring that renewable targets were met.

Spending under the LCF was originally expected to increase from £3.2bn in 2013/14 to over £7bn by 2020/21, in 2011/12 prices. This would cover the costs of the Renewables Obligation (RO), small scale Feed-in-Tariff (ss-FiT) and the Contracts for Difference Feed-in-Tariff (CfD-FiT) schemes. However, the LCF was vastly over budget due to the 'build and accredit' model of the ss-FiT and RO schemes. Both proved very attractive to investors due to the predictable and lucrative subsidy received.

Having announced the end of LCF in its 2017 Spring Budget, the Government introduced its replacement in that year's Autumn Budget: the Control for Low Carbon Levies (CLCL). This policy states that there'll be no new low carbon electricity levies until the burden of legacy LCF levies (including planned and current CfD capacity) begins to fall. It's anticipated that this will happen around 2025, when older FiT and RO sites begin to decommission or to see their subsidy expire.

Renewables Obligation (RO)

Before the Renewables Obligation (RO) closed to all new generation in March 2017, it was the main support framework incentivising the generation of large-scale renewable electricity in the UK.

Eligible generators receive a prescribed amount of Renewables Obligation Certificates (ROCs) for every MWh of renewable energy they generate. Licensed suppliers are obliged to source an increasing proportion – the "Renewables Obligation" – of electricity from renewable sources.

The RO is specified at the beginning of October each year and applies to the Compliance Period (CP) that runs from April 1st of the following year through to March 31st of the year after.

Suppliers fulfil their requirements by presenting ROCs to the Office of Gas and Electricity Markets (Ofgem), or by paying Ofgem a published Buy-Out price per ROC for any shortfall. After administration costs are deducted, the Buy-Out payment funds are distributed to suppliers that presented ROCs as part, or all, of their obligation.

The RO scheme closed to all new generating capacity on 31st March 2017 (excluding grace periods). Therefore, although there will be minimal increases in capacity for 2018/19 due to generation under grace periods, the cost of the RO will start to level out from 2018/19 onwards (after adjusting for inflation).

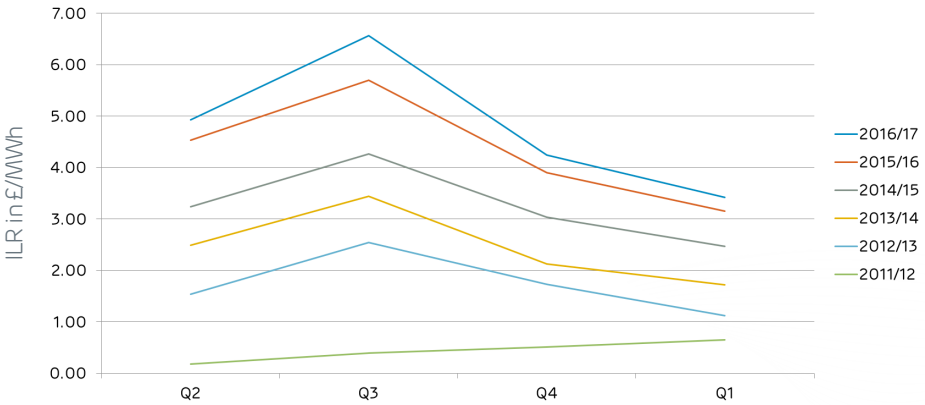
The reduced eligible demand for RO in 2018/19 increased the obligation percentage for non-eligible customers, therefore increasing costs. The proposed widening of the EII (Energy Intensive Industry) scheme would take place from April 2020, so the 2019/20 obligation (and, therefore, the unit rate) is likely to stay the same when published in February 2019.

For 2018/19, the Buy Out was published at £47.22; the amount has increased each year in line with inflation (Retail Price Index: RPI)

Small Scale Feed-in-Tariffs (ss-FiT)

ss-FiT is a subsidy recovered from suppliers and paid to smaller generators of eligible low carbon and renewable power. For 2016/17, the payments to generators ranged from £4/MWh to £140/MWh, depending on the type and size of generation. The scheme will close to new applications in March 2019.

The scheme includes generation from residential properties as well as businesses. The ss-FiT scheme is largely made up of solar photovoltaic (PV) installations, so the biggest factor affecting the cost is the amount of sunshine in any one year. Due to this seasonality, quarterly costs differ considerably with summer quarters out turning higher than those in winter.



Ofgem administers the ss-FiT scheme, collecting a sum from each supplier based on its market share in each quarter. Following the end of the financial year in April, there is an annual reconciliation in September based on the additional information available at that time, after more accredited data and a better view of electricity demand. The principal factors affecting the charges are the amount of sunshine hours and installed solar photovoltaic (PV) capacity.

On 19th July 2018, the Department of Business, Energy & Industrial Strategy (BEIS) published a consultation stating its intention to close the FIT scheme to new applicants from 1st April 2019, barring several exceptions. Thanks to cost control measures by BEIS, the scheme's annual costs are now starting to level out at around £1.4 billion.

FiT installations are now at a much lower level than in previous years, with approximately half the capacity accredited in Q2 2018 compared to 2017. This is largely due to the effect of much lower tariff rates and deployment caps.

Q2 2018 (April-June, which is Q1 of the 2018/19 FiT year) out turned much lower than most forecasts; wind generation was considerably lower than in the same period in previous years. This will have contributed to a reduction in the total generation costs.

The Energy Intensive Industry (EII) exemption for ss-FiT is still awaiting European Union state aid approval. The EU may not grant this before April 2019, when the scheme closes to new applicants. There's also the possibility that the criteria will be widened, increasing the costs of the scheme for non-exempt customers.

Contracts for Difference Feed-in-Tariff (CfD FiT)

The CfD FiT scheme is the main framework to encourage new low carbon power generation in the UK. It replaces the Renewables Obligation (RO, see earlier section) mechanism - now closed for new generation - as the main vehicle for long-term investment into renewable electricity.

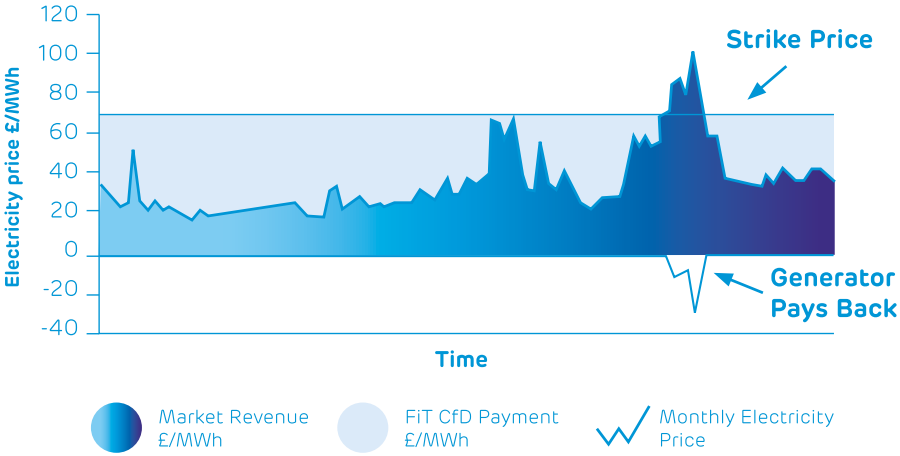
Generators contract with the Low Carbon Contracts Company (LCCC) and agree a "strike price" for the electricity they generate and want to sell back to the market. If the wholesale price is less than the agreed "strike price", the generator will receive a "top up" price for its energy. If the market price is higher than the "strike price", a payment is made back to suppliers. This means that the generator is guaranteed a certain amount per MWh, and this makes funding projects easier.

The LCCC sets an Interim Levy Rate (ILR) for each quarter, and suppliers are billed on this rate. At the end of each quarter, the LCCC reconciles the difference between each supplier's daily outturn and the actual ILR.

The scheme's first generation was in summer 2016. Since then, both generation levels and costs have increased considerably, with other sites due to come online soon. Published recently, the second CfD auction secured 3.3GW of capacity for delivery years 2021/22 and 2022/23. Strike prices for the 10 successful projects were considerably lower than in the previous auction.

As the scheme's costs are dependent on wholesale prices, predicting costs for generation under the scheme is difficult. Should wholesale prices increase, scheme costs will fall as lower top-up payments are required, with the opposite holding true if prices fall. However, this also means that suppliers, and therefore customers, should receive a set price rather than the dramatic increases in costs seen under the RO and ss-FiT schemes.

The graph below illustrates how generators are compensated.

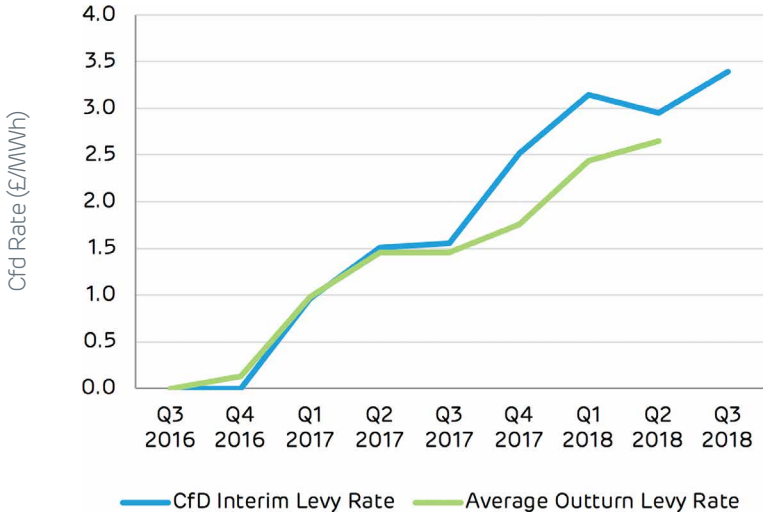


Source UK Government White Paper, July 2011, licensed under the Open Government License v1.0

Breaking down the costs

CfD costs comprise the Interim Levy Rate and Operational Costs. Every February, the Department for Business, Energy & Industrial Strategy (BEIS) publishes the Operational Costs Levy. BEIS set it at £0.0524/MWh for 2017/18 and increased it to £0.0570/MWh for 2018/19.

Since generation started in July 2016, the Interim Levy Rate (ILR) – set by the Low Carbon Contracts Company (LCCC) - has increased from £0.005 to £4.080/MWh for Q4 2018. The graph compares the ILR published by the LCCC to a time-weighted average of the quarterly out turn based on the daily rates.


4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Cfd Rate (£/MWh)
Q3 2016
Q4 2016
Q1 2017
Q2 2017
Q3 2017
Q4 2017
Q1 2018
Q2 2018
Q3 2018
CfD Interim Levy Rate
Average Outturn Levy Rate

Capacity Market (CM)

The Electricity Market Reform (EMR) arrangements introduced a Capacity Market (CM) to ensure the UK has enough capacity on the grid to cover peak demands. Historically, these were between 4pm and 7pm, Monday to Friday, November to February.

Reliable generation units that aren't remunerated under any renewable schemes are eligible under the CM - alongside demand that can be reduced with notice. In return for a payment, set through an auction process, capacity providers must commit to being available at peak times in the future.

While the charges falling under the Levy Control Framework (LCF) are spread across all periods, the CM supplier charge is a monthly payment to National Grid. The payments are based on each supplier's expected market share during the periods of high demand. (4pm to 7pm, Monday to Friday, November to February).

The charge will be reconciled with the actual amount (the out turn) supplied by each supplier, once that figure is known. The aim of the scheme is security of supply; charging in peak periods will hopefully discourage usage during these times, and support the business case for more flexible and intelligent uses of energy.

Like the Contracts for Difference (CfD) scheme, CM costs are broken down into parts: Operational Costs and Supplier Levy. Along with CfD, these charges form the EMR levy shown on bills for customers with non half hourly (NHH) meters.

Climate Change Levy (CCL)

The CCL is a tax on energy that aims to encourage businesses to reduce carbon emissions and become more energy efficient.

Until August 2015, Levy Exemption Certificates (LECs) supported generation from renewable sources (such as biomass or wind) and customers on renewable energy were exempt from paying the CCL. However, since that date, the charge has been applied to all business users.

CCL rates show modest increases until 2019/20, at which point they jump 46% to £8.47/MWh, This significant increase is due to the government seeking to make up a shortfall in revenue resulting from the end of the Carbon Reduction Commitment (CRC) scheme in 2019. At the time of writing, rates for April 2020 onwards haven't been published.

£/MWh	2016/17	2017/18	2018/19	2019/20
CCL	5.59	5.68	5.83	8.47

Actuals published by HMRC.

Glossary

BEIS	The Department for Business, Energy and Industrial Strategy
BSUoS	Balancing Services Use of System
CCL	Climate Change Levy
CfD	Contracts for Difference
CfD FiT	Contracts for Difference Feed-in-Tariff
CLCL	Control for Low Carbon Levies
CM	Capacity Market
CP	Compliance Period
CRC	Carbon Reduction Commitment
DNO	Distribution Network Operator
DUoS	Distribution Use of System
EII	Energy Intensive Industries
EMR	Electricity Market Reform
HH	Half Hourly
HVDC	High Voltage Direct Current
ILR	Interim Levy Rate
LCCC	Low Carbon Contracts Company
LCF	Levy Control Framework
NHH	Non Half Hourly
Ofgem	The office of Gas and Electricity Markets
PV	Photovoltaic
RO	Renewals Obligation
ROCs	Renewables Obligation Certificates
RPI	Retail Price Index
SCR	Significant Code Review
ss-FiT	small scale Feed-in-Tariffs
TCR	Targeted Charging Review
TNUoS	Transmission Network Use of System
TPCs	Third Party Costs


haven power
A Drax Group company

Haven Power Ltd
The Havens
Ransomes Europark
Ipswich IP3 9SJ

A better use of energy

www.havenpower.com / contact.us@havenpower.com / 01473 725943

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