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Supplier Cost Index

Methodology

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Team: Monitoring, Research & Insight team

Tel: 020 7901 7000

Email: marketmonitoring@ofgem.gov.uk

Overview:

This document summarises the methodology used to calculate the Supplier Cost Index.

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1. What is the Supplier Cost Index?

Overview

1.1. The Supplier Cost Index draws on publically-available information to estimate ongoing trends in the main elements of costs that a supplier incurs in supplying a typical domestic customer with gas and electricity. It shows whether industry costs are rising or falling over time and what is driving this (ie the relative contribution of wholesale prices, network charges and the charges to suppliers associated with government programmes designed to, for example, support renewable electricity generation and improve energy efficiency). In this way, it helps to improve transparency as to the factors behind ongoing trends in energy bills.

1.2. The index reflects estimated expected annual costs, covering the 12 months from the time of each update, based on the best information available at the time. So, for example, the value of the index for January 2017 will reflect estimated costs for the period 1 January 2017 to 31 December 2017, expressed relative to estimated expected annual costs as of the base period (1 January 2014 to 31 December 2014).

BOX 1.1: **What is an index number?**

Index numbers are a way of displaying changes in a variable over time that help to simplify comparisons. A base time period is chosen, and the value of the index at that base is set to 100. At all other periods the value of the index number represents the change in the series from the base period. For example, our index of suppliers' expected costs for the coming 12 months might be set to 100 for 1 January 2015. If suppliers' expected costs increased by 2% in the following three months, then the index number on 1 April 2015 would be 102.

1.3. As the estimates are forward-looking, they rely on forecasts and assumptions, and so will be subject to uncertainty. Information on the actual costs that suppliers incurred in previous financial years is available in the financial statements that we require the six large energy companies to publish.

Calculating the Supplier Cost Index

1.4. For a given month[1], the cost index is calculated in three steps as follows (an illustrative example is given in Table 1.1):

- First, we estimate the percentage change relative to the base period in wholesale costs, expected network costs and the expected costs of government obligations. We explain how each of these elements of costs are estimated below

[1] Although the index is updated on our website quarterly, it is calculated index at a monthly granularity, to provide greater insight into within-quarter trends in costs.

- Second, we apply a weight to each of these percentage changes, according to the estimated share of that category of cost in suppliers' total costs (excluding operating costs)

- Finally, these weighted percentage changes are combined to derive the percentage change in the overall cost index since the base period.

TABLE 1.1: **Calculating the cost index – illustrative example**

Cost	**Percentage change since base period (a)**	**Weight as of base period (estimated share of that category in suppliers' overall costs, excluding operating costs) (b)**	**Weighted percentage change (c) = (a) x (b)**
Wholesale - gas	-10%	30%	-3.0%
Wholesale - electricity	-10%	25%	-2.5%
Network charges – gas	-10%	15%	-1.5%
Network charges – electricity	+10%	15%	+1.5%
Government obligations – gas	-10%	5%	-0.5%
Government obligations - electricity	+10%	10%	+1.0%
Percentage change in supplier cost index			-5.0%

***Note**: Data is illustrative, and does not reflect actual trends in suppliers' costs or the actual share of different categories in suppliers' overall costs.*

1.5. The weights (column b in the table) are based on information from the most recent financial statements of the five large suppliers with financial years covering the period January - December. Using this information has two limitations. First, the information relates to outturn costs rather than expected costs. Second, it will reflect the consumption profile of the customers of the large suppliers in a particular financial year (which will be affected by weather, among other factors), rather than the seasonally adjusted consumption profile of a typical domestic customer. Despite these limitations, the financial statements provide the most reliable publically-available source of information on the breakdown of suppliers' costs.

1.6. We intend to bring the base period forward by a year each May, when updated financial statements for five of the large suppliers are available. The new base period used would be the start of the year two years prior to that May. So, for example, in May 2017 the base would be set to 1 January 2015, and we would continue to present the index relative to this base until May 2018, at which point the base would be brought forward to 1 January 2016. Charts showing the evolution of the index would therefore cover a period of between two and three years.

What costs are included in the Supplier Cost Index?

1.7. The Supplier Cost Index tracks the three main categories of direct costs faced by suppliers – the costs of wholesale energy; network charges and charges associated with government obligations.

1.8. The index does not include suppliers' operating costs (such as the costs of billing or metering – including the costs of the smart meter rollout). This is for two reasons:

- First, because they are largely within suppliers' control, trends in these costs are difficult to estimate from quarter-to-quarter using publicly-available data.

- Second, we expect these costs to generally be less relevant from the perspective of understanding pricing behaviour, because they are more likely to be supplier-specific, and more likely to be fixed. While in the long term suppliers' will seek to cover their indirect costs in the prices they set, it is movements in industry marginal costs which we would expect to primarily drive prices in a competitive market.

1.9. We do, however, provide analysis of suppliers' operating costs as part of our annual analysis of the financial statements of the six large energy companies.

1.10. Note that, while the index will track broad trends in industry costs, the costs of any one supplier may follow a different trajectory to the index. For example, the index is based on trends in the average prices of wholesale gas and electricity forward contracts in the month prior to the update. However in practice the approach taken by different suppliers to purchasing energy varies considerably, with many buying their energy on a rolling basis over longer periods of time. This means that these suppliers will be to some extent insulated from increases in wholesale prices, and less able to take advantage when wholesale prices fall.

1.11. Other elements of costs are also likely to vary across individual suppliers. For example, suppliers may have some flexibility in how they meet their obligations under government programmes. Network charges will vary between suppliers depending on things like the regional profile of their customer base.

Treatment of consumption

1.12. The index is calculated for a customer with typical consumption, which we have held fixed over time to increase comparability with trends in suppliers' prices (which are also typically expressed for a given level of consumption). Specifically, we currently assume that annual consumption is fixed at medium typical domestic consumption values (TDCVs) – currently 12,500kWh for gas and 3,100kWh for electricity.

1.13. In fact, energy use will vary from one year to the next, depending on temperatures. Energy use is also subject to long-run trends, for example as a result of increasing energy efficiency. These trends in consumption will have a significant impact on the size of customers' bills, in addition to the impact of trends in prices.

2. Data and methodology

Wholesale energy costs

Wholesale market costs

2.1. The cost of buying energy is the largest element of suppliers' costs, accounting for around 43% of a dual fuel bill in 2015.[2]

2.2. Suppliers procure their energy by trading on the gas and electricity wholesale markets. Vertically-integrated suppliers can also procure energy internally from their upstream businesses. We use information on movements in wholesale gas and electricity prices to estimate trends in suppliers' expected wholesale costs for the purposes of calculating the index.

2.3. Because wholesale gas and electricity prices can be volatile, suppliers typically buy much of their energy requirement in advance of delivery to manage their risk – a practice known as hedging. This raises the question of which wholesale price our estimate of trends in expected costs should be based on, both in terms of which products we should consider (eg energy for delivery the next day or the next month) and at which point in time (eg the price of energy at the time of our update or the price of energy six months prior to the update).

2.4. Approaches to hedging change over time and vary from supplier to supplier. Suppliers also tend to use different approaches for domestic customers on different types of tariffs. For example, energy for customers on standard variable tariffs (SVTs) is often bought on a rolling basis over a long period of time, as much as two or three years in advance of delivery. In contrast, suppliers are likely to purchase energy for customers signing up to a fixed-term tariff closer to the time that tariff is launched.

2.5. The CMA discusses the relationship between wholesale prices and suppliers' costs in detail in its final report. It draws a distinction between forward energy purchases made at the point at which a supplier becomes committed to supply a customer at a given price (eg at the time of launching a fixed-term contract) and forward purchases made before any such commitment exists (eg to reflect anticipated demand for a SVT in a year's time). It sets out its view that a prudent supplier would seek to forward purchase energy to meet its contractual commitments, so as to minimise its exposure to subsequent movements in wholesale prices. However, by purchasing in advance of any commitment to supply at a given price, a supplier risks paying more for wholesale energy than they could expect to recover in a highly competitive retail market.

[2] Based on CSS of large suppliers excluding SSE for financial year 2015. See this page for further details of our estimates of the breakdown of a dual fuel bill.

2.6. As a result, the CMA concluded that "*historically incurred costs are not the relevant basis on which Ofgem could infer trends in the strength of the competitive pressure on retail prices including the SVT over time.*"[3] Instead, competitive prices should reflect the opportunity cost of gas and electricity: the prevailing wholesale prices of energy for future delivery at the point at which a supplier becomes contractually committed to supply a customer at a given price (plus any additional costs incurred closer to the point of delivery, for example in relation to shaping).

2.7. In the light of the CMA's recommendation, we base the wholesale cost element of our cost index on the price of wholesale gas and electricity contracts for delivery in the coming 12 months as observed in the month prior to the date of the update. In doing so, we use the following assumptions:

- Wholesale prices are based on daily price assessment data taken from ICIS ESGM report for gas and EDEM report for electricity. Prices used are the mid-points of close-of-day bid-offer ranges for a variety of different forward products. We use the average of these prices in the month prior to the update (eg average forward prices in the month of December for an update in January).

- We assign each of the 12 months in the year covered by the update a price based on the average price of contracts for delivery in the coming winter and summer seasons where available, or a combination of monthly and quarterly contracts where a season has already begun. The specific contracts used for each month are listed appendix 1.

- Prices in each month are then weighted according to historic consumption in that month. For electricity, estimated quarterly consumption are based on data from government's 'energy trends' publication[4] for the previous calendar year. For gas, estimated monthly consumption are based on Local Distribution Zone demand data from National Grid[5] for the same month in the previous calendar year.

- We assume a split of 30% to 70% for peak to baseload contracts for electricity. This is consistent with the value used by the CMA in calculating the wholesale price index for the purposes of setting its prepayment price cap.

Capacity market

2.8. In addition to the costs suppliers incur purchasing electricity on the wholesale markets, from autumn 2017 suppliers will also be required to make Capacity Market (CM) payments. The CM was introduced as part of the government's Electricity Market Reform policy, and is intended to ensure that there is sufficient capacity to meet the government's reliability standard, by incentivising investment in generation or demand-side response. This is needed to help secure electricity supplies for the future, and thereby keep wholesale electricity costs down.

[3] CMA Final report paragraph 18.132
[4] https://www.gov.uk/government/collections/energy-trends
[5] http://www2.nationalgrid.com/uk/industry-information/gas-transmission-operational-data/data-item-explorer/

2.9. Under the CM, the capacity needed in a given delivery year (running from 1st October – 30th September) is secured through an auction four years ahead (T-4) and another auction one year ahead (T-1) of the delivery year. In the auctions, parties bid the price for which they would be willing to guarantee a given amount of capacity in the event that the system is tight. The first T-4 CM auction was held in December 2014, for delivery in 2018/19. An auction for securing the entire capacity for delivery in 2017/18 – the first year – was held in January 2017.

2.10. The aggregate payments for each delivery year are determined by the clearing price of the auction multiplied by the agreed capacity. The regulations require electricity suppliers to pay monthly charges to meet the cost of making these payments to capacity providers, subject to a weighting factor outlined in The Electricity Capacity Regulations 2014[6]. The agreements for each auction are published within 8 working days of auction closing by the delivery body, National Grid[7].

2.11. To estimate the expected costs to suppliers of the capacity market scheme, we use the aggregate payment amount for a given delivery year as published by National Grid. We derive the proportion of these payments falling to domestic customers using an estimate of domestic electricity demand out of total demand in peak demand periods during winter[8], based on National Grid's latest Future Energy Scenarios[9]. We then calculate a monthly amount by dividing by 12 and adjusted to reflect historic demand in each month, based on the monthly weighting factors published by the settlement body. Finally, we divide by the total number of domestic customers to derive a monthly £ per customer estimate of the expected costs associated with the programme.

2.12. We add to this estimate the administration costs of the scheme, as projected by BEIS. Trends in overall wholesale electricity costs are then derived by combining this capacity market component with our estimates of the costs a supplier would incur in the electricity wholesale markets.

Network charges

2.13. Suppliers are charged for the costs of building, maintaining and operating the energy network and system infrastructure used to deliver energy to their customers. Because the networks are largely monopoly businesses, we regulate the prices that the network companies are able to charge by controlling the companies' allowed revenues. The network charges paid by suppliers vary depending on where their customers live, what type of electricity meter they have and how much energy they

[6] http://www.legislation.gov.uk/uksi/2014/2043/schedule/1/made
[7] https://www.emrdeliverybody.com/CM/CMDocumentLibrary.aspx
[8] We use the period of 17:30-18:00 on weekdays between November and February – as described in National Grid's Future Energy Scenarios – as a proxy for the use of 16:00-19:00 on the same days as described in the CM regulations.
[9] http://fes.nationalgrid.com/fes-document/

use. In total, these charges accounted for approximately a quarter of a dual fuel bill in 2015.[10]

2.14. Different charges apply for the high voltage/high pressure transmission networks (which take electricity and gas around Great Britain) and the lower voltage/lower pressure distribution networks (which connect customers to the national transmission networks). As well as the charges to suppliers that are considered in the Supplier Cost Index, electricity generators and gas producers will also face charges for using the networks: it is important to note that trends in network charges will therefore also affect suppliers' costs indirectly via their impact on wholesale prices.

2.15. The approach used to estimate trends in suppliers' expected network costs for our cost index is nearly identical to the methodology used to determine how the network component of the prepayment price cap is set for gas customers and electricity customers with unrestricted electricity meters (the exceptions being the treatment of balancing system charges; the use of forecasts; and the fact that a weighted average of regional charges is calculated). It involves combining publicly-available charging information published by the network companies with assumptions around domestic consumption.

Gas

2.16. Gas distribution charges in each Local Distribution Zone (LDZ) are set annually for the period April to March by the individual network companies. Gas transmission charges are set by National Grid twice a year, in spring and autumn. Indicative notices are provided in advance of the new charges coming into force.

2.17. For both transmission and distribution, the charges comprise a set of pence/kWh commodity charges and pence/kWh/day capacity charges:

- To estimate total capacity charges per customer in each LDZ, we combine our assumed level of annual domestic consumption per customer with information on regional load factors (published by Xoserve) to produce an estimate of peak daily load. This is then multiplied by capacity charges as reported in the most recent charging statements. For transmission, capacity charges in each LDZ are assumed to equal a weighted average of the charges in each exit zone within that area (NTS exit capacity charges), as published by the gas distribution companies. Weights are based on target capacity volumes, as published in the Gas transporter licence conditions.

- For commodity charges, we multiply assumed annual domestic consumption per customer with the published charges (for transmission, the transportation owner and system operator commodity charges published by National Grid and, for distribution, the LDZ system commodity charges published by the gas distribution companies).

[10] Based on CSS of the large suppliers excluding SSE, for financial year 2015. See this page for further details of our estimates of the breakdown of a dual fuel bill.

- The total annual charge per customer in each region is then calculated, before taking a weighted average across regions, weighting according to the number of domestic gas meter points in each region (based on data from Xoserve).

2.18. Our estimate of expected network costs is forward looking, covering the 12 month period from the time of the update. Where information on charges for future periods is available we will therefore use this to estimate future network charges (for example, with estimated expected network costs in July 2016 being a weighted average of relevant charges for the current 2016-17 charging year, and for the 2017-18 charging year). Where forecasts of future network charges are not available (ie in the period between April and the end of October, when indicative charges for the coming year are published by the distribution companies), these will be assumed to be equal to current charges.

Electricity

2.19. Electricity distribution charges for each Distribution Network Operator (DNO) area are set by the distribution companies 15 months in advance of the charging period (which runs from April to March). They comprise a unit rate paid per kWh, and a fixed daily charge, which we combine with annual consumption and the number of days in the year to derive an annual estimate of distribution charges per customer. Different charges apply to customers on different types of meters: our estimates are based on those for a customer with a standard, unrestricted meter (accounting for around 80% of all domestic electricity customers).

2.20. Electricity transmission charges are set annually by National Grid for the period April to March, with forecasts provided in advance of the final charges being published. They constitute an energy consumption tariff (p/kWh), which we multiply by an estimate of the proportion of annual consumption that takes place during peak times (derived using profile class 1 consumption profile data provided by Elexon) to estimate charges per customer. We scale up to account for regional losses in the distribution system, estimated using the loss adjustment factors published by the DNOs.

2.21. As with gas, we estimate total electricity network charges per customer by taking a weighted average of the distribution and transmission charges across each DNO. Weights are based on the number of unrestricted meter points in each area less off-peak related meter points, taken from the DNOs' Common Distribution Charging Methodology models (see this page for further information).[11]

BSUoS

2.22. Balancing Services Use of System (BSUoS) charges cover the cost of services used to balance the electricity system and internal system operator operating costs. To calculate these charges, we use the latest annual £/MWh BSUoS charge data for the current and following year as provided by National Grid. A £ per customer figure

[11] The assumption here is that all of those off-peak related meter points will also have an unrestricted meter point (although note that this is not necessarily always the case, as some may have two rate meter points).

is then calculated using total consumption, scaled up for distribution and transmission losses (estimated using National Grid's transmission losses report and the loss adjustment factors published by the DNOs respectively). The BSUoS charge projections are sourced from National Grid's monthly balancing services summary, which includes projections of scheme outturn costs.

Charges associated with Government programmes

2.23. Charges to suppliers for government programmes made up about 7% of a dual fuel bill in 2015.[12] These charges fund schemes to support renewable and low carbon generation, to support the installation of energy efficiency measures, and to help vulnerable customers.

2.24. Note that the direct costs to suppliers in relation to these government programmes reflect only a part of their overall impact on suppliers' costs and consumer bills. For example, the Energy Company Obligation supports the installation of energy efficiency measures, which are expected to reduce energy consumption and so lower bills.

2.25. Our approach to estimating the forward-looking costs associated with government obligations varies from one scheme to the next. It is in all cases based on publically-available information on either eligible suppliers' obligations under the scheme, or estimates of the overall scheme cost (often from published impact assessments).

2.26. The nature of government programmes evolves over time, and a number of suppliers' obligations are currently undergoing changes. Given this, we are committed to regularly reviewing our approach to estimating policy costs, ensuring that our methodology draws on the best information available at any given point in time. Therefore, while what we describe below is our current preferred approach to estimating the costs of the different programmes, our approach for specific schemes may change from one update to the next. In the event of such changes, we will describe the methodology that has been used.

Renewables Obligation (RO)

2.27. The RO supports large-scale renewable electricity projects in the UK. It places an obligation on UK electricity suppliers to source an increasing proportion of the electricity they supply from renewable sources. The obligation is set annually by Government. The obligation period runs from 1 April to 31 March and the obligation level is published at least six months prior, by 1 October of the previous year. Renewables Obligation Certificates (ROCs) are issued to operators of accredited renewable generating stations for the eligible renewable electricity they generate. ROCs can be traded between parties.

[12] Based on CSS of large suppliers excluding SSE for financial year 2015. This excludes the impact of funding the warm home discount.

2.28. Suppliers can meet their annual obligation by presenting ROCs, making a payment into a buy-out fund for each ROC that they do not present or a combination of the two. The 'buy-out' price-per-ROC is set annually by Ofgem. The administration cost of the scheme is recovered from the fund and the remainder is distributed back to suppliers in proportion to the number of ROCs they produced in respect of their individual obligation.

2.29. We estimate the cost of the RO scheme using the final buy-out price as a proxy of the cost of a ROC faced by a supplier[13]. This buy-out price is multiplied by the obligation level, to obtain a £/MWh cost[14]. This is then multiplied by our assumed typical annual electricity consumption to arrive at a £/customer figure.

2.30. Our estimates of suppliers' expected costs relate to the coming 12 months, and so will generally comprise a weighted average of estimated RO costs for the current and subsequent obligation periods. In the period before the following charging year's obligation level is set (ie between April and September), we base our forecast of next year's RO charges on the year-on-year change in the projections for the total costs of the scheme as set out in the supplementary fiscal tables of the Office for Budget Responsibility's (OBR) 'Economic and Fiscal outlook'[15]. In the period after the following year's obligation has been determined but before the buy-out price is set (ie September to February), we use RPI forecasts prepared by the OBR to project the following year's buy-out price.

Energy Company Obligation (ECO)

2.31. ECO is a government scheme that requires suppliers with more than 250,000 domestic customers to deliver energy efficiency measures. The scheme was launched in January 2013, with ECO running from January 2013 to March 2015. ECO2 is due to end on 31 March 2017. The government has recently launched a consultation on the future of the scheme up to 2022[16].

2.32. Within ECO and ECO2, suppliers are given targets for delivering energy efficiency measures to domestic premises. These include the installation of insulation and heating measures, a proportion of which must be delivered in rural areas or to low income and vulnerable households. The size of a supplier's obligation under the scheme depends on its share of the domestic market.

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[13] Note that this will be an imperfect measure, as ongoing trading of ROCs can mean that the costs incurred by a supplier in obtaining the appropriate number of ROCs may not be equal to the equivalent buy-out payment at the end of the obligation period. Additionally, the proportion of the buy-out fund that a supplier receives will affect their final cost. Nevertheless, comparing the large suppliers' realised RO costs per domestic customer with this approach suggests that using the buy-out price and obligation level provides a reasonable guide to trends in costs associated with the scheme.

[14] DECC has recently consulted on exempting energy intensive industries from the RO and FiT schemes – if this proposal is taken forward, the RO obligation level for domestic customers will be scaled up to reflect the greater part of the obligation that they will take on.

[15] http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/

[16] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/531964/ECO_Help_to_Heat_Consultation_Document_for_publication.pdf

2.33. We estimate the expected cost of charges associated with the ECO scheme for gas and electricity customers using information on the total projected scheme cost taken from government impact assessments, splitting this in half, and then dividing by the total number of gas and electricity customers of obligated suppliers, respectively.

2.34. We note that suppliers have discretion over the timing of when they meet their obligations during the obligation period. However, this will vary from supplier to supplier, and is not something that we seek to reflect in our estimate of the trend in charges associated with the ECO scheme.

Feed-in Tariffs (FiTs)

2.35. Under the FiT scheme, owners of small-scale renewable and low-carbon electricity generation technologies are eligible to receive payments for the energy that they generate and the electricity that they export back to the grid. To fund the scheme, all licensed electricity suppliers are required to make payments, proportionate to their share of the electricity supply market. These payments take into account any payments the supplier has made to accredited installations under the scheme.

2.36. As with ECO, to estimate the expected costs of this programme to suppliers, we use the projected costs of the FiT programme as published in the most recent government impact assessment, inflated accordingly to reflect current price levels and then multiplied by the proportion of domestic consumption in total electricity consumption[17], divided by the total number of electricity customers.

Warm Home Discount (WHD)

2.37. The WHD scheme came into effect on 1 April 2011. It requires energy suppliers with over 250,000 customers to provide direct and indirect support to fuel poor customers over a four year period to 31 March 2015. The government recently committed to extending it beyond that to 31 March 2021.

2.38. We estimate the cost of the WHD to customers of participating suppliers by dividing the total anticipated cost of the scheme for each year[18] by the number of domestic gas and electricity customers of obligated suppliers, giving a £/customer figure for a single-fuel customer. We then double this to derive a corresponding figure for a dual-fuel customer. This approach is consistent with the way that suppliers' obligations are calculated, according to their share of all domestic gas and electricity customers (with dual fuel customers counted twice).

[17] Based on government DUKES data. If government takes forward its proposed exemption of energy-intensive industries from the indirect costs of the FiTs scheme, these costs would be calculated based on domestic electricity consumption as a proportion of total consumption *excluding* energy-intensive industries.
[18] https://www.ofgem.gov.uk/sites/default/files/docs/2015/03/whd_supplier_guidance_sy5_0.pdf

Contracts for Difference (CFDs)

2.39. CFDs are designed to give greater certainty and stability of revenues to low carbon electricity generators by reducing their exposure to volatile wholesale prices, while protecting consumers from paying for higher support costs when electricity prices are high. The contracts are between generators and the Low Carbon Contracts Company (LCCC). LCCC obtains the monies to make the required payments to CFD generators via a compulsory levy on electricity suppliers. LCCC pays generators the "difference" when the "reference price" for electricity is lower than the agreed "strike price" set out in the CFD, and receives difference payments from CFD generators when the reference price is higher than the strike price. The reference price is calculated on the basis of the market price.

2.40. Suppliers are required to pay both a daily applicable Interim Levy Rate (ILR) per MWh, as well as quarterly reserve payments to make up the Total Reserve Amount (TRA). The ILR is determined by LCCC by dividing the total expected net payments to generators in a given quarter by the total expected eligible supply[19] in that quarter. As the realised value of the payments to generators and eligible supply may differ to the expected values, suppliers may make under- or over-payments, which are then reconciled via a quarterly process. As supplier payments can be subject to this uncertainty, the TRA is set and used to ensure that 19 times out of 20, LCCC has sufficient resources to make payments to generators.

2.41. We use the ILR to estimate the ongoing costs of the scheme. In particular, in addition to the current quarter's ILR, LCCC prepares forecasts of the ILR for the coming three quarters. These rates are multiplied by an estimate of individual consumption for each obligation period to provide a £/customer figure of the charges suppliers face in that period. This is then totalled for the following 12 months to derive the total per-customer charge.

2.42. Estimated consumption in each month is estimated by pro-rating total annual consumption across the year, using historic information on quarterly electricity consumption taken from government's Energy Trends Statistics[20].

2.43. Note that we do not take into account any impact on suppliers' costs of non-GB sources of renewable generation, or the cost of capital on the reserve fund. We expect these exclusions to have only a small impact on our overall estimates of suppliers' CFD costs. We do, however, include the projected cost of the operating cost levy, as published by BEIS.

Assistance for Areas with High Electricity Distribution Costs

2.44. The Assistance for Areas with High Electricity Distribution Costs (AAHEDC) scheme was introduced in the Energy Act 2004. The scheme, previously known as the "Hydro Benefit Scheme", aims to reduce electricity prices in areas of high

[19] Eligible supply refers to total electricity supply following the exemption of supply to electricity intensive industries.
[20] https://www.gov.uk/government/statistics/energy-trends-december-2015

distribution costs and is currently specified for Northern Scotland only. Licensed suppliers are obliged to pay to National Grid the tariff set out in their annual Charging Statement.

2.45. The estimated cost per consumer for the scheme is calculated by multiplying the charge per kWh, as published in the annual Charging Statement, with assumed typical electricity consumption.

Appendix 1 – wholesale price assumptions

	Prices for …											
Update month	**M+1**	**M+2**	**M+3**	**M+4**	**M+5**	**M+6**	**M+7**	**M+8**	**M+9**	**M+10**	**M+11**	**M+12**
February	2	3	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Winter y0	Winter y0	Winter y0	Winter y0
March	3	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0
April	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Summer y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0
May	5	6	Q3 y0	Q3 y0	Q3 y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1
June	6	Q3 y0	Q3 y0	Q3 y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1	Summer y1
July	Q3 y0	Q3 y0	Q3 y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1	Summer y1	Summer y1
August	8	9	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1	Summer y1	Summer y1	Summer y1
September	9	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1
October	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Winter y0	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1
November	11	12	Q1 y1	Q1 y1	Q1 y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Winter y1
December	12	Q1 y1	Q1 y1	Q1 y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Winter y1	Winter y1
January	Q1 y1	Q1 y1	Q1 y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Summer y1	Winter y1	Winter y1	Winter y1

Note: columns M+1,…, M+12 indicate which contracts are used for each of the 12 months of the update period, with the index calculated using average prices in the month preceding the update. So, for instance, the table shows that for the September update, the average price of the winter contract in August is used for the month of October. "y0" indicates that a contract is for the current calendar year, "y1" indicates that a contract is for the subsequent calendar year. Numbers indicate that the prices of monthly contracts are used (with the number corresponding to the month in the year). "Qx" indicates that the prices of quarterly contracts are used.