

Energy Bill Discount Scheme for Non-Domestic Customers in Great Britain

Reference Wholesale Price Methodology

26 April 2023

In accordance with regulation 9 of the Energy Bills Discount Scheme Regulations 2023 (SI 2023 /453) the Secretary of State establishes the following methodology for determining reference wholesale prices for variable price contracts and fixed price contracts.

1 Introduction

1.1 This document sets out separate parts of the methodology to apply to:

- (a) fixed price contracts entered into before 1st April 2023
- (b) fixed price contracts entered into from 1st April 2023 to 31st March 2024
- (c) variable price contracts.

1.2 Reference wholesale prices for flexible price contracts are determined in accordance with the Regulations and are not within the scope of the methodology in this document.

1.3 In this document, words which provide background or explanation for the methodology are in italics and do not form part of the methodology itself.

1.4 *Background*

1.4.1 *Reference wholesale prices are used under the Energy Bills Discount Scheme to calculate the discount to be applied to prices for the supply of gas and electricity to non-domestic consumers in the UK.*

2 Data

2.1 Forward prices for wholesale electricity and wholesale gas are drawn from ICIS European Daily Electricity Market report and European Spot Gas Market report. For details of how these data are assessed and how to access them see:

3 Fixed price contracts with a price-fix date before 1st April 2023

- 3.1 For fixed price contracts where the price-fix date was before 1st April 2023, an average of forward wholesale prices for the Summer 23 and Winter 23 period is used to calculate the reference wholesale price on a given day.

Explanation: As the reference wholesale price acts as a proxy for the contracted wholesale price of a fixed price contract, the forward prices used are for the delivery period covered by the scheme (Summer 23 and Winter 23). Winter is defined as 1st October to 31st March and Summer is defined as 1st April to 30th September.

- 3.2 ICIS NBP Price Assessment Bid/Offer range daily outright (Mid) Season +1, Season +2, Season +3 and Season +4 are used for gas. UK OTC Power Price Assessment – Baseload Season +1, Season +2, Season +3 and Season +4 are used for electricity.
- 3.3 An average of Season +1 and Season +2 is used for those fixing between 1st October 2022 and 31st March 2023 (i.e., these are contracts fixing in Winter 22, therefore Season +1 and +2 represent Summer 23 and Winter 23 prices). An average of Season +2 and +3 is used for those fixing between 1st April 2022 and 30th September 2022. Finally, Season + 3 and Season +4 are used for those fixing prior to 1st April 2022.
- 3.4 An average is taken of the NBP Price Assessment and UK OTC Power Price Assessment for Summer 23 and Winter 23 on the market trading days in a week, with the average then representing the reference wholesale price for contracts with a price-fix date in the 7-day period of that week.

Explanation: an average is taken over a working week in order to account for day-to-day variation in forward prices within the week.

Figure 1: Reference wholesale prices calculation for fixed price contracts with a price-fix date before 1st April 2023

Wholesale reference price for Week W between 1 st December 2021 and 31 st March 2022	=	Day D in Week W average of Season +3 and Season +4 price	+	Day D+1 in Week W average of Season +3 and Season +4 price	+	Day D+2 in Week W average of Season +3 and Season +4 price	+	Day D+3 in Week W average of Season +3 and Season +4 price	+	Day D+4 in Week W average of Season +3 and Season +4 price
<hr/> Wholesale reference price for Working days in Week W										
Wholesale reference price for Week W between 1 st April 2022 and 30 th September 2022	=	Day D in Week W average of Season +2 and Season +3 price	+	Day D+1 in Week W average of Season +2 and Season +3 price	+	Day D+2 in Week W average of Season +2 and Season +3 price	+	Day D+3 in Week W average of Season +2 and Season +3 price	+	Day D+4 in Week W average of Season +2 and Season +3 price
<hr/> Wholesale reference price for Working days in Week W										
Wholesale reference price for Week W between 1 st October 2022 and 31 st March 2023	=	Day D in Week W average of Season +1 and Season +2 price	+	Day D+1 in Week W average of Season +1 and Season +2 price	+	Day D+2 in Week W average of Season +1 and Season +2 price	+	Day D+3 in Week W average of Season +1 and Season +2 price	+	Day D+4 in Week W average of Season +1 and Season +2 price
<hr/> Wholesale reference price for Working days in Week W										

3.5 Once calculated the reference wholesale price remains fixed throughout the scheme period.

4 Fixed price contracts with a price-fix date between 1st April 2023 and 31st March 2024

4.1 For fixed price contracts with a price-fix date between 1st April 2023 and 31st March 2024, the same approach to calculation is applied as for those fixing pre-1st April 2023, with an average of forward prices for the next 12 months used (starting from Month+1).

Explanation: As fixed term contracts are likely to last multiple seasons, with often higher prices in winter and lower in summer, two seasons have been used to better estimate the true price which may be quoted for fixed term contracts. Reference price calculation start from Month+1 prices, to proxy for the lag between agreeing the price and starting the contract.

4.2 This is done using ICIS NBP Price Assessment Bid/Offer range daily outright (Mid) Month +1 up to Quarter +4 for gas and UK OTC Power Price Assessment – Baseload Month +1 up to Quarter +4 for electricity. An average is taken across month+1, month+2 up to a full 12 months of price data.

Explanation: ICIS price assessments only go up to delivery in Month+4 for electricity and Month+6 for gas, quarterly price estimates are therefore used after that point. For example, Quarter + 2 is used to estimate Month+5 and Month+6 prices for electricity, with Quarter +3 used for Month +7 to Month +9 for both gas and electricity.

- 4.3 Each month's price is weighted by the number of days in that month. For example, the reference wholesale price for a customer signing a contract on the 1st May 2023 would be an average of the prices for delivery in June 2023 up to May 2024, weighted by the number of days in each month.
- 4.4 An average is taken of the NBP Price Assessment and UK OTC Power Price Assessment for the next year on each market trading day in a week, with the working week average then representing the reference wholesale price for contracts with a price-fix date in the 7-day period of that week.

Figure 2: Gas reference wholesale price calculation for fixed price contracts with a price-fix date between 1st April 2023 and 31st March 2024

$$\begin{aligned}
 &\text{Price for date D in Week W in Month M} = \frac{\text{Days in Month M+1} * \text{price} + \text{Days in Month M+2} * \text{price} + \text{Days in Month M+3} * \text{price} + \text{Days in Month M+4} * \text{price} + \text{Days in Month M+5} * \text{price} + \text{Days in Month M+6} * \text{price} + \text{Days in Month M+7} * \text{price} + \text{Days in Month M+8} * \text{price} + \text{Days in Month M+9} * \text{price} + \text{Days in Month M+10} * \text{price} + \text{Days in Month M+11} * \text{price} + \text{Days in Month M+12} * \text{price}}{\text{Total days from Month +1 to Month+12}} \\
 &\text{Wholesale reference price for Week W in Month M} = \frac{\text{Price for date D in Week W in Month M} + \text{Price for date D+1 in Week W in Month M} + \text{Price for date D+2 in Week W in Month M} + \text{Price for date D+3 in Week W in Month M} + \text{Price for date D+4 in Week W in Month M}}{\text{Working days in Week W}}
 \end{aligned}$$

Figure 3: Electricity reference wholesale price calculated for fixed price contracts with a price-fix date between 1st April 2023 and 31st March 2024

$$\begin{aligned}
 &\text{Price for date D in Week W in Month M} = \frac{\text{Days in Month M+1} * \text{price} + \text{Days in Month M+2} * \text{price} + \text{Days in Month M+3} * \text{price} + \text{Days in Month M+4} * \text{price} + \text{Days in Quarter+2} * \text{price} + \text{Days in Quarter+2} * \text{price} + \text{Days in Quarter+3} * \text{price} + \text{Days in Quarter+3} * \text{price} + \text{Days in Quarter+3} * \text{price} + \text{Days in Quarter+4} * \text{price} + \text{Days in Quarter+4} * \text{price} + \text{Days in Quarter+4} * \text{price}}{\text{Total days from Month +1 to Month+12}} \\
 &\text{Wholesale reference price for Week W in Month M} = \frac{\text{Price for date D in Week W in Month M} + \text{Price for date D+1 in Week W in Month M} + \text{Price for date D+2 in Week W in Month M} + \text{Price for date D+3 in Week W in Month M} + \text{Price for date D+4 in Week W in Month M}}{\text{Working days in Week W}}
 \end{aligned}$$

5 Variable price contracts

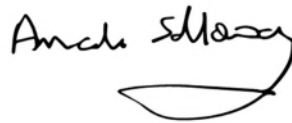
- 5.1 The reference wholesale prices used for variable price contracts will be updated each quarter. They are based on ICIS NBP Price Assessment Bid/Offer range daily outright (Mid) Quarter+1 for gas and UK OTC Power Price Assessment – Baseload Quarter+1 for electricity averaged across a full month. They will be published the month before the start of each quarter and based on the previous month's prices. For example, the wholesale reference price for Q2 2023 will be published in March 2023, with the wholesale reference price based on an average of Quarter+1 prices across the whole of February. Then Q3 2023 will be published in June and based on an average of Quarter +1 prices across May.

Explanation: suppliers broadly set prices for variable contracts on a quarterly basis with these prices set roughly a month ahead of time

6 Publishing reference wholesale prices

- 6.1 The government publishes the discounts for fixed and variable tariffs, alongside the relevant reference wholesale prices, currently on a weekly basis here:
<https://www.gov.uk/government/publications/energy-bill-discount-scheme-discounts-for-fixed-default-and-variable-contracts>

26 April 2023



Amanda Solloway
Parliamentary Under Secretary of State for Energy Consumers and Affordability
Department for Energy Security and Net Zero