

Digital Energy Element March 2022

The volatility in wholesale energy prices remains the centre piece for price movement



Annual gas prices







Annual power prices



Spot power prices



February represented a relatively volatile period for GB gas prices, in a month of two halves from a price direction point of view. We observed losses across day-ahead and front month contracts, but prices across the board climbed strongly into the months end.

On average, seasonal gas contracts from summer 22 to summer 24 were 7.9% higher in February than in the previous month. These gains were accelerated at the months end, with tracked seasonal gas contracts from summer 22 to summer 24 up 22% compared with the start of February.

The volatility in wholesale energy prices remains the centre piece for price movement, with January and February being largely bearish wholesale pricing periods for the start of 2022. However, news broke on 24 February that Russia had invaded Ukraine, with the news of conflict subsequently causing near-term gas prices to soar – primarily driven by the potential for supply disruption to future gas supply to Europe, with Russia being the largest provider of gas for the region.

The significance that this humanitarian crisis has placed on near-term gas prices has been profound. On the morning of 24 February, day-ahead gas prices jumped 83p/th day-on-day and we saw near-term monthly contracts climb 70p/th on the previous day. Despite this, day-ahead gas prices were 6.9% lower on average than the month previous, weighed by milder weather during most of the month however, prices did end February 46% higher than at the start of the month (260p/th).

The magnitude of this event transcended into the domestic power market too, but with the more pronounced bullish sentiment felt at the back end of February, like their gas contract counterparts.

Seasonal power contracts from summer 22 to summer 24 rose 16.9% on average from February, with a bullish final week of February prompting strong price growth overall.

Looking at the first half of February, the sentiment was largely bearish. Primarily, periods of milder weather against seasonal norms suppressed gas-fired power demand. Additionally, we also saw storms Dudley, Eunice and Franklin make landfall in the UK, bringing with it significant wind outturn, softening system margins. As the month progressed, the majority of power contracts took direction from bullish movements in gas prices, primarily driven by the conflict intensifying in Ukraine.

Commodity markets reflected the largely bullish outcome for wholesale energy prices in February. Brent crude prices rose 9.5% to \$93.83/bl, UK ETS rose 10.5% to £84.70/t and the EU ETS lifted 7.4% to average €90.76/t.

1 Catalyst Commercial Services' independent approach enables clients to manage their exposure to energy price risk, while at the same time benefiting from a first-class service from a range of major and independent suppliers. Catalyst Commercial Services' procurement solutions make it simple, so contact a member of the team to discuss requirements.



Digital Energy Element / March 22

Key market indicators: 01/03/2022

| | Gas (p/th) | | Electricity (£/MWh) | | Coal | EUA Carbon | UKA Carbon | Brent crude |
|--|---|--------------------------------------|--|--|---|---------------------|--|--|
| | Day-ahead | Year-ahead | Day-ahead | Year-ahead | (\$/t) | (€/t) | (£/t) | (\$/bl) |
| This month 1 Mar 22 | 261.00 | 260.67 | 215.00 | 231.76 | 175.00 | 80.14 | 79.00 | 101.58 |
| Last month 31 Jan 22 | 207.00 | 208.50 | 176.00 | 195.25 | 114.00 | 88.46 | 84.50 | 91.41 |
| Last year 2 Mar 21 | 43.75 | 42.81 | 105.00 | 52.05 | 69.50 | 37.54 | N/A | 63.66 |
| Year-on-year % change | 497% | 509% | 105% | 345% | 152% | 113% | N/A | 60% |
| Year high | 415.00 | 281.63 | 540.00 | 279.13 | 185.00 | 97.61 | 87.75 | 105.06 |
| Year low | 43.20 | 42.34 | 47.00 | 51.41 | 67.82 | 36.86 | 42.40 | 62.00 |
| This table shows the price at the end of this month compared with prices from the previous month and year. The graphs show the position of this month's prices with a red X and the range of prices over the year is represented by the black line. | 440 - 390 - 340 - 290 - 240 - 190 - 140 - 90 - 40 - | 290 240 190 140 90 40 | 580 - 530 - 480 - 430 - 380 - 330 - 280 - 230 - 180 - 130 - 80 - 30 - | 290 - 240 - 190 - 140 - 90 - 40 - | 190 170 - X 150 - 130 - 110 - 90 - 70 - 50 - | 102 - 92 - 82 - 200 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 115 - 105 - 95 - 85 - 75 - 65 - 55 - |

Commodities

Carbon: EU Emissions Trading Scheme carbon is quoted as over-the-counter (OTC) latest opening prices. All carbon prices are in euros per tonne (€/EUA).

Coal: Coal is quoted as OTC latest opening prices. All coal prices are in US dollars per tonne (\$/t).

Electricity: UK power base-load and peak-load are quoted as OTC latest opening prices. All UK electricity prices are in pounds per megawatt hour (£/MWh).

Gas: UK National Balancing Point (NBP) gas is quoted as OTC latest opening prices. All UK gas prices are in pence per therm (p/th).

Oil: Brent crude oil is quoted as OTC latest opening prices. All Brent crude oil prices are in US dollars per barrel (\$/bl).

Language/ terms

Bearish: A bearish market shows a general decline in prices over a period of time.

Bullish: A bullish market shows a general increase in prices over a period of time.

Curve: A graph of forward prices over a future time period.

Margin: The indicated UK imbalance of a given settlement period. It is the difference between the sum of the indicated generation available, and the national demand forecast made by National Grid.

Over-the-counter (OTC): The trade of a commodity directly between two parties, often on standardised terms.

Spark/ Dark spread: The theoretical net income of a gas/ coal-fired power plant from selling electricity having purchased the necessary fuel. The clean spark/ dark spread is this net income adjusted for the cost of carbon.

Disclaimer

This monthly news and pricing bulletin is produced by Comwall Insight in conjunction with Catalyst Commercial Services exclusively for the customers of Catalyst Commercial Services and provides general information and commentary on energy market trends. The opinions contained in this bulletin constitute the current opinions of Comwall Insight and/or Catalyst Commercial Services and are produced for informational purposes only. This bulletin should not be construed as an offer, recommendation or solicitation to buy, sell or deal in any commodity, product or security or to enter into any trading or investment activity whatsoever. Any use by you or any third party of any information or other material contained in or associated with this document signifies agreement by you or them to these conditions. The report makes use of information gathered from a variety of sources that have not been subject to independent verification. Neither Cornwall Insight nor Catalyst Commercial Services gives any representation or warranty as to the accuracy or completeness of the information collected from market participants or from sources in the public domain. Neither Cornwall Insight nor Catalyst Commercial Services gives any arranties, whether express, implied or statutory regarding or relating to the contents of this report and specifically disclaim all implied warranties, including, but not limited to, the implied warranties of satisfactory quality and fitness for a particular purpose. While Cornwall Insight and Catalyst Commercial Services consider that the information and opinions given in this bulletin and all other document, neither Cornwall Insight nor Catalyst Commercial Services, their affiliates and employees, either individually or collectively accept any responsibility for any loss, damage, cost or expense of whatever kind arising directly or indirectly from or in connection with the use by any person whomsoever of any such information or material; neither do they make any representation or warranty as to the accuracy



As an Award-Winning Digital Energy Consultant our job is to put you back in control of your utilities

Our Energy Spend Management platform powered by Robotic Process Automation - EaaSi® sits at the heart of our journey to transform how you manage, reduce, contract and report on your utilities.

Visit www.EaaSi.co.uk



EaaSi® is a registered trade marked product of Catalyst Digital Energy www.catalyst-commercial.co.uk



Cataly

Switch to digital with Catalyst

Default Tariff Cap rises by £693 from 1 April

On 3 February, Ofgem confirmed the level of the Default Tariff Cap which will come into effect from 1 April. Ofgem confirmed the cap which impacts approximately 22mn customers would see a rise £693 from £1,277 to £1,971 per year for those that pay by direct debit. Customers that are on prepayment will see an increase of £708 from £1,309 to £2,017. Ofgem highlighted that it will affect default tariff customers who have not switched to a fixed deal and those who remain with their new supplier after their previous supplier exited the market. Ofgem states that the increase is driven by a record rise in global gas prices over the last 6 months, with wholesale prices quadrupling in the last year.

Ofgem added that since the price cap was last updated in August, the current level does not reflect the unprecedented record rise in gas prices which has since taken place. In addition, over the last year, 29 energy companies have exited the market or been put in special administration in the wake of escalating global gas prices. This has affected around 4.3mn domestic customers. The report added that the main driver of the increase in networks costs is the recovery of Supplier of Last Resort (SoLR) levy costs (£68).

Jonathan Brearley, chief executive of Ofgem, said: "We know this rise will be extremely worrying for many people, especially those who are struggling to make ends meet, and Ofgem will ensure energy companies support their customers in any way they can." Adding: "The energy market has faced a huge challenge due to the unprecedented increase in global gas prices, a once in a 30-year event, and Ofgem's role as energy regulator is to ensure that, under the price cap, energy companies can only charge a fair price based on the true cost of supplying electricity and gas." Brealey concluded: "Ofgem is working to stabilise the market and over the longer term to diversify our sources of energy which will help protect customers from similar price shocks in the future."

Government

HMT launches energy bills rebate

On 3 February, Chancellor of the Exchequer Rishi Sunak announced a £9.1bn Energy Bills Rebate, providing all domestic electricity customers financial support after the announcement of the rise in the Default Tariff Cap. Speaking about the announcement Sunak said that growing cost of living pressures was the "number one issue on people's minds", and that the package would support hard working families.

Looking at the details, the Energy Bills Rebate will provide around 28mn households with an upfront discount on their bills worth £200. Energy suppliers will apply the discount to domestic electricity customers from October. The discount will then be automatically recovered from bills in equal £40 instalments over the next five years beginning in 2023. It states in the release that this is when it is hoped global wholesale gas prices will start to decrease.

In addition, households in England, which are in council tax bands A-D (around 80% of all homes in England), will also receive a £150 rebate which will be paid directly by local authorities from April. The announcement states that this will not need to be repaid and is more targeted support (in the region of £1bn) for low-income families than a cut in VAT levels would be. In addition, a £144mn discretionary funding, will also be provided to support vulnerable people and individuals on low incomes that do not pay Council Tax, or that pay Council Tax for properties in Bands E-H. Sunak also confirmed that plans to expand the Warm Home Discount by almost a third, increasing the number of households covered to 3mn, will go ahead. In addition, the planned £10 uplift to £150 will also occur from November.

Generation



Simplify your energy spend management

Switch to digital with Catalyst



www.Catalyst-Commercial.co.uk



Switch to digital with Catalyst

Catalyst

Final TNUoS tariffs for 2022-23

On 31 January, National Grid Electricity System Operator (ESO) issued the final transmission network use of system (TNUoS) charges to apply from 1 April 2022. The total TNUoS revenue to be collected has increased by £276mn from £3,518mn to £3,594mn between 2021-22 and 2022-23, although this is a £10mn decrease on the draft tariffs. The revenue to be recovered through demand tariffs for 2022-23 is £2,752mn or 76.6% of the total revenue recovered which is £35mn less than the draft tariffs. Both average half hourly (HH) and non-half hourly (NHH) demand tariffs have reduced since the draft tariffs. The average HH gross tariff has decreased by £0.65/kW from the draft tariffs to £55.06/kW and the average NHH gross tariff has decreased by 0.17p/kWh to 6.81p/kWh. The ESO has calculated that the TNUoS charge will form £38.14 of consumer bills, a decrease of £0.95 from the draft tariffs.

National Grid

ESC: impacts of EV charging on electricity grid security

On 21 February, Energy Systems Catapult (ESC) published a report on Resilience Electric Vehicle (EV) Charging, setting out six ways EV chargers present a risk to grid security, including step, ramp, oscillations, degraded stability, demand control and restoration. ESC highlights a need to prepare now for increased demand in the 2030s from forecasted mass adoption of EVs and low carbon technologies. ESC states that by around 2040 demand for energy will at least double in three out of four Future Energy Scenarios (FES), and that peak demand is forecast to increase by 50% in all FES. It states that much of this demand will come from "smart" loads and that new types of smart load will introduce new system risks, noting six risks that it views EV chargers pose to grid security. These include too many chargers switching on or off at the same moment (step) and switching on or off within a few minutes (ramp), a group of chargers switching on and off (oscillations), degraded stability increasing risk of post-fault collapse, eroded defences (demand control), and that erratic behaviour after restart will hinder the restoration process.

ESC also states that common-mode behaviour decreases load diversity, noting that the 2021 FES envisages between 12 to 16mn EVs in service in 2035, and that – with typical 7kW domestic chargers – just 2% of these chargers switching on at the same time would generate a load step of between 1.7 and 2.6GW. It says smart charging control systems could cause such synchronised action by responding to Time-of-Use (ToU) tariffs, that randomisation helps soften the load, but that the volume of price-driven demand could still result in rapid multi-GW ramps. ESC states that EV charging and Vehicle-to-Grid (V2G) design is focused on customer needs, rather than grid requirements. Additionally, it says smart charging depends on an interconnected software ecosystem, creating the risk of conflicting controls and unforeseen behaviours under normal and abnormal conditions, as well as a high risk of cyber compromise.

Energy Systems Catapult

Ofgem introduces measures to address market volatility risks

On 16 February, Ofgem announced that it will be introducing two temporary measures to protect customers from the risks of market volatility, ahead of enduring reforms. From 14 April, suppliers will need to offer all tariffs to existing customers, and, if wholescale prices fall below a certain level, pay a Market Stabilisation Charge (MSC) to the losing supplier when taking on a new domestic customer. This follows the conclusion of the regulator's December 2021 consultation on potential short-term interventions to address the risks to consumers from market volatility, as part of the regulator's package of measures for building energy market resilience. The proposed options included: requiring suppliers to make all tariffs available to new and existing customers; allowing suppliers to charge exit fees on Standard Variable Tariffs; and requiring suppliers to pay an MSC when acquiring new customers. Having considered the responses, Ofgem has decided



Catal

Switch to digital with Catalyst

to proceed with two of the proposed temporary measures which will come into effect on 14 April 2022. It is intended that these will be in place for six months, until the end of September 2022 when enduring reforms are expected to be implemented. Ofgem notes it will have the ability to extend each measure through next winter if significant risks remain.

Ofgem

Climate-related financial disclosure requirements

On 21 February, BEIS released guidance to help limited liability partnerships (LLPs) and in-scope companies understand how to meet new mandatory climate-related financial disclosure requirements under the Limited Liability Partnerships (Climate-related Financial Disclosure) Regulations 2022 and Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022. BEIS states that the regulations were made on 17 January 2022 and apply to reporting for financial years beginning on or after 6 April 2022. It also included the scope criteria of:

- All UK companies that are currently required to produce a non-financial information statement, being UK companies that have more than 500 employees and have either transferable securities admitted to trading on a UK regulated market or are banking companies or insurance companies (Relevant Public Interest Entities (PIEs)).
- UK registered companies with securities admitted to AIM with more than 500 employees.
- UK registered companies not included in the categories above, which have more than 500 employees and a turnover of more than £500mn.
- Large Limited Liability Partnerships (LLPs), which are not traded or banking LLPs, and have more than 500 employees and a turnover of more than £500mn.
- Traded or banking LLPs which have more than 500 employees.

BEIS

Highest ever T-4 Capacity Market clearing price achieved

On 22 February 2022, the T-4 Capacity Market (CM) auction for Delivery Year 2025-26 cleared at £30.59/kW/year. This is the highest ever clearing price in a T-4 GB CM auction and follows the T-1 auction for 2022-23, which cleared at the highest ever GB CM price of £75/kW on 15 February 2022. The T-4 auction awarded agreements to 42,364MW of derated capacity, 32,305MW of which was awarded to Existing Generating Capacity Market Units (CMUs). A further 6,966MW was awarded to interconnectors, both new build and existing, followed by 1,919MW of New Build Generating CMUs, 810MW of Unproven DSR, 194MW of Proven DSR and 170MW of Refurbishing Generating CMUs.

The majority of existing capacity awarded agreements came from gas-fired assets with 20,659MW from CCGT, 4,399MW from Gas – CHP, 1,893MW from OCGT and 481MW from gas reciprocating engines. Pumped storage accounted for 2,357MW of successful existing capacity, with a further 170MW (from Ffestiniog) awarded agreements as refurbishing plant. Just 990MW of nuclear capacity was awarded agreements, with Sizewell B the only nuclear plant participating in the auction. The Heysham 2 and Torness nuclear plants opted out of the auction, but plan to remain operational over the 2025-26 Delivery Year, while all other nuclear plants currently active are scheduled to be decommissioned by the start of the Delivery Year. Battery storage assets represented the majority of successful new build capacity with a total of 3,342MW of nameplate capacity, de-rated to 1,033MW awarded agreements. 901MW of this de-rated capacity came from 2-hour duration (651MW) and 1-hour duration (250MW) batteries. The nameplate capacity from these asset types were 1,638MW and 1,252MW, respectively. The remaining battery storage capacity was split between 0.5-hour, 1-hour, 1.5-hour, 2.5-hour, and 4-hour duration assets.

EMR



Award Winning Business Energy Consultants